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# **REPORTING PERIOD – April 2011 to March 2012**

Summary of achievements during the reporting period

KVK Name	Activity		rget		vement	
	·	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	19	95	16	79	
Kandhamal	FLDs – Oilseeds (activity in ha)	15	55	15	55	
Kandhamal	FLDs – Pulses (activity in ha)	5	23	5	23	
Kandhamal	FLDs – Cotton (activity in ha)	-	-	-	-	
Kandhamal	FLDs – Other than Oilseed and pulse crops(activity in ha)	19	100	19	100	
Kandhamal	FLDs – Other than Crops (activity in no. of Unit/Enterprise)	5	30	5	30	
Kandhamal	Training-Farmers and farm women	51	1455	47	1350	
Kandhamal	Training-Rural youths	25	465	24	450	
Kandhamal	Training- Extension functionaries	10	180	8	150	
Kandhamal	Extension Activities	879	2663	879	2663	
Kandhamal	Seed Production (Number of activity as seeds in quintal)	3	2	3	2	16500
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)	24098	110	24098	110	5997
Kandhamal	Sapling Production (Number of activity as number of sapling in numbers)	902	25	902	25	2680
Kandhamal	Other Bio- products, Vermicompost in kg	500	80	670	85	3350
Kandhamal	Live stock products ,poultry chicks	1000	50	762	42	23788
Kandhamal	SAC Meeting (Date & no. of core/official members (dt 18.6.11)	1	40	1	40	
Kandhamal	Newsletters (no.)	4	2000	4	2000	
Kandhamal	Publication (Research papers, popular article)	2	MASS	2	MASS	
Kandhamal	Convergence programmes / Sponsored programmes	2	110	2	110	
Kandhamal	KVK-ATMA Linkage programme (Number of activities)	1	25	25		
Kandhamal	Outreach of KVK in the District (No. of blocks, no. of villages)	8	3000	8	6500	
Kandhamal	Soil sample tested	1000	400	732	304	7270
Kandhamal	Water sample tested	10	5	7	3	
Kandhamal	KMA (No. of messages & beneficiaries)	240	780	240	780	

# 1. GENERAL INFORMATION

# **1.1. Staff Position (31.03.2012)**

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	19810	09.12.2009	Permanent	Other
Kandhamal	Subject Matter Specialist1	Manoranjan Mohanty	Forestry	M.Sc (Forestry.)	Forest product	15600-39100	19810	5.07.2011	Permanent	Other
Kandhamal	Subject Matter Specialist2	Sujit Kumar Mukhi	Soil science	M.Sc(Ag.)	Soil Fertility	15600-39100	16920	23.10.2009	Permanent	Other
Kandhamal	Subject Matter Specialist3	Jayanta Kumar Mahalik	Plant Protection	M.Sc(Ag.)	Nematology	15600-39100	16920	08.03.2011	Permanent	Other
Kandhamal	Subject Matter Specialist4	Gouri Sankar Singh	Agronomy	M.Sc(Ag.)	Crop production	15600-39100	15600	28.03.2011	Permanent	other
Kandhamal	Subject Matter Specialist5	-	-	=	-	-		-	-	-
Kandhamal	Subject Matter Specialist6	-	-	-	-	-		-	-	-
Kandhamal	Programme Assistant	-	-	-	-	-		-	-	-
Kandhamal	Farm Manager	Manoj Kumar Pradhan	Seed Science	M.Sc (Ag.)	Seed Science	9300-34800	11470	04.10.2006	Permanent	Other
Kandhamal	Computer Programmer	Bishnu Ranjan Padhi	Computer Sc.	B.E	Computer Sc.	9300-34800	13060	22.08.2005	Permanent	Other
Kandhamal	Accountant / superintendent	Sahadev Dakua		H SC		9300-34800	14730	10.02.2011	Permanent	Other
Kandhamal	Stenographer	Bibhu Prasad Dash		B.A	Stenography	5200-20200	6430	22.01.2007	Temporary	Other
Kandhamal	Driver	Gobinda Gouda		8 <sup>th</sup> pass	-	5200-20200	5640	21.07.08	Temporary	Other
Kandhamal	Driver	Rajanikanta Pattnayak		10+2 pass	-	5200-20200	5640	28.07.08	Temporary	Other
Kandhamal	Supporting staff	Aparti Chhatoi		7 <sup>th</sup> pass	-	4440-7440	4800	28.07.08	Temporary	Other
Kandhamal	Supporting staff	Arjuni Ch. Swain		11 <sup>th</sup> pass	-	4440-7440	4800	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	15	06	113				

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

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

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

Sl. No	Crop	A-Area in ('000ha)	P-Production in ('000 Mts)	Y-Yield rate in kg/ha
1	Paddy	48.36	65.56	2024
2	Maize	16.56	26.78	1617
3	Blackgram	5.0	1.86	372
4	Arhar	5.25	5.02	957
5	Field Pea	0.45	0.22	497
6	Groundnut	0.90	1.46	1622
7	Niger	12.40	3.53	285
8	Mustard	15.26	3.60	236
9	Turmeric	11.52	107.48	9330
10	Ginger	4.38	49.22	11237

#### 1.3. DETAILS OF ADOPTED VILLAGE during 1.4.2011 to 31.3.2012 (Approved by competent Authority in meetings/workshops)

KVK Name	Village Name	Year of adoption	Block Name	Distance from	Population	Number of farmers (having
				KVK		land in the village)
Kandhamal	Baibali	2007-08	Raikia	25	436	63
Kandhamal	Bandagada	2011-12	K. Nuagaon	32	450	70
Kandhamal	Magarguda	2011-12	G.Udayagiri	10	201	27
Kandhamal	Bedasuga	2008-09	Tikabali	20	310	84
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 Block-K.Nuagaon,G.Udayagiri,Raikia
Kandhamal	Soil degradation	Transact map & Secondary information.	Village-Bandaguda,Baibali,Magarguda,Kambrikia 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,Kambrikia, Block-,G.Udayagiri,Raikia,Tikabali
Kandhamal	Mono cropping in hilly terrain	Village survey & Group meetings with villagers	Village-, Magarguda, Kambrikia, Bedasuga Block-G. Udayagiri, Raikia, Tikabali
Kandhamal	Small, Marginal and Landless Farmers	PRA survey & district statistical report	Village-Bandaguda,Baibali,Magarguda,Kambrikia Block-K.Nuagaon,G.Udayagiri,Raikia,Tikabali,Phulbani,Baliguda
Kandhamal	Stray Cattle menace	Village survey & group discussion	Village-Bandaguda,Baibali,Magarguda,Kambrikia,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,Kambrikia,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,Kambrikia,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,Kambrikia,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,Kambrikia,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,Kambrikia,Penala,Braneguda Block-K.Nuagaon,G.Udayagiri,Raikia,Tikabali
Kandhamal	Weed menace in up land crops	Problem cause analysis & PRA	Village-Bandaguda,Baibali,Magarguda,Kambrikia,Penala,Braneguda Block-K.Nuagaon,G.Udayagiri,Raikia,Tikabali

# 2. On Farm Testing

## 2.1 Information about OFT

KVK	Year/	Problem	Category of technology	Them atic	Crop/ enterprise	Farming Situations	Title of OFT	No. of	para	ts (with meter) d q/ha)		Returns s./ha)	Recommendations
name	season	diagnose	(Assessment/ Refinement)	Area			Title of OF 1	trial s	Farmer practi ce T1	Rec. Tech T2	<b>T</b> 1	Т2	
Kandhamal	Kharif-11	Low yield of existing cultivars Lalat	Assessment	Variet al evalua tion	Paddy	Red and yellow soil, rainfed mid land	Assessment of Hybrid paddy variety – Ajay	4	32.3	60.4	16054	38887	HYV paddy Ajay gave an yield of 60.4qt/ha, with 87% increase over Var Lalat
Kandhamal	Kharif-11	Poor yield due to use of local cultivars	Assessment	Variet al evalua tion	Paddy	Clay sandy loam soil, rainfed mid land	Assessment of scented rice variety Nua kalazeera	5	16.6	22.0	14280	21400	Scented rice Nua kalazeera an yield of 22qt/ha, with 33% increase over local variety
Kandhamal	Kharif11	Poor return due to use of local cultivar	Assessment	Variet al evalua tion	Sweet Corn	Red and yellow soil, rainfed ,low land	Assessment of Sweet corn Var – Madhuri	5	30380 (No.)	40200 (No.)	6304	18100	Sweet corn Madhuri gave 32 % more return over local variety Kuji makka.
Kandhamal	Kharif11	Low yield of Turmeric due to Rhizome rot	Assessment	IDM	Turmeric	Red and yellow soil, rainfed , Upland	Assessment of Rhizome rot in Turmeric	5	72.6	106.2	87200	145100	Seed treatment with T. Viridae @5gm/lit. of water ,soil treatment with T. Viridae at planting time , after 45 days & 90 days after planting @2.5kg/ha, need based spraying of Redomil MZ @ 3gm/lit of water.
Kandhamal	Kharif11	Poor yield due to heavy incidence of colar rot	Assessment	IDM	Groundnut	Red and yellow soil, rainfed ,mid land	Assessment of Colar rot & tikka disease in Groundnut	5	10.08	16.06	8600	18870	Seed treatment with Carboxyn (37.5%) + Thiram (37.5%) DS @ 2.5 gm/kg of seed, need based spraying of Chloro thlonil @0.2%, soil treatment T. Viridae @2.5kg/ha.

Kandhamal	Kharif11	Poor yield due to imbalance d use of fertilizer	Assessment	INM	Maize	Red and yellow soil, rainfed , Upland	Assessment of bio fertilizer & micro nutrient in maize.	5	24.9	39.7	10300	21600	Seed inoculation with azatobactor culture @ 20gm/kg seed ,Nitrogen is applied 50 % basal & another 50% at 30 DAS ,P& K applied as basal.Application of ZnSo4 @ 0.5 % spraying at 30 DAS by using 500 ltr. of spray solutions/ha
Kandhamal	Kharif11	Low yield due to sulphur deficiency	Assessment	INM	Groundnut	Red and yellow soil, rainfed , Upland	Assessment of lime & sulphur application in Groundnut.	5	11.7	18.1	18260	26230	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 @ 20:40:20 :: NPK kg/ha with Sulphur @ 30kg/ha.
Kandhamal	Kharif11	Poor yield 22qt/ha due to Zinc and Sulphur deficiency (71% soil is sulphur deficient in kandhamal district)	Assessment	INM	Paddy	Red sandy loam rainfed mid land	Assessment zinc & sulphur management in Kharif Paddy.	5	27.8	38.4	12100	20150	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
Kandhamal	Kharif11	Low efficiency & high drudgery of farm women during Groundnut Stripping	Assessment	Drudg ery reduct ion	Groundnut	Red and yellow soil, rainfed , Upland	Assessment of Groundnut Stripper for drudgery reduction of farm women during Groundnut stripping.	5	5.4kg/ hr	10.1kg/ hr			Groundnut stripper reduces drudgery of farm women & increases efficiency by 83 % of Groundnnut stripping.
Kandhamal	Rabi 11- 12	Poor yield (4qt/ha) due to use of local cultvar	Assessment	Variet al evalua tion	Mustard	Red sandy loam soil, rainfed upland	Assessment of Mustard var Anuradha	5	3.31	8.07	2568	9685	Variety Anuradha recorded 144 % more yield than local variety.
	Rabi 11- 12	Poor yield 3.5qt/ha due to use of local	Assessment	Variet al evalua tion	Horsegram	Red sandy loam soil, rainfed upland	Assessment of Horse Gram Var - Urmi	5	3.51	5.92	3580	5510	Horsegram variety Urmi recorded an yield of 5.92 q/ha with an increase of 68 % over local variety.

		cultvar											
Kandhamal	Rabi 11- 12	Low yield in mustard due to in sufficient pollinators	Assessment	IFS	Mustard	Red sandy loam soil irrigated upland	Assessment of yield in Mustard by Bee keeping	5	6.13	8.2	5390	8490	Keeping 3 no of ISI Bee Boxes/acre, species <i>Apis</i> <i>cerena indica</i> ,distance 20-30 meter.
Kandhamal	Rabi 11- 12	Low yield & poor quality due to infestation of fruit & shoot borer	Assessment	IPM	Brinjal	Red sandy loam soil irrigated mid land	Assessment of fruit & shoot borer in Brinjal	5	163.8	227.4	51600	76500	Spraying of Spinosad 45% SC @ 75 ml/acre,3-4 times at 10 days interval ,hand clipping & destruction of infected shoots & fruits.
Kandhamal	Rabi 11- 12	Low yield due to imbalance d use of fertilizer.	Assessment	INM	Cauli flower	Red sandy loam,irri gated mid land	Assessment of INM in Cauli flower .	5	142	217	35600	68400	Application of lime @0.2 LR at the time of final ploughing with FYM @ 15 ton/ha ,soil test based fertilizer application with 2kg Boron/ha at the time of planting of seedlings
Kandhamal	Rabi 11- 12	Simple dumping of bio waste	Assessment	Small Scale incom e genera ting enterp rises	Vermicom post		Assessment of low cost vermicompost production for income generation.	5		4.5	-	1380	Partial decomposition of bio waste for 30 days, use of <i>E.foetida</i> earthworm @ 2kg per 2 quintal of biowaste, maintain moisture content 30-35 %

#### 2.2 Economic Performance

KVK name	OFT Title	Para	meters			rage Coa ation (R		Average G	ross Return	(Rs/ha)	Average	Net Return	(Rs/ha)		fit-Cost R Return / Cost)	
		Name and unit of Parameter	Demo	Check	FP (T <sub>1</sub> )	RP (T <sub>2</sub> )	Refine d Practic e, if any (T <sub>3</sub> )	<b>FP</b> ( <b>T</b> <sub>1</sub> )	RP (T <sub>2</sub> )	Refined Practic e, if any (T <sub>3</sub> )	FP (T <sub>1</sub> )	<b>RP</b> (T <sub>2</sub> )	Refined Practice, if any (T <sub>3</sub> )	( -/	RP (T <sub>2</sub> )	Refine d Practi ce, if any (T <sub>3</sub> )
Kandhamal	Assessment of Hybrid paddy variety – Ajay	No. of Tiller/hill	17	9	17215	23325		33269	62212		16054	38887		1.9	2.7	
Kandhamal	Assessment of scented rice variety Nua	No. of Tiller/hill	6.6	2.6	15600	18200		29880	39600		14280	21400		1.92	2.17	

								T								
Kharif	kalazeera Assessment of	Coblength	19	15	18000	22100		24304	40200		6304	18100		1.35	1.82	
	Sweet corn Var – Madhuri	in cm														
Kandhamal	Assessment of Rhizome rot in Turmeric	Single culm weight in gm	622	407.6	65200	77500		152400	222600		87200	145100		2.33	2.87	
Kandhamal	Assessment of Colar rot in Groundnut	No. of pod per plamt	15.2	9.4		13250		20000	32120		8600	18870		1.75	2.42	
Kandhamal	Assessment of bio fertilizer & micro nutrient in maize.	No. of grains/cob	482	393		18100		24900	39700		10300	21600		1.7	2.2	
Kandhamal	Assessment of lime & sulphur application in Groundnut.	No. of pods/plant	26	15		15400		26910	41630		18260	26230		2.2	2.7	
Kandhamal	Assessment zinc & sulphur management in Kharif Paddy.	No. of tillers/plant	12	8	15700	18250		27800	38400		12100	20150		1.7	2.1	
Kandhamal	Assessment of Groundnut Stripper for drudgery reduction of farm women during Groundnut stripping.	Labour for stripping /qntl.	1.23 days	2.31 days	-	-	-	-	-	-	-	-	-	-	-	-
Kandhamal	Assessment of Mustard var Anuradha	No. of siliqua/plant	223	140	7350	14525		9918	24212		2568	9685		1.35	1.67	
Kandhamal	Assessment of Horse Gram Var - Urmi	No. of pods/plant	20.6	12.2	6950	9350		10530	17760		3580	5510		1.52	1,90	
Kandhamal	Assessment of yield in Mustard by	No. of pods/plant	140	101.4	6850	7910		12260	16400		5390	8490		1.78	2.07	

	Bee keeping												
Kandhamal	Assessment of fruit & shoot borer in Brinjal	Brinjal infestation (%)	11.4	51.8	30300	37200	 81900	113700	 51600	76500	 2.7	3.05	
Kandhamal	Assessment of INM in Cauli flower.	Single head weight in gm	840.6	558.6	35400	40100	 71000	108500	 35600	68400	 2.0	2.7	
Kandhamal	Assessment of low cost vermicompost production for income generation.						 		 	1380	 	1.64	

# 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

	Crop/	Thematic		Details of popularization	Horiz	zontal spread of te	chnology
KVK Name	Enterprise	Area	Technology demonstrated	methods suggested to the	No. o		Area in ha
				Extension system	villages	farmers	
	Paddy	IPM	Summer ploughing, Seed treatment, seedling	FLD, Training, Field days,	90	330	256
Kandhamal			treatment, Pheromone trap, Resistant variety ,Bio	group discussion, CD shows			
Tunanana			agents with need based management practices.				
Kandhamal	Paddy	Varietal	Var- Pratikshya ,Seed treatment with Bavistin	FLD, Training, Field days, ,	39	156	52
		evaluation	2gm/kg of seed ,Spacing 20X10 cm ,fertilizer	CD shows			
			80:40:40 NPK kg/ha ,				
Kandhamal	Garden pea	Varietal	Var-Azad P-3,Summer ploughing ,FYM 15T./ha	FLD, Training, Field days,	82	402	205
	evaluation ,seed treating, Fertilizer 5		,seed treatment with Rhizobium 20g/kg of Seed	group discussion,			
			Fertilizer 50:70:50 Spacing 30x5cm.	group discussion,			
Kandhamal	Brinjal	IPM	Soil incorporation with Neem cake @250kg/ha,		85	295	72
			Ph trap, Bio pesticides application(BT) hand	FLD, Training, Field days,			
			clipping of infected shoots and fruits and need	group discussion, CD shows			
Kandhamal	Brinjal	INM	based magt.practices.  Seed treatment with Bavistin 2gm/kg of seed		79	303	76
Kanunamai	Drilljai	IINIVI	Spacing 75 x60 cm, FYM 15 ton/Ha, fertilizer		19	303	76
			120:80:60,50 % N ,100 % P ,100 % K at	FLD, Training, Field days,			
			transplanting time ,25 % N at 25 DAT, Rest 25 %	group discussion, CD shows			
			N at 40 DAT				
Kandhamal	Tomato	INM	Application of lime as PMS @5q/ha at final		76	386	153
			ploughing followed by use of incubated &	FLD, Training, Field days,			
			inoculated FYM at planting time. (Bio-	group discussion, CD shows			
			inoculation (BI)= Azotobacter	group discussion, CD shows			
			+Azospirillum+PSB(1:1:1), 2+2+2=6 kg/ha)				
Kandhamal	Tomato	IPM	Soil incorporation of neem cake @250 kgs/ha,		153	492	158
			seed and seedling treatment, ph trap, trap crop	ELD Turining Field 4:			
			and need based application of pesticides	FLD, Training, Field days, group discussion, CD shows			
				group discussion, CD shows			
Kandhamal	Vegetables	ICM	Planning, layout and management of nutritional	FLD, Training, Field days,	40	185	25
Kanunamai	v egetables	ICIVI	garden	group discussion, CD shows	40	103	23
			Bur dell	group discussion, CD shows	1		

Kandhamal	Niger	INM	Seed inoculation with Azotobacter and PSB @ 20gm /kg , pre emergence weedicide (pendimethalin) application @ 1.0kg a.i. /ha , hand weeding at 30 DAS, RDF @40:20:20 kg NPK/ha with need based application of plant protection chemicals		15	148	57
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.	D. Training, Field days, oup discussion, CD shows	71	433	149
Kandhamal	Blackgram	INM		D.D. Training, Field days, oup discussion, CD shows	81	502	195
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.		53	337	192
Kandhamal	Back yard poultry	Small Scale Income generating enterprises	Introduction of improved poultry breed Banaraj,  FLI	D, Training, CD shows	205	547	6560 Nos.
Kandhamal	Oyster mushroom	Mushroom cultivation		D, Training, Field days, oup discussion, CD shows,	37	258	3056Nos.
Kandhamal	Apiary	Small Scale Income generating enterprises		D, Training, Field days, oup discussion, CD shows	158	392	1126 boxes
Kandhamal	Turmeric	Value addtion		D, Training, Field days, oup discussion, CD shows	95	486	
Kandhamal	Cabbage	Drudgery reduction		D, Training, Field days, oup discussion, CD shows	22	45	48
Kandhamal	Maize	Drudgery reduction	Use of Miaze Sheller for shelling FLI	D, Training, Field days, oup discussion, CD shows	27	54	

## 3.2 Details of FLDs implemented

KVK Name	Thematic	Name of	Seaso	Technology demonstrated	Crop-	Name of	Results	(q/ha)	%		N	lo. of fa		
	area	Crop/ Enterpris e	n and year		Area (ha) / Entrep - No.	Variety/Technology/ Enterprises	Demons	Check	change	SC	ST	OBC	Others	Total
Kandhamal	Varietal evaluation	Paddy	Kharif 2011	Variety-Manaswini ,Maturity Medium(125-132 days),spacing 20x10 cm , with recommended dose of fertilizer 80:40:40 NPK kg/ha	1.0	HYV Paddy variety Manaswini	47.0	30.5	54.1		5			5
Kandhamal	Integrated weed management	Paddy	Kharif 2011	Pre emergence application of weedicide, Pretilachlore @ 0.6 kg a i /ha (1.25 lit/ha), after four days of transplanting followed by one hand weeding at 25DAT	1.0	Integrated weed management in Paddy	44.0	31.5	41.9	1	3	1	1	5
Kandhamal	Integrated weed management	Groundnut	Kharif 2011	Pre emergence application of weedicide , Oxyflorafen 23.5EC@ 400ml /ha after one day of sowing of groundnut followed by one hand weeding at 20DAS	1.0	Integrated weed management in kharif Groundnut	15.4	10.2	51.0		5	-	1	5
Kandhamal	INM	Paddy	Kharif 2011	Application of mixing Nimin @ 10ml/kg of Urea before application in paddy crop.	1.0	Application of Nimin coated urea to improve the efficiency of urea fertilizer in medium land paddy	37.4	31.2	19.8	1	4	-	-	5
Kandhamal	IPDM	Paddy	Kharif 2011	Seed treatment with tricyclazole @2gm/kg of Seed,, Application of Fipronil 0.3G @ 1.25 Kg in 1000m² nursery area & 7 days before transplanting release of Tricho cards ,spraying of multineem 300 PPM @5ml/liter of water, Pheromone trap @20nos./ha.	1.0	IPDM in Paddy	40.7	30.56	33	1	4	-	-	5

Kandhamal	Varietal Tomato Evaluation	Kharif 2011	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 , application recommended dose of fertilizer @125:80:110 NPK kg/ha.	1.0	Introduction of hybrid Tomato var- Utkal Raja	146.0	97.0	50.5	2	3	-	-	5
Kandhamal	IDM Brinjal	Kharif 2011	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.	1.0	Wilt management in Brinjal	258.8	192.6	34.37	2	3	-	-	5
Kandhamal	IPM Cabbage	Kharif 2011	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.	1.0	IPM of Spodoptera in Cabbage	239.8	174.0	37.8	2	3	1	-	5
Kandhamal	INM Turmeric	Kharif 2011	Lime application @ 5q/ha at the time of final ploughing with fYM @ 15 t /ha , Spacing 30x20 cm, seedrate-18q /ha.	1.0	Soil liming in Turmeric	121	79.0	53.2	-	5	1	-	5
Kandhamal	Varietal Ginger Evaluation	Kharif 2011	Variety-Suprava ,FYM 10 ton/ha ,Seed treatment with <i>Trichoderma viridiae</i> @ 5 gm/kg & Neem cake application @ 250kg/ha in raised bed .	1.0	HYV Ginger var- Suprava	87.3	53.2	64.1	1	4	-	-	5
Kandhamal	House hold food security garden	al Kharif 2011	Plot Size -10 cent , Developing crop schedule on rotation basis, lay out of nutritional garden with crop management.	0.4	Planning & layout of Nutritional garden	68	112	64	3	7	-	-	10

Kandhamal	Drudgery reduction	Cono weeder	Kharif 2011	Weeding by cono weeder at 20 DAT & 40 DAT.	1.0	Use of cono weeder for SRI method of paddy cultivation.	120 m <sup>2/</sup> /hr	55 m <sup>2/</sup> /hr	118	1	4	-	-	5
Kandhamal	Drudgery reduction	Maize sheller	Kharif 2011	Shelling of Maize using maize sheller	5 units	Use of Maize sheller	20 kg/hr	4kg/hr	400	-	5	-	-	5
Kandhamal	INM	Niger	Kharif 2011	Soil test based fertilizer applied at the time of sowing where as ,K,S,B nutrients were applied 15 horoughly through Pottasium sulphate (1%) & Boron (0.2%) as foliar spray at 40 DAS ,50 DAS & 60 DAS.	1.0	Foliar application of Sulphur & Boron in Niger	5.3	2.9	82.7	-	5	-	-	5
Kandhamal	Weed mangement	Niger	Kharif 2011	Line sowing, inoculation of Azotobacter and PSB @ 20 g/kg seed, soil test based fertilizer application @ 40:20:20 NPK kg/ha,, pre emergence application of weedicide oxyflorafen 23.5 EC @ 200 ml/ ha, hand weeding at 30DAS with need based application of plant protection.		Weed management in Niger.	5.2	3.3	57.5	5	15	-	-	20
Kandhamal	INM & IPM	Blackgram	2011	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	HYV seed with IPM & INM	6.3	3.9	61.5	6	17	-	-	23
Kandhamal	Varietal evaluation	Sun flower	Rabi 11-12	Hybrid var , KBSH-1, duration 90-95 days , application of fertilizer @ 60:60:40 NPK kg/ha , oil content 40-42 %	1.0	Hybrid Sunflower variety KBSH-I	13.49	7.38	82.7		5	-	-	5
Kandhamal	IPM	Okra	Rabi 11-12	Seed treatment with imidacloprid @7 g/kg of seed, fixing up of yellow sticky trap, two spray of imidacloprid @ 3ml/10 lit and Neem oil @ 5ml/lit of water at 10 days interval.	1.0	Control of YMV in Okra	114.4	82.0	39.5	1	4	-	-	5

Kandhamal	IPM	Mustrad	Rabi 11-12	Two spray of imidacloprid 3ml/10 lit at 15 days interval. Alternating with spraying of Roger @ 2 ml/lit.	1.0	Control of Aphid incidence in Mustard	8.06	5.16	56.2	1	4	-	-	5
Kandhamal	INM	Cabbage	Rabi 11-12	Application of FYM @ 15 tonn/ha at the time of final ploughing followed by foliar spray of boron @ 3g / lit of water at 30DAP and 45 DAP with soil test based fertilizer application	1.0	Boron application in Cabbage	227.8	156.3	45.7	-	5	-	-	5
Kandhamal	INM	Potato	Rabi 11-12	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.	1.0	Bio fertilizer application in Potato	160.4	102.7	56.2	-	5	-	-	5
Kandhamal	ICM	Mango	Rabi 11-12	Spraying of Gibberellic acid (GA3) @ 50PPM at full blossom and at pea stage of mango for 5-7 year old plant	1.0	Control of fruit drop in Mango.	24	10	140	-	-5	-	,	5
Kandhamal	Varietal evaluation	Cow Pea	Rabi 11-12	FYM @5 ton/ha ,Seed treatment with thiram @ 3 gm/kg of seed ,spacing 30X15 cm ,soil test based fertilizer application @ 25:50:25 NPK kg/ha.	1.0	HYV Cowpea var- Utkal Manika	140.0	105.0	33.3	-	5	-	-	5
Kandhamal	ICM	Toria	Rabi 11-12	HYV toria Parvati , line sowing with soil test based fertilizer @ 40:20:20 NPK kg/ha , Gypsum 250 kg/ha & need based plant protection chemicals.	5.0	HYV mustard Parvati with INM practices.	9.3	5.8	60.3	4	31	-	-	35
Kandhamal	Small Scale Income generating enterprises	Bee keeping	Rabi 11-12	ISI Bee Box ,Apis cerena indica & improved management practices.	5 boxes	Bee keeping for income generation	7.5kg/b ox	4 kg/box	87.5	-	5	-	-	5
Kandhamal	Small Scale Income generating enterprises	Mushroom cultivation		Cultivation of Oyster mushroom var-P.sajarcaju.	50 beds	Mushroom cultivation for	1.25kg/ bed			4	6	-	-	10
Kandhamal	Drudgery reduction	Turmeric boiling drum	Rabi 11-12	Boiling of turmeric for 45 minutes using improved tuemeric boiling drum.	5 units	Use of Turmeric boiling drum	40kg/dr um	10kg/dr um	300 %	-	5	-	-	5

# 3.3 Economic Impact of FLD

KVK Name	Name of Crop/ Enterprise	Technology demonstrated	Paramet	ers		Cost o cultivat (Rs/ha	ion	Gross Ro (Rs/h		Average Return (1		Benefit-G Ratio (G Return / G Cost)	ross Gross
			Name and unit of Parameter	Demo	Check	Demo	Check	Demo	Check	Demo	Check	Demo	Local Check
Kandhamal	Paddy	Variety-Manaswini ,Maturity Medium(125-132 days),spacing 20x10 cm , with recommended dose of fertilizer 80:40:40 NPK kg/ha .	No. of tillers/hill	14.2	6.8	20125	16210	48410	31415	28285	15205	2.4	1.9
Kandhamal	Paddy	Pre emergence application of weedicide, Pretilachlore @ 0.6 kg a i /ha (1.25 lit/ha), after four days of transplanting followed by one hand weeding at 25DAT	No. of tillers/hill	11.9	5.7	20225	16325	45320	31930	25095	15605	2.2	1.9
Kandhamal	Groundnut	Pre emergence application of weedicide, Oxyflorafen 23.5EC@ 200ml /ha after one day of sowing of groundnut followed by one hand weeding at 20DAS	No. of pods/plant	15	12	14450	11250	30800	20400	16350	9150	2.1	1.8
Kandhamal	Paddy	Application of mixing Nimin @ 10ml/kg of Urea before application in paddy crop.	No. of tillers/hill	13	7	17900	16450	37400	31200	19500	14750	2.1	1.9
Kandhamal	Paddy	Seed treatment with tricyclazole @2gm/kg of Seed,, Application of Fipronil 0.3G @ 1.25 Kg in 1000m <sup>2</sup> nursery area & days before transplanting release of Tricho cards ,spraying of multineem 300 PPM @5ml/liter of water, Pheromone trap @20nos./ha.	No. of dead heart (%)	3.5	18.8	18250	16600	42735	32025	24485	15425	2.34	1.9
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 , application recommended dose of fertilizer @125:80:110 NPK kg/ha	No. of fruits/pant	5.4	7.4	47500	40000	87600	58200	40100	18200	1.84	1.45
Kandhamal	Brinjal	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.	Wilting %	6.0	21.2	35600	30250	103520	77040	67920	46790	2.9	2.54

Kandhamal	Cabbage	Intercropping with mustard (One row mustard with 10 rows cabbage),installation of Ph trap,application of neem cake 250kg/ha ,spraying of Bt @ 2gm /lit & Cartap Hydrochoride @ 1.25Gm /Lit alternatively at 15 days interval.	No. of larva/10 cabbage plant	4.0	14.2	39800	31750	95920	69600	56120	37850	2.4	2.1
Kandhamal	Turmeric	Lime application @ 5q/ha at the time of final ploughing with fYM @ 15 t /ha, Spacing 30x20 cm, seedrate-18q /ha.	Single culm weight in gm	635	422	77400	68300	176000	112750	98600	44450	2.3	1.6
Kandhamal	Ginger	Variety-Suprava ,FYM 10 ton/ha ,Seed treatment with <i>Trichoderma viridiae</i> @ 5 gm/kg & Neem cake application @ 250kg/ha in raised bed	Single culm weight in gm	110	70	114000	84000	174600	106400	60600	22400	1.53	1.26
Kandhamal	Nutritional garden	Plot Size -10 cent , Developing crop schedule on rotation basis, lay out of nutritional garden with crop management.	-	-	-	4800	3600	11200	6800	6400	3200	2.3	1.8
Kandhamal	Cono- weeder	Weeding by cono weeder at 20 DAT & 40 DAT.	Mandays/ha	10.4	22.7		-	-	-	-	-	-	-
Kandhamal	Maize sheller	Shelling of Maize using maize sheller	-	-	-	-	-	-	-	-	-	-	-
Kandhamal	Niger	Soil test based fertilizer applied at the time of sowing where as ,K,S,B nutrients were applied 18 horoughly through Pottasium sulphate (1%) & Boron (0.2%) as foliar spray at 40 DAS ,50 DAS & 60 DAS.	Test weight in Gm	5.05	3.15	8750	5900	21200	11600	12450	5700	2.4	1.9
Kandhamal	Niger	Line sowing, inoculation of Azotobacter and PSB @ 20 g/kg seed, soil test based fertilizer application @ 40:20:20 NPK kg/ha,, pre emergence application of weedicide oxyflorafen 23.5 EC @ 200 ml/ha, hand weeding at 30DAS with need based application of plant protection.	Weed infestation at 60 DAS/m <sup>2</sup>	2.5	15.4	8000	5600	20800	13200	12700	7700	2.6	2.3
Kandhamal	Blackgram	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	19.5	11.2	12300	9400	25200	15600	12900	6200	2.0	1.65
Kandhamal	Sun flower	Hybrid var, KBSH-1, duration 90-95 days, application of fertilizer @ 60:60:40 NPK kg/ha, oil content 40-42 %	No. of seeds/head	129.4	82.6	13890	9540	31702	17343	17893	7803	2.3	1.8

Kandhamal	Okra	Seed treatment with imidacloprid @7 g/kg of seed, fixing up of yellow sticky trap, two spray of imidacloprid @ 3ml/10 lit and Neem oil @ 5ml/lit of water at 10 days interval.	YMV infestation %	8.8	32.5	38200	33700	114400	82000	76200	48300	3.0	2.4
Kandhamal	Mustard	Two spray of imidacloprid 3ml/10 lit at 15 days interval. Alternating with spraying of Roger @ 2 ml/lit.	No. of aphid/plant	17.8	88	8900	7150	20150	12900	11250	5750	2.26	1.8
Kandhamal	Cabbage	Application of FYM @ 15 tonn/ha at the time of final ploughing followed by foliar spray of boron @ 3g / lit of water at 30DAP and 45 DAP with soil test based fertilizer application	Head weight in Kg	1.35	0.95	39100	35350	102510	70335	63410	34985	2.6	2.0
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 and applpy at the time of planting.	Root length in cm	26.9	19.2	35300	29200	104260	66755	68960	37555	3.0	2.3
Kandhamal	Mango	Spraying of Gibberellic acid (GA3) @ 50PPM at full blossom and at pea stage of mango for 5-7 year old plant	% of dropping/plant	20	65	6200	5000	28800	12000	22600	7000	4.64	2.40
Kandhamal	Cow Pea	FYM @5 ton/ha ,Seed treatment with thiram @ 3 gm/kg of seed ,spacing 30X15 cm ,soil test based fertilizer application @ 25:50:25 NPK kg/ha.	No. of pods/plant	6	4.5	33400	30000	112000	84000	78600	60000	3.35	2.80
Kandhamal	Toria	HYV toria Parvati, line sowing with soil test based fertilizer @ 40:20:20 NPK kg/ha, Gypsum 250 kg/ha & need based plant protection chemicals.	No. of siliqua/plant	178	105	11750	7800	27900	17400	16150	9600	2.4	2.2
Kandhamal	Bee keeping	ISI Bee Box ,Apis cerena indica & improved management practices.		-	-	600/box	400/b ox	1125/bo x	600/box	525/box	200/box	1.9	1.5
Kandhamal	Mushroom cultivation	Cultivation of Oyster mushroom var- P.sajarcaju			-	22/bed		75		53		3.4	
Kandhamal	Turmeric boiling drum	Boiling of turmeric for 45 minutes using improved tuemeric boiling drum.		-	-	-	-	-	-	-	-	-	-

## 3.4 Feedback of the Farmers

Name of	Feedback
KVK	
Kandhamal	Paddy –Variety Manaswini gave an average yield of 47 q/ha with an increase of 51.4 % over local variety & accepted by the farmers.
Kandhamal	Paddy- Application of weedicide pretilachlore @0.6 kg a.i /ha reduces the weed infestation by 74 % & gave an yield of 44q/ha .the
	technology is appreciated by the farmers.
Kandhamal	Groundnut-Application of Pre emergence weedicide, Oxyflorafen 23.5EC@ 400ml /ha reduces weed infestation by 71 % during early
	growth period & gave an average yield of 15.4 q/ha with an increase of 51 % over farmers practice & is accepted by the farmers.
Kandhamal	Paddy- The technology is accepted by the farmers
Kandhamal	Paddy- The farmers accepted the technology
Kandhamal	Tomato- The farmers accepted the variety for off season cultivation for fetching higher price.
Kandhamal	Brinjal- The farmers accepted the technology due less incidence of fruit & shoot borer.
Kandhamal	Cabbage-The farmers accepted the technology
Kandhamal	Turmeric-Accepted by the farmers.
Kandhamal	Ginger-The farmers appreciated the variety due to least incidence of rhizome rot
Kandhamal	Nutritional garden-The farm women accepted the technology as they are geeting fresh vegetables & also additional income.
Kandhamal	Niger-The technology is accepted by the farmers
Kandhamal	Sunflower- Hybrid Sun flower variety KBSH-I gave an average yield of 13.49 q/ha with an increase of 82.7 % over local variety. The variety
	is accepted by the farmers.
Kandhamal	Okra-The technology accepted by the farmers
Kandhamal	Mustard-The technology accepted by the farmers
Kandhamal	Cabbage-The technology is highly appreciated by the farmers
Kandhamal	Potato-The technology is highly appreciated by the farmers.
Kandhamal	Mango-The farmers has accepted the technology due good retention of fruits.
Kandhamal	Cow pea-The farmers accepted the variety due to bushy nature of plant & compact uniform pod

# 3.5 Training and Extension activities under FLD 3.6

KVK Name	Crop	Activity	No. of activities organized	Number of participants	Remarks
Kandhamal		Field days	1	20	-
Kandhamal	Paddy	Farmers Training	3	75	
Kandhamal	rauuy	Media coverage	-	-	-
Kandhamal		Training for extension functionaries	-	-	-
Kandhamal		Field days	1		
Kandhamal	Paddy	Farmers Training	2	60	
Kandhamal	1 addy	Media coverage	-	-	
Kandhamal		Training for extension functionaries	-	-	
Kandhamal		Field days	1	20	
Kandhamal	Groundnut	Farmers Training	2	60	
Kandhamal	Groundhut	Media coverage			
Kandhamal		Training for extension functionaries			
Kandhamal		Field days	1	20	
Kandhamal	Paddy	Farmers Training	1	30	
Kandhamal	Paddy	Media coverage	-	-	
Kandhamal		Training for extension functionaries	-	-	
Kandhamal		Field days	1	20	-
Kandhamal	D 11	Farmers Training	2	60	-
Kandhamal	Paddy	Media coverage			
Kandhamal		Training for extension functionaries			
Kandhamal		Field days	1	20	
Kandhamal		Farmers Training	1	30	
Kandhamal	Tomato	Media coverage			
Kandhamal		Training for extension functionaries			
Kandhamal		Field days	1	20	=
Kandhamal	<b></b>	Farmers Training	2	60	
Kandhamal	Brinjal	Media coverage			
Kandhamal		Training for extension functionaries			
Kandhamal		Field days	1	20	
Kandhamal		Farmers Training	1	30	
Kandhamal	Cabbage	Media coverage			
Kandhamal		Training for extension functionaries			
Kandhamal		Field days	1	20	
Kandhamal		Farmers Training	1	30	
Kandhamal	Turmeric	Media coverage	1	30	
Kandhamal		Training for extension functionaries			
Kanunamai		Training for extension functionaries			

Kandhamal		Field days	1	20
Kandhamal	a:	Farmers Training	2	60
Kandhamal	Ginger	Media coverage		
Kandhamal		Training for extension functionaries		
Kandhamal		Field days	-	-
Kandhamal	XX	Farmers Training	2	60 -
Kandhamal	Nutritional garden	Media coverage	-	
Kandhamal		Training for extension functionaries	-	
Kandhamal		Field days	1	20
Kandhamal	<b>.</b>	Farmers Training	1	30
Kandhamal	Niger	Media coverage		
Kandhamal		Training for extension functionaries		
Kandhamal		Field days	-	-
Kandhamal	C CI	Farmers Training	1	15
Kandhamal	Sunflower	Media coverage	-	
Kandhamal		Training for extension functionaries	-	
Kandhamal		Field days	-	
Kandhamal	01	Farmers Training	1	30
Kandhamal	Okra	Media coverage		
Kandhamal		Training for extension functionaries		
Kandhamal		Field days	-	-
Kandhamal	M1	Farmers Training	1	30
Kandhamal	Mustard	Media coverage		
Kandhamal		Training for extension functionaries		
Kandhamal		Field days	1	20
Kandhamal	Cabbaga	Farmers Training	1	30
Kandhamal	Cabbage	Media coverage		
Kandhamal		Training for extension functionaries	1	15
Kandhamal		Field days	1	20
Kandhamal	Potato	Farmers Training	2	45
Kandhamal	rotato	Media coverage		
Kandhamal		Training for extension functionaries	1	15
Kandhamal		Field days		
Kandhamal	Mango	Farmers Training	5	120
Kandhamal	wango	Media coverage		
Kandhamal		Training for extension functionaries		
Kandhamal		Field days		
Kandhamal	Cow Pea	Farmers Training	2	60
Kandhamal	Cow Pea	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			25.11.11 ,Bandaguda	255
	Practicing farmers & farm	Focused group discussion	24.03.12 ,Magariguda	
	women	,Interaction & diagnostic visit	22.2.12 ,KVK Campus	
			3.06.2011 ,Bandaguda	
Kandhamal	Form woman	Interaction with farm women	4.12.2011 ,Pradhanpada	25
	Farm women	,Diagnostic visit & PRA.		
Kandhamal	Rural Youth	Personnel interview, PRA &	29.03.12 , 8.02.12 ,KVK ,Kandhamal	50
	Rurai Toutii	group discussion		
Kandhamal		Group discussion & secondary	18.06.2011 ,KVK ,Kandhamal,	70
	Extension functionaries	information.	29.03.2011 ,Soil Conservation hall ,Phulbani	

#### **Abbreviation Used**

	non Oseu							
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 A	reas 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	Cate-	Training	Thema	Training Title	No.	Duratio				Par	ticipants	3		
KVK	gory	Type	tic		of	n (Days)	Gen			SC		ST		thers
			area		Cour ses		M	F	M	F	M	F	M	F
1	2	3	4	5	7	8	9	10	11	12	13	14		
Kandhamal	FW	OFC	CRP	Agro technique for Maize cultivation	1	1	-	-	15	4	9	2	-	-
Kandhamal	FW	OFC	CRP	Agro-techniques for oilseed crops	1	1	-	-	1	2	11	16	-	-
Kandhamal	FW	OFC	CRP	Weed Management in transplanted Paddy	2	2	1	2	18	8	18	13	-	-
Kandhamal	FW	OFC	CRP	Package and practices of paddy cultivation	1	1	-	_	9	7	9	5	-	-
Kandhamal	RY	OFC	CRP	Nursery Management in Hybrid rice	1	1	-	-	3	2	18	7	-	-
Kandhamal	RY	OFC	CRP	Integrated weed management in Kharif Groundnut	1	1	-	-	2	-	20	8	-	-
Kandhamal	RY	ONC	CRP	Bio-fertilizer application in pulse crop	1	1	-	-	3	2	8	2	-	-
Kandhamal	RY	ONC	CRP	Weed Management in Pulse crop	1	1	-	-	5	-	4	6	-	-
Kandhamal	RY	ONC	CRP	Package and practices of sunflower cultivation	1	1	-	_	3	-	11	1	-	-
Kandhamal	RY	ONC	CRP	Use of herbicide in Maize & Paddy.	1	1	-	_	1	-	9	5	-	-
Kandhamal	IS	ONC	CRP	Productivity enhancement in field crops	1	1	10	-	2	-	3	-	-	-
Kandhamal	FW	OFC	PLP	Integrated pest management in paddy	1	1	-	-	2	-	21	7	-	-

Name of	Cate-	Training	Thema	Training Title	No.	Duratio								
KVK	gory	Type	tic		of	n (Days)	Gen	eral		SC		ST	Ot	hers
			area		Cour ses		M	F	M	F	M	F	M	F
1	2	3	4	5	7	8	9	10	11	12	13	14		
Kandhamal	FW	OFC	PLP	Integrated disease management in Turmeric	1	1	-	-	10	3	11	6	-	-
Kandhamal	FW	OFC	PLP	Integrated disease management in Groundnut	1	1	-	-	-	-	21	9	-	-
Kandhamal	FW	OFC	PLP	Integrated pest management in Cabbage	1	1	-	-	-	-	22	8	-	-
Kandhamal	FW	OFC	PLP	Integrated disease management in Brinjal	1	1	-	-	1	1	13	15	-	-
Kandhamal	FW	OFC	PLP	Bio control of pest and diseases of solanaceous vegetable	1	1	-	-	11	9	3	7	-	-
Kandhamal	RY	ONC	PLP	Method & application of bio pesticides										
Kandhamal	FW	OFC	PLP	Integrated pest management in Mustard	1	1	-	-	-	-	26	4	-	-
Kandhamal	FW	OFC	PLP	Integrated disease management in Okra	1	1	-	-	-	-	14	16	-	-
Kandhamal	FW	OFC	PLP	Integrated disease management in Brinjal	1	1	-	-	1	1	13	15	-	-
Kandhamal	FW	OFC	PLP	Integrated pest management in Tuber crops	1	1	-	-	6	3	16	55	-	-
Kandhamal	FW	OFC	PLP	Bio control of pest & disease in Ginger	1	1	1	-	-	-	29	-	-	-
Kandhamal	RY	ONC	PLP	Integrated pest management in Tuber crops	1	2	-	-	2	-	11	2	-	-
Kandhamal	RY	ONC	PLP	Bee keeping	1	4	-	-	-	-	15	-	-	-
Kandhamal	IS	ONC	PLP	IPM in cole crops	1	1	4	-	3	-	8	-	-	-
Kandhamal	FW	OFC	SFM	Need of Soil testing and	1	1	-	-	3	-	20	7	-	-

Name of						Duratio	Participants									
KVK	gory	Type	tic		of	n (Days)		eral		SC		ST		thers		
			area		Cour ses		M	F	M	F	M	F	M	F		
1	2	3	4	5	7	8	9	10	11	12	13	14				
				soil test based fertilizer application												
Kandhamal	FW	OFC	SFM	Enhancing productivity of Turmeric through nutrient management practices	1	1	-	-	4	1	20	5	-	-		
Kandhamal	FW	OFC	SFM	Methodology for improving fertilizer use efficiency in medium land paddy	1	1	1	-	5	2	22	-	-	-		
Kandhamal	FW	OFC	SFM	Fertilizer management in cereal crops.	1	1	-	-	1	-	25	4	-	-		
Kandhamal	FW	OFC	SFM	Micro and secondary nutrient management in oilseed crops.	1	1	1	2	2	`2	14	9	-	-		
Kandhamal	FW	OFC	SFM	Nutrient management in spice crops	1	1	-	-	2	2	18	8	-	-		
Kandhamal	FW	OFC	SFM	Nutrient management in cole crops	1	1	-	-	2	2	24	2	-	-		
Kandhamal	FW	OFC	SFM	Micro nutrient management in vegetables	1	1	-	-	-	-	12	18	-	-		
Kandhamal	FW	ONC	SFM	Technology to maximize irrigation water use efficiency.	1	1	-	-	2	-	13	-	-	-		
Kandhamal	RY	OFC	SFM	Methodology for quality vermin compost production	1	1	-	-	3	1	18	8	-	-		
Kandhamal	RY	OFC	SFM	Nutrient management through bio fertlizer	1	1	-	-	-	-	17	13	-	-		
Kandhamal	RY	ONC	SFM	Methodology for quality	2	2	-	-	-	-	27	3	-	-		

Name of	Cate-	Training	Thema	Training Title	No.	Duratio	Participants									
KVK	gory	Type	tic		of	n (Days)		eral		SC		ST		hers		
			area		Cour ses		M	F	M	F	M	F	M	F		
1	2	3	4	5	7	8	9	10	11	12	13	14				
				vermin compost production												
Kandhamal	RY	ONC	SFM	Techniques for soil sample collection	1	1	-	-	1	-	14	-	-	-		
Kandhamal	RY	ONC	SFM	Vermicomposting	1	4	-	-	2	-	13	-	-	-		
Kandhamal	IS	ONC	SFM	Methodology for bio fertilizer application in vegetables	1	1	6	-	2	-	7	-	-	-		
Kandhamal	IS	ONC	SFM	Management of acid soils for higher productivity.	1	1	9	-	5	-	1	-	-	-		
Kandhamal	FW	OFC	WOE	Management and layout of Nutritional garden	2	2	-	-	1	13	-	47	-	-		
Kandhamal	FW	OFC	WOE	Use of Cono weeder in SRI Paddy cultivation	1	1	-	-	1	3	11	15	-	-		
Kandhamal	FW	OFC	WOE	Use of Paddy winnower and thresher	1	1	1	-	-	8	1	20	-	-		
Kandhamal	FW	ONC	WOE	Paddy straw mushroom cultivation	1	2	-	-	1	7	-	7	-	-		
Kandhamal	FW	OFC	WOE	Use & maintenance of Turmeric boiling drum	2	2	-	3	-	14	-	43	-	-		
Kandhamal	FW	ONC	WOE	Oyster Mushroom cultivation	1	2	-	-	-	-	-	15	-	-		
Kandhamal	RY	OFC	WOE	Knowledge on use of Paddy winnower and thresher	1	1	-	-	-	7	-	23	-	-		
Kandhamal	RY	OFC	WOE	Preparation of leaf plates by stiching machine	1	1	-	-	-	7	-	23	-	-		
Kandhamal	RY	ONC	WOE	Processing, preservation and value addition of minor forest product & fruits	3	6	-	5	-	6	-	34	-	-		
Kandhamal	RY	ONC	WOE	Mushroom Cultivation	2	2	-	-	3	4	8	15	-	-		

Name of	Cate-	Training	Thema	Training Title	No.	Duratio					rticipants			
KVK	gory	Type	tic		of	n (Days)		eral		SC		ST	Ot	hers
			area		Cour ses		M	F	M	F	M	F	M	F
1	2	3	4	5	7	8	9	10	11	12	13	14		-
Kandhamal	IS	ONC	WOE	Processing, preservation and value addition of Minor fruit crops and vegetables	2	2	-	14	-	6	-	10	-	-
Kandhamal	FW	OFC	CBD	Formation & & management of farm science club	2	2	-	-	4	-	53	3	-	-
Kandhamal	FW	OFC	CBD	Formation & management of SHG	1	1	-	-	10	5	11	4	-	-
Kandhamal	FW	OFC	CBD	Leadership development	1	1	-	-	5	-	22	3	-	-
Kandhamal	FW	OFC	CBD	Entrepreneur development for farmer.	1	1	-	-	9	1	13	7	-	-
Kandhamal	FW	ONC	CBD	Formation & management of farm science club	1	1	-	-	-	-	15	-	-	-
Kandhamal	IS	ONC	CBD	WTO & IPR issue	1	1	4	-	-	-	11	-	-	-
Kandhamal	FW	OFC	HOS	Raised seed bed technique for turmeric and ginger planting	1	1	5	2	1	2	13	7	-	-
Kandhamal	FW	OFC	НОТ	Organic Turmeric and Ginger Cultivation	1	1	-	-	1	-	20	9	-	-
Kandhamal	FW	OFC	HOV	Soil & water conservation measure in orchard	1	1	-	-	9	-	19	2	-	-
Kandhamal	FW	OFC	HOV	Production technique of garden pea cultivation	2	2	-	-	-	-	22	38	-	-
Kandhamal	FW	OFC	HOV	Control of fruit drop in Mango	1	1	-	-	1	3	19	7	-	-
Kandhamal	FW	OFC	HOV	Nursery raising technique of off season vegetable for higher	1	1	2	-	-	-	28	-	-	-

Name of	Cate-	Training	Thema	Training Title	No.	Duratio	o Participants							
KVK	gory	Type	tic		of	n (Days)	ays) General		General SC		ST		Ot	hers
			area		Cour		M	F	M	F	M	F	M	F
					ses									
1	2	3	4	5	7	8	9	10	11	12	13	14		
				income.										
Kandhamal	RY	ONC	HOF	Technique of propagation	1	3	-	-	-	-	15	-	-	-
				of Mango and Guava										
Kandhamal	RY	OFC	HOF	Improved method of	1	1	-	-	4	-	24	2	-	-
				mango cultivation										
Kandhamal	IS	ONC	HOV	Use of sprinkler	1	1	6	-	4	-	5	-	-	-
				irrigation & drip										
				irrigation in orchard.										

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

		Cron /		Duration	Number of Beneficiaries							
Name of KVK	Training title	Crop / Enterpris	Identified Thrust Area	of training		SC	ST		Others			
		е		(days)	M	F	M	F	M	F		
Kandhamal	Vermicomposting	Enterprise	Production & use of organic inputs	4	2	-	13	-	-	-		
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	-	-	-	15	-	-		

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

Name of	Training title	Self employed after training	self employed after training							
KVK		Type of units	Number of units	Number of persons employed	persons employed else where					
Kandhamal	Vermicomposting	Vermin		2	-					
Kandhamal	Bee keeping	Bee hives	5	3	-					
Kandhamal	Processing ,preservation & value addition of minor fruit crops & vegetables	Preservatives		5	1					
Kandhamal	Mushroom cultivation	Spawn	10	4	-					

**Table 5.4. Sponsored Training Programmes** 

Nome of			Thematic area	Sub-theme (as per column no	Client	Dura-		No. Oth		artic Se		nts S'	Г	~ .	Fund received
Name KVK	of	Title	(as given in abbreviation table)	5 of Table T1)	(FW/ RY/ IS)	tion (days)	No. of courses	M	F	M	F	M	F	Sponsoring Agency	for training (Rs.)
Kandh	amal	Water management for increasing crop productivity	Water management	Water management	FW	07	01	-	-	12	3	29	6	AICRP on Water management (ICAR)	
Kandh	namal	Awareness programme under utilized crops	Crop substitution	Crop diversification	FW	01	01	-	-	22	-	38	-	AICRN on UU crops ,OUAT ,Bhubaneswar	

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

Ī			Thematic area (as	Sub-theme	Client	Dura-		No.	of Par	ticipan	ts				
Name of KVK			given in	(as per	s per (FW/	W/ tion	No. of	Others SC		ST		Sponsoring	Fund received for		
	Name of KVK	Title	ahhraviation tahla)	column no 5 RY/ of Table T1) IS)		(days)	courses	M	F	M	F	M	F	Agency	training (Rs.)
	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		nge in rledge ore)	Change in 1 (q/l		Change in (R		Impact on 1. Area expanded (ha) 2. No. of farmers adopted (no.)
			Before	After	Before	After	Before	After	3. % change in knowledge, production & Income
Kandhamal	Agro technique for Maize cultivation	30	35	53	15	22	25000	33000	<ol> <li>35 ha</li> <li>Out of 30 trainees, 18 farmers have accepted the new technology.</li> <li>(i) Knowledge: 51.(After-Before)/Before *100</li> <li>(ii) Production: 47</li> <li>(ii) Income: 46</li> </ol>
Kandhamal	Nursery Management in Hybrid rice	30	25	44	18	25	18000	25000	1. 56 ha 2. Out of 30 trainees, 20 farmers accepted the technology 3. (i) Knowledge: 76.(After-Before)/Before *100 (ii) Production: 39 (ii) Income: 39
Kandhamal	Integrated weed management in Kharif Groundnut	30	22	36	10	15	15000	22500	<ol> <li>55 ha</li> <li>Out of 30 trainees, 21 farmers accepted the technology</li> <li>(i) Knowledge: 64.(After-Before)/Before *100         <ul> <li>(ii) Production: 50</li> <li>(iii) Income: 50</li> </ul> </li> </ol>
Kandhamal	Weed Management in transplanted Paddy	30	22	39	25	34	25000	34000	<ol> <li>74 ha</li> <li>Out of 30 trainees, 18 farmers accepted the technology</li> <li>(i) Knowledge: 77.(After-Before)/Before *100</li> <li>(ii) Production: 36</li> <li>(ii) Income: 36</li> </ol>

Kandhamal	Package and practices of paddy cultivation	30	28	43	28	37	28000	37000	<ol> <li>82 ha</li> <li>Out of 30 trainees, 21 farmers accepted the technology</li> <li>(i) Knowledge: 52.(After-Before)/Before *100</li> <li>(ii) Production: 25</li> <li>(ii) Income: 25</li> </ol>
Kandhamal	Bio-fertilizer application in pulse crop	15	23	35	8	10	20000	25000	<ol> <li>25 ha</li> <li>Out of 15 trainees, 9 farmers accepted the technology</li> <li>(i) Knowledge: 52(After-Before)/Before *100</li> <li>(ii) Production: 25</li> <li>(ii) Income: 25</li> </ol>
Kandhamal	Agrotechniques for oilseed crops	30	25	52	4	7	12000	21000	<ol> <li>28 ha</li> <li>Out of 30 trainees, 24 farmers accepted the technology</li> <li>(i) Knowledge: 108.(After-Before)/Before *100</li> <li>(ii) Production:75</li> <li>(ii) Income: 75</li> </ol>
Kandhamal	Weed Management in Pulse crop	15	23	42	5	9	15000	27000	<ol> <li>82 ha</li> <li>Out of 15 trainees, 11 farmers accepted the technology</li> <li>(i) Knowledge: 82.(After-Before)/Before *100</li> <li>(ii) Production: 80</li> <li>(ii) Income: 80</li> </ol>
Kandhamal	Use of herbicide in Maize & Paddy.	15	17	32	14	22	14000	22000	<ol> <li>40 ha</li> <li>Out of 15 trainees, 11 farmers accepted the technology</li> <li>(i) Knowledge: 88.(After-Before)/Before *100</li> <li>(ii) Production: 57</li> <li>(ii) Income: 57</li> </ol>
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:

					1		1	1	
Kandhamal	Package and practices of sunflower cultivation	15	10	15	07	13	21000	39000	<ol> <li>32 ha</li> <li>Out of 15 trainees, 9 farmers accepted the technology</li> <li>(i) Knowledge: 50.(After-Before)/Before *100</li> <li>(ii) Production: 85</li> <li>(ii) Income: 85</li> </ol>
Kandhamal	Integrated pest management in paddy	60	22	41	24	29	13100	16300	<ol> <li>1. 165 ha</li> <li>2. Out of 60 trainees, 33 farmers adopted the recommended pest management practices in paddy.</li> <li>3. (i) Knowledge: 86.(After-Before)/Before *100         <ul> <li>(ii) Production: 20</li> <li>(ii) Income: 20</li> </ul> </li> </ol>
Kandhamal	Integrated disease management in Turmeric	30	25	38	92	117	119600	152100	<ol> <li>212 ha</li> <li>Out of 30 trainees, 16 farmers adopted the recommended disease management practices in turmeric.</li> <li>(i) Knowledge: 52.(After-Before)/Before *100         <ul> <li>(ii) Production: 27</li> <li>(iii) Income: 27</li> </ul> </li> </ol>
Kandhamal	Integrated disease management in Groundnut	30	18	49	9	14	12700	19200	1. 66 ha 2.Out of 30 trainees, 12 farmers adopted the recommended disease management practices in groundnut. 3. (i) Knowledge: 172.(After-Before)/Before *100 (ii) Production: 55 (ii) Income: 55
Kandhamal	Integrated pest management in Cabbage	30	14	27	172	215	24400	32200	1. 187 ha 2.Out of 30 trainees, 15 farmers adopted the recommended pest management practices in cabbage 3. (i) Knowledge: 92.(After-Before)/Before *100 (ii) Production: 25 (ii) Income: 31

Kandhamal	Integrated disease management in Brinjal	30	17	32	182	225	44800	66700	1. 142 ha 2.Out of 30 trainees, 14 farmers adopted the recommended pest management practices in brinjal. 3. (i) Knowledge: 88.(After-Before)/Before *100 (ii) Production: 23 (ii) Income: 49
Kandhamal	Bio control of pest and diseases of solanaceous vegetable	30	23	51	165	197	26500	38200	<ol> <li>1. 88 ha</li> <li>2.Out of 30 trainees, 17 farmers adopted the recommended pest management practices in tomato</li> <li>2. (i) Knowledge: 121.(After-Before)/Before *100</li> <li>(ii) Production: 19</li> <li>(ii) Income: 44</li> </ol>
Kandhamal	Method & application of bio pesticides	15	19	44	182	224	42500	61700	<ol> <li>1. 128 ha</li> <li>2. Out of 15 trainees, 8 farmers adopted the recommended practice.</li> <li>3. (i) Knowledge: 131.(After-Before)/Before *100         <ul> <li>(ii) Production: 23</li> <li>(iii) Income: 45</li> </ul> </li> </ol>
Kandhamal	Integrated pest management in Mustard	30	28	51	6.1	8.2	5390	8490	<ol> <li>250 ha</li> <li>Out of 30 trainees, 19 farmers adopted the IPM in mustard</li> <li>(i) Knowledge: 82.(After-Before)/Before *100</li> <li>(ii) Production: 34.4</li> <li>(ii) Income: 57</li> </ol>
Kandhamal	Integrated disease management in Okra	30	24	61	88	114	48300	76200	1. 120 ha 2.Out of 30 trainees, 17 farmers adopted the IPM in Okra (i) Knowledge: 158.(After-Before)/Before *100 (ii) Production: 29 (ii) Income: 57

Kandhamal	Integrated disease management in Brinjal	30	18	44	190	258	46700	68000	<ol> <li>1. 175 ha</li> <li>2. Out of 30 trainees, 19 farmers adopted the IDM technologies.</li> <li>3. (i) Knowledge: 144 (After-Before)/Before *100</li> <li>(ii) Production: 35.7 %</li> <li>1. (ii) Income: 45%</li> </ol>
Kandhamal	Integrated pest management in Tuber crops	30	31	68	120	156	42000	63000	1. 220 ha 2. Out of 30 trainees, 20 farmers accepted the technology 3. (i) Knowledge: 119 (After-Before)/Before *100 (ii) Production: 30 % 2. (ii) Income:50 %
Kandhamal	Bio control of pest & disease in Ginger	30	19	43	53	87	57000	92000	1. 300 ha 2. Out of 30 trainees, 16 farmers accepted the technology 3. (i) Knowledge: 126 (After-Before)/Before *100 (ii) Production: 64 % (ii) Income: 61 %
Kandhamal	Integrated pest management in Tuber crops	15	27	72	112	162	40000	65000	<ol> <li>225 ha</li> <li>Out of 15 trainees, 8 farmers accepted the technology</li> <li>(i) Knowledge: 44 (After-Before)/Before *100</li> <li>(ii) Production: 30 %</li> <li>(ii) Income:50 %</li> </ol>
Kandhamal	Bee keeping	15	35	78	3kg/box	6kg/box	450/box	900/box	<ol> <li>Out of 15 trainees, 10 farmers adopted the technology</li> <li>(i) Knowledge: 122 (After-Before)/Before *100</li> <li>(ii) Production: 100 %</li> <li>(ii) Income:100 %</li> </ol>
Kandhamal	IPM in cole crops	15	54	83	-	-	-	-	<ol> <li>Out of 15 trainees, 10 trainees aware about the technology.</li> <li>(i) Knowledge: 53.7 (After-Before)/Before *100         <ul> <li>(ii) Production:</li> <li>(iii) Income</li> </ul> </li> </ol>

** "							2.700		
Kandhamal	Formation &	75	32	47	-	-	3500	7100	1. No. Of Farm science club 5
	management of								2. Out of 75 trainees, 52 have good
	farm science								knowledge in book keeping & role FSC.
	club								3. (i) Knowledge: 46 (After-Before)/Before
	Club								*100
									(ii) Production:
									(ii) Income: 102 %
Kandhamal	Formation &	30	25	52	-	-	1400	2700	1. No. of SHG-5
	management of								2. Out of 30 trainees, 12 have understood
	SHG								the SHG concept & book keeping.
	3110								3. (i) Knowledge: 108 (After-Before)/Before
									*100
									(ii) Production:
									(ii) Income:92 %
Kandhamal	Leadership	30	21	32	-	-	-	-	1. No. of villages 6
	development								2. Out of 30 trainees, 16 have the
	development								knowledge on organisation management
									3. (i) Knowledge: 52 (After-Before)/Before
									*100
									(ii) Production:
									(ii) Income:
Kandhamal	WTO & IPR	15	15	39	-	-	-	-	1. Out of 15 trainees, 9 have knowledge on
	issue								organisation management.
	issuc								2. (i) Knowledge: 160 (After-
									Before)/Before *100
									(ii) Production:
									(ii) Income:
Kandhamal	Entrepreneur	30	12	33	-	-	-	-	1. Out of 30 trainees, 19 have
	development								knowledge on organisation
	for farmer.								management.
	for farmer.								2. (i) Knowledge: 175 (After-
									Before)/Before *100
									(ii) Production:
									(ii) Income:
Kandhamal	Need of Soil	30	29	66	127.8	213.7	34480	57655	1. 80 ha
	testing and soil								2. Out of 30 trainees, 21 farmers understood
	test based								the importance of soil testing.
									3. (i) Knowledge: 127 (After-Before)/Before
	fertilizer								*100
	application								(ii) Production: 67.2 %
									(ii) Income: 67.2 %

Kandhamal	Enhancing productivity of Turmeric through nutrient management practices	30	21	52	73	107	79600	116674	<ol> <li>1. 180 ha</li> <li>2. Out of 30 trainees, 16 farmers accepted the technology</li> <li>3. (i) Knowledge: 147 (After-Before)/Before *100         <ul> <li>(ii) Production: 46.6 %</li> <li>(iii) Income:46.6 %</li> </ul> </li> </ol>
Kandhamal	Methodology for improving fertilizer use efficiency in medium land paddy	30	16	49	32.5	37.8	32500	37800	90 ha 1. Out of 30 trainees, 22 farmers use in kharif paddy 2. (i) Knowledge: 206.2 (After-Before)/Before *100 (ii) Production: 16.3 % (ii) Income:16.3 %
Kandhamal	Fertilizer management in cereal crops.	30	38	69	23.2	39.1	23200	39100	<ol> <li>72 ha</li> <li>Out of 30 trainees, 21 farmers followed the fertilizer management practices.</li> <li>(i) Knowledge: 81.6 (After-Before)/Before *100         <ul> <li>(ii) Production: 68.5 %</li> </ul> </li> <li>(ii) Income: 68.5 %</li> </ol>
Kandhamal	Micro and secondary nutrient management in oilseed crops.	30	28	59	10.6	17.7	24380	40701	<ol> <li>1. 107ha</li> <li>2. Out of 30 trainees, 24 farmers followed the fertilizer management practices in oilseed crops.</li> <li>3. (i) Knowledge: 81 (After-Before)/Before *100         <ul> <li>(ii) Production: 66 %</li> </ul> </li> <li>(ii) Income: 66 %</li> </ol>
Kandhamal	Nutrient management in spice crops	30	29	56	79	121	112750	176000	<ol> <li>520 ha</li> <li>Out of 30 trainees, 26 farmers followed the nutrient management practices.</li> <li>(i) Knowledge: 93.1 (After-Before)/Before *100         <ul> <li>(ii) Production:53.2 %</li> <li>(iii) Income: 56.1 %</li> </ul> </li> </ol>
Kandhamal	Nutrient management in cole crops	30	24	42	142	217	71000	185000	1. 105 ha 2. Out of 30 trainees, 18 farmers accepted the technology 3. (i) Knowledge: 75 (After-Before)/Before *100 (ii) Production:52.8 % (ii) Income: 52.8 %

Kandhamal	Micro nutrient management in vegetables	30	31	54	102.7	160.4	66755	104260	<ol> <li>92ha</li> <li>Out of 30 trainees, 22 farmers accepted the technology</li> <li>(i) Knowledge: 74.2 (After-Before)/Before *100         <ul> <li>(ii) Production: 56.2 %</li> </ul> </li> <li>(ii) Income:56.2 %</li> </ol>
Kandhamal	Technology to maximize irrigation water use efficiency.	15	27	39	156.3	227.8	70335	102510	<ol> <li>45 ha</li> <li>Out of 15 trainees, 9 trainess adopted the technology.</li> <li>(i) Knowledge: 44 (After-Before)/Before *100         <ul> <li>(ii) Production: 45 %</li> <li>(iii) Income: 45.7 %</li> </ul> </li> </ol>
Kandhamal	Methodology for quality vermin compost production	60	40	62	99.3	159.3	31280	50180	<ol> <li>No. Of village- 92</li> <li>Out of 60 trainees, 46 trainees adopted the technology of quality vermicompost production</li> <li>(i) Knowledge: 55 (After-Before)/Before *100         <ul> <li>(ii) Production: 60.4 %</li> </ul> </li> <li>Income: 60.4 %</li> </ol>
Kandhamal	Nutrient management through bio fertlizer	30	42	76	123	234	52800	100448	<ol> <li>90 ha</li> <li>Out of 30 trainees, 18 farmers understood the importance of bio-fertlizer for soil productivity.</li> <li>(i) Knowledge: 80.9 (After-Before)/Before *100         <ul> <li>(ii) Production:90.2 %</li> <li>(iii) Income:90.2 %</li> </ul> </li> </ol>
Kandhamal	Techniques for soil sample collection	15	29	46	-	-	-	-	<ol> <li>Out of 15 trainees, 12 trainees learnt the method of soil sample collection</li> <li>(i) Knowledge:58.6 (After-Before)/Before *100         <ul> <li>(ii) Production:</li> <li>(iii) Income:</li> </ul> </li> </ol>
Kandhamal	Vermicomposting	15	27	51	104.8	162.7	41920	65080	<ol> <li>No. Of villages -35</li> <li>Out of 15trainees, 9 trainees adopted the vermin composting methods.</li> <li>(i) Knowledge: 88.8 (After-Before)/Before *100         <ul> <li>(ii) Production: 55.2 %</li> </ul> </li> <li>Income: 55.2 %</li> </ol>

Kandhamal	Methodology for bio fertilizer application in vegetables	15	32	59	108.3	170.5	70395	110825	<ol> <li>69 ha</li> <li>Out of 15 trainees, 12 trainees accepted the methodology of bio fertilizer application.</li> <li>(i) Knowledge: 84 (After-Before)/Before *100         <ul> <li>(ii) Production: 57.4 %</li> </ul> </li> <li>Income: 57.4 %</li> </ol>
Kandhamal	Management of acid soils for higher productivity	15	27	58	10.8	17.1	21600	34200	<ol> <li>1. 118 ha</li> <li>2. Out of 15trainees, 13 trainees followed the management practices to correct soil acidity.</li> <li>3. (i) Knowledge: 114.8 (After-Before)/Before *100         <ul> <li>(ii) Production: 58.3 %</li> </ul> </li> <li>(ii) Income: 58.3 %</li> </ol>
Kandhamal	Organic Turmeric and Ginger Cultivation	30	25	36	67	98	100500	147000	<ol> <li>42 ha</li> <li>Out of 30 trainees, 22 farmers accepted the technology</li> <li>(i) Knowledge: 44 (After-Before)/Before *100         <ul> <li>(ii) Production: 46 %</li> <li>(ii) Income: 46 %</li> </ul> </li> </ol>
Kandhamal	Technique of propagation of Mango and Guava	15	30	80	-	-	-	-	<ol> <li>24 ha</li> <li>Out of 15 trainees, 8 farmers understood the technology</li> <li>(i) Knowledge: 166(After-Before)/Before *100         <ul> <li>(ii) Production:</li> <li>(iii) Income:</li> </ul> </li> </ol>
Kandhamal	Soil & water conservation measure in orchard	30	20	40	30	36	45000	54000	<ol> <li>6 ha</li> <li>Out of 30 trainees, 17 farmers accepted the technology</li> <li>(i) Knowledge: 100 (After-Before)/Before *100         <ul> <li>(ii) Production: 20 %</li> <li>(ii) Income: 20 %</li> </ul> </li> </ol>
Kandhamal	Improved of mango cultivation	30	23	65	-	-	-	-	1. 48 ha 2. Out of 30 trainees, 21 farmers accepted the technology 3. (i) Knowledge: 182 (After-Before)/Before *100 (ii) Production: (ii) Income:

Kandhamal	Production technique of garden pea cultivation	60	60	95	50	60	100000	120000	<ol> <li>72 ha</li> <li>Out of 60 trainees, 40 farmers accepted the technology</li> <li>(i) Knowledge: 58 (After-Before)/Before *100         <ul> <li>(ii) Production: 20 %</li> </ul> </li> <li>(ii) Income: 20 %</li> </ol>
Kandhamal	Control of fruit drop in Mango	30	20	90	10	24	15000	24000	<ol> <li>1. 10 ha</li> <li>2. Out of 30 trainees, 15 farmers accepted the technology</li> <li>3. (i) Knowledge: 350 (After-Before)/Before *100         <ul> <li>(ii) Production: 140 %</li> <li>(iii) Income: 60 %</li> </ul> </li> </ol>
Kandhamal	Nursery raising technique of off season vegetable for higher income.	30	60	90	-	-	-	-	<ol> <li>1. 1 ha</li> <li>2. Out of 30 trainees, 25 farmers accepted the technology of nursery raising.</li> <li>3. (i) Knowledge: 50 (After-Before)/Before *100         <ul> <li>(ii) Production:</li> <li>(iii) Income:</li> </ul> </li> </ol>
Kandhamal	Use of sprinkler irrigation & drip irrigation in orchard.	15	15	85	-	-	-	-	<ol> <li>Out of 15 trainees, 10 farmers accepted the technology</li> <li>(i) Knowledge: 467 (After-Before)/Before *100         <ul> <li>(ii) Production:</li> <li>(iii) Income:</li> </ul> </li> </ol>
Kandhamal	Raised seed bed technique for turmeric and ginger planting	60	23	31	43.2	58.5	34,400	47,500	1.32 ha 2. Out of 60trainees, 18farmers adopted the recommended technology 3. i) Knowledge: 34 % (ii) Production:35 % (ii) Income-38 %
Kandhamal	Management & layout of nutritional garden	60	28	45	65	106	3100	6000	<ol> <li>No of Villages 212</li> <li>Out of 60 trainees 48 have knowledge of nutritional garden</li> <li>(i) Knowledge: 60</li> <li>(ii) Production: 63</li> <li>(ii) Income:93</li> </ol>

Kandhamal	Paddy straw mushroom cultivation	15	40	76	750gm	1 kg	30	40	1.No. of Villages 45 2.Out of 15 trainees 9 have good knowledge about cultivation of paddy straw Mushroom 1. (i) Knowledge: 90 (ii) Production: 33 (iii) Income:33
Kandhamal	Oyster Mushroom cultivation	15	40	75	1 kg	1.25 kg	60	75	<ol> <li>1.No. of Villages 40</li> <li>Out of 15 trainees 11 have good knowledge about cultivation of Oyster Mushroom</li> <li>(i) Knowledge: 38</li> <li>(ii) Production: 25</li> <li>(ii) Income:25</li> </ol>
Kandhamal	Preparation of leaf plates by stitching machine.	30	25	55	-	-	1200	1800	No of SHG 10     Out of 30 trainees 18 have knowledge on leaf plate preparation using stitching machine.     (i) Knowledge: 120     (ii) Production:     (ii) Income:50
Kandhamal	Processing ,preservation & value addition of forest products & fruits & vegetables	75	20	60			1800	4200	<ol> <li>No of villages 20</li> <li>Out of 75 trainees 63 have knowledge on preservation of Tomato &amp; Tamarind.</li> <li>(i) Knowledge: 200         <ul> <li>(ii) Production:</li> <li>(ii) Income:120</li> </ul> </li> </ol>
Kandhamal	Knowledge on use of Paddy thresher & winnower	60	18	30			1800	3500	<ol> <li>No of SHG 8</li> <li>Out of 60 trainees 46 have knowledge on post harvest implements.</li> <li>(i) Knowledge: 66</li> <li>(ii) Production:</li> <li>(ii) Income:94</li> </ol>
Kandhamal	Use of Cono weeder in SRI Paddy cultivation	30	22	38		-	-	-	1. 134 ha     2. Out of 30 trainees 18 have knowledge on cono weeder     3. (i) Knowledge: 72     (ii) Production:     1. (ii) Income:
Kandhamal	Mushroom Cultivation	30	38	75	0.75kg/bed	1.25kg/bed	45	75	No of village 242     Out of 30 trainees 426 have gained knowledge on mushroom cultivation     (i) Knowledge: 97     (ii) Production:     2. (ii) Income:94
Kandhamal	Use & maintenance of Turmeric boiling drum	60	38	67					No of SHG 48     Out of 60 trainees 46 have knowledge on turmeric boiling drum     (i) Knowledge: 76     (ii) Production:         (ii) Income:

# **6. EXTENSION ACTIVITIES**

Name of the		No. of	_	Detail of	Partici	oants	Remarks					
KVK	A -4°•4	activities	No. of	Farmers		SC/ST	İ	Exten				
	Activity	(Targete	activities (Achieved)	(Others)	ı	(Farm	ers)	Offici	als	Purpose	Topic s	Crop Stages
		d)	(Acmeved)	M	F	M	F	M	F	•		
Kandhamal	Field Day	15	15	-	-	243	57	4		Technology dissemination	1.Paddy 2. Groundnut 3. Ginger 4.Tomato 5.Brinjal 6. Toria 7.Blackgram 8. Cabbage 9. Turmeric 10.Niger 11.Potato 12.Paddy 13.Paddy	1 Harvest stage
Kandhamal	Kisan Mela	2	2	-	-	156	44	3	-	1.Awareness programmme and technology dissemination to the farmers	1.To aware the farmers about various govt. scheme like RKVY ,NFSM & NHM.	
Kandhamal	Kisan Ghosthi	2	2	-	-	46	4	-	-	Group dynamics & social resource mobilization,credi t linkage with NABARD	Formation of farm science club & CIG.	-
Kandhamal	Exhibition	2	2	1	-	Mass	-	-	-	Technology dissemination & Awareness programmme	1. Exhibition at OUAT ,BBSR	-
Kandhamal	Film Show	71	71	-	-	1524	464	2	-	Technology dissemination	Agricultural technologies & allied.	-
Kandhamal	Method Demonstrations	10	10	-	-	122	36	4	-	Technology dissemination	IPM INM	Flowering stage
Kandhamal	Farmers Seminar	-	-	-	-	-	-	-	-	-	-	-
Kandhamal	Workshop	1	1	2	-	18	2	-	-	-	-	-
Kandhamal	Group meetings	18	18	10	8	158	25	-	-	-	Plant protection measures	-

Name of the		No. of	Detail of Participants						Remarks			
KVK	Activity	activities (Targete	No. of activities	Farmers (Others)		SC/ST (Farm		Extens Officia		Purpose	Topic s	Crop Stages
		d)	(Achieved)	M	F	M	F	M	F	1 ui pose	Topics	Crop Stages
		,		1.2	_	1.12			_		Soil health	
Kandhamal	Lectures delivered as resource persons	18	18	90	10	352	52	30	-	Technology dissemination	1.Vermicompost ing. 2.Mushroom Cultivation 3.Acid Soil management 4.Agro forestry	
Kandhamal	Newspaper coverage	3	3	Mass						Technology dissemination	1.Parthenium Awareness week 2.Soil health campign	Technology disseminatio n
Kandhamal	Radio talks	-	-	-	-	-	-	-	-	-	-	-
Kandhamal	TV talks	-	-	-	-	-	-	-	-	-	-	-
Kandhamal	Popular articles	2	2	Mass	-	-	-	-	-			
Kandhamal	Extension Literature	4	4	Mass						Technology dissemination	News letter	-
Kandhamal	Farm advisory Services	28	28	16	6	67	19	14	-	Identifies disease ,pest & its management	1. Spodoptera in Cabbage 2. Fruit & shoot borer in Brinjal	
Kandhamal	Scientific visit to farmers field	228	228	56	22	537	147	-	-	To give time based technical advice	Diagnostic visit	
Kandhamal	Farmers visit to KVK	434	434	12	3	382	37	-	-	To get advice on various agricultural aspects.	Disease & pest incidence Fertilizer application.	
Kandhamal	Diagnostic visits	22	22	9	1	93	21	-	-	Identifies disease ,pest & its management	Stem borer in Paddy Wilting in Brinjal Aphid in Mustard	crop growth stage
Kandhamal	Exposure visits	2	2	-	-	20	-	-	-	To Enrich Knowledge	Integrated farming system	
Kandhamal	Ex-trainees Sammelan	2	2	-	-	36	4	-	-	Collect feedback and suggestion		Collect feedback

Name of the		No. of		Detail o	f Partici <sub>l</sub>	oants			Remarks			
KVK	A -4::4	activities	No. of	Farmer		SC/ST		Extens				
	Activity	(Targete	activities (Achieved)	(Others	)	(Farme	ers)	Officia	ıls	Purpose	Topic s	Crop Stages
		d)	(Acnieved)	M	F	M	F	M	F		•	1 3
Kandhamal	Soil health Camp	3	3	-	-	103	36	2	-	Soil fertility status	Soil health campign	-
Kandhamal	Animal Health Camp	-	-	-	-	-	-	-	-	-	-	-
Kandhamal	Agri mobile clinic	1	1	-	-	19	6	-	-	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	1	1	-	-	16	5	1	-	To create awreness on soil fertility management.		Pre sowing
Kandhamal	Farm Science Club conveners meet	1	1	4	2	14	7	-	-			
Kandhamal	Self Help Group conveners meetings	1	1	4	2	-	25	1	-		To know about different government schemems	
Kandhamal	Mahila Mandals conveners meetings	1	1	-	6	-	19	1	-	Women Empowerment		
Kandhamal	Celebration of important days	7	7	-	-	262	87	5	-	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	March 2011	Quarter	500	500
Kandhamal	June 2011	Quarter	500	500
Kandhamal	September 2011	Quarter	500	500
Kandhamal	December 2011	Quarter	500	500

## 7.2 Literature developed/published

KVK Name	Type	Title	Author's name	Number of copies
Kandhamal	Research	1. Effect of nimin coated urea	S. Mohapatra, S.K Mukhi ,J.K Mohalik	
	Paper	application on yield and nitrogen use	& B. Jena.	
		efficiency by rice.		
		2. Improved Turmeric boiling drum:		
		An effective tool for drudgery	S. Mohapatra,	
		reduction of tribal women.		

### 7.3 Details of Electronic Media Produced

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

## 8. Production and supply of Technological products

8.1 SEED production

_	KVK Name	Major group/class	Сгор	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
I	Kandhamal	Spices	Turmeric	Roma	SD	3	Qtl	16500	2

## 8.2 Planting Material production

KVK	Majar	Name	Data of	Data of	Amaa	Details of	f production	Į	Amour	nt (Rs.)	
Name	Major group/class	of the crop	Date of sowing	Date of harvest	Area (ha)	Variety	Type of Produce	Qty.	Cost of inputs	Gross income	Remarks
Kandhamal	Fruits	Papaya	May 2 <sup>nd</sup> week			Coorg Honey Dew	Sapling	135	600	675	Distributed to farmers
Kandhamal		Drumstick	May 2 <sup>nd</sup> week			PKM-1	Sapling	100	380	500	Distributed to farmers
Kandhamal	Vegetable	Tomato	June 1st Week			BT-10	Seedling	15898	1250	4801	Distributed to farmers
Kandhamal		Brinjal	June 2 <sup>nd</sup> Week			PPC	Seedling	4000	400	1000	Distributed to farmers
Kandhamal		Cabbage	September last week			Disha	Seedling	2000	150	500	Distributed to farmers
Kandhamal		Cauliflower	September last week			Himlata	Seedling	2200	170	550	Distributed to farmers
Kandhamal	Forest plants	Shikakai	October 1 <sup>st</sup> week	-	-		Sapling	333	850	999	Distributed to farmers
Kandhamal		Salia Bamoo	October 1st week	-	-	-	Sapling	334	850	1002	Distributed to farmers

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

	Name of the Product	Qty	Amount (Rs.)		
KVK Name			Cost of inputs	Gross income	Remarks
Kandhamal	BIOAGENTS				
Kandhamal	BIOFERTILIZERS	6.7 q		3350	Vermicompost
Kandhamal	BIO PESTICIDES				

8.4 Livestock and fisheries production

	Name	Details of produc	ction	ion .			
KVK Name	of the animal /	Breed	Type of Produce	Qty.	Cost of inputs	Gross income	Remarks
	bird / aquatics		V 1		•		
Kandhamal	Cattle						
Kandhamal	Buffalo						
Kandhamal	Sheep and Goat						
Kandhamal	Poultry	Banaraja	Chicks	762	18661	23788	
Kandhamal	Fisheries						
Kandhamal	Others (Specify)Vermin	E-foetida	Vermin	1000 No	-	500	

### 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	732	304	29	7270
Kandhamal	Water Sample	7	3	3	

## 10. Rainwater Harvesting

Training programmes conducted by using Rainwater Harvesting Demonstration Unit

Name of KVK	Date	Title of the training course	Client (PF/RY/EF)	No. of	No. of Participants including SC/ST		No. of SC/ST Participants			
				Courses	Male	Female	Total	Male	Female	Total
Kandhamal	29.09.10	Water management for increasing crop productivity	PF & RY	1	12	08	20	12	08	20

### 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			<mark></mark>				

## 12. Utilization of Staff Quarters facilities

KVK Na	ame	Year of construction	Year of allotment	No. of quarters occupied	No. of quarters vacant	Reasons for vacant quarters, if any
Kandh	namal	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	18.06.2011	30	1. Introduction of newly released Hybrid & scented variety of Paddy
			for higher economic return.
			2. Introduction of popular newly released vegetable & oilseed crops.
			3.Popularisation of HYV toria variety.
			4.More training programmes on processing ,preservation & value
			addition of fruit crops & vegetables.
			5.More emphasis on IPM & IDM in vegetables.
			6. Extension programme on soil health campaign & distribution of soil
			health cards to the farmers.
			7. More number of publication should be done to popularize the
			technologies among the farmers.
			8.Development of IFS (Horticultural based) model in the farmers field.
			9. Production of good quality of seeds & planting materials by KVK
			10. Demonstration programme on backyard poultry & programmes on
			animal health camp

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

IZVIZ Nome	No. of messages sent	No. of be	eneficiary	Major recommendations
KVK Name		Farmers	Ext. Pers.	Major recommendations
Kandhamal	240	754	26	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.
				<ol><li>Weather based cultural practices.</li></ol>
				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 2011-12

KVK Name	Account No.	Opening balance (Rs.)	Closing balance (Rs.)	Current status (Rs.)
Kandhamal	11754367222	292533	342914	

# 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	
Kandhamal	State level Exhibition	Institution	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 cabbage is 2775 ha with a productivity of 150 q/ha. The district is predominantly inhibited by tribal peoples. The tribal farmers are resource poor & marginal farmers. They are cultivating cabbage in traditional method. The low productivity of cabbage is due to heavy pest , disease incidence & micro-nutrient deficiency. The production of crop is being increased by adopting the integrated pest & nutrient management.

**KVK Intervention**: Cracking of Cabbage due Boron deficiency & pest incidence such as Diamond Back Moth & Spodoptera results in low productivity & marketability of cabbage .Keeping in view the low productivity of cabbage ,KVK has focused its efforts to maximize the productivity by providing training on balanced fertilizer application ,micronutrient application & integrated disease & pest management in cabbage. Also Training programmes were organized in the village level for imparting various technologies to the farmers about package & practices of Cabbage cultivation .Demonstrations were conducted on Integrated Pest management in Cabbage for Diamond Back Moth & Spodoptera which is main cause of low productivity & marketability.

**Outcome:-** The KVK ,Kandhamal conducted demonstration on Integrated pest management in cabbage in the field of Sri Rohit Nayak of village Bandaguda ,Block K-Nuagaon .Application of Neem cake @ 2.5 q/ha , seed treatment with bavistin @ 2gm/kg of seed ,inter cropping with mustard (16:1) ,installation of Pheromene trap , sparyaing of Bt @ 2 gm/liter alternate with Cartap Hydrochloride @ 1.25 gm at 10 days interval .Also application of Boron @ 2kg/ha gave an yield of 260 q/ha with an increase in productivity of 53 % over traditional practice. The bigger head size &non- cracking of Cabbage fetches good market value & Sri Nayak got an net profit of Rs.90,000/- /ha with a B.C ratio 3.2.

**Impact:-** The out come of the demonstration has motivated the farmers to apply Boron, soil test based fertilizer application with pest & disease management to enhance the productivity of cabbage. Inspring the result of the demonstration most of the farmers of K-Nuagaon & Tikabali block are now giving much importance on IPM practice & Boron application 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	Name of Visitor	Date of Visit	Remarks
KVK			
Kandhamal	Dr. B.S Rath ,Chief Scientist	16.04.2011	Visited the soil & water testing laboratory & praised the analysis work
	,AICRP on DA, ,Phulbani		& appreciated the KVK publications.
Kandhamal	Mr. P.K Sahoo,OFS(I)	1.07.2011	KVK is doing good work & meeting the expectation of farming
	D.F.O ,G. Udayagiri		community in the district.
Kandhamal	Mr. David Leishman	21.08.2011	Appreciated the work of KVK & emphasized on market linkage
	Sr. Agricultural		programmes.
	Attache, USDA, US embassy		
	New Delhi		
Kandhamal	Mr. S. Baskar Reddy,Head	21.08.2011	Excellent work done by KVK in the field of agriculture in the district.
	,Agriculture ,FICCI.New		
	Delhi		
Kandhamal	Dr. Santosh Kumar Singh, Ag.	21.08.2011	KVK is doing excellent work in the field of organic farming.
	Scientist ,USDA ,New Delhi		
Kandhamal	Dr. Subash Chandra Mallick	15.12.2011	Visited the chicks rearing & other demonstration unit & appreciated the
	,CDVO,Phulbani		KVK activities.
Kandhamal	Dr. A.K Pal ,Prof. & OIC	23.12.2011	Visited the KVK demonstrated farmers fields & praised the work of
	,AICRP on Micro &		KVK in the field of agriculture.
	secondary nutrients,OUAT		

Kandhamal	Dr. Bijoy Kumar Sahoo,ADR	21.03.2012	Praised the co ordination of the KVK staff.
	,Seeds &		
	Sr. Agronomist ,AICRP on		
	forage crop		
Kandhamal	Dr. P.K Sahoo ,Prof . AICRN	21.03.2012	Highly appreciated the work of KVK work & remarked that the KVK
	on UU crops, OUAT		campus is nicely maintained.
	,Bhubaneswar.		

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

## 22. E-CONNECTIVITY

NI PIZVIZ	Number and Date of Lecture delivered from KVK Hub				No of lectors	Brief	Remarks
Name of KVK	Date	No of Staff attended	No of call received from	No of Call mate to Hub by KVK	organized by KVK	achievements	
		attenueu	Hub	Hub by KVK	KVK		
Kandhamal							
	-	-	12	23			

## 23. DETAILS OF TECHNOLOGY WEEK CELEBRATIONS

Name of KVK	Types of Activities	No. of	Number of	Related crop/livestock technology
		Activities	<b>Participants</b>	
Kandhamal	Film show	4	24	Off-season vegetable cultivation, Backyard poultry, Honeybee & water management
Kandhamal	Lectures organized			
Kandhamal	Exhibition of farm implement	2	42	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	9	131	

## 24. INTERVENTIONS ON DROUGHT MITIGATION

### Introduction of alternate crops/varieties

Name of KVK	Crops/cultivars	Area (ha)	Number of beneficiaries
Kandhamal	Upland paddy Var-Vandana	700	1000
	,Khandagiri		
Kandhamal	Blackgram var PU-19 ,TU94-	400	750
	2,Sekhar 2		
Kandhamal	Niger Var- ONS 150,GA-10,PU-31	820	920
Kandhamal	Toria var- Parvati ,PT-303	1260	1850

Major area coverage under alternate crops/varieties

Mane of	Crops	Area (ha)	Number of beneficiaries
KVK			
Kandhamal	Oilseeds	265	1320
Kandhamal	Pulses	210	760
Kandhamal	Cereals	560	1810
Kandhamal	Vegetable crops	100	310
Kandhamal	Tuber crops	1870	7920
Kandhamal	Fruits	270	1380
Kandhamal	Spices	1020	950
Kandhamal	Total	4295	14450

### Farmers-scientists interaction on livestock management

Name of KVK	Livestock components	Number of interactions	No.of participants
Kandhamal	Dairy Management	2	40
Kandhamal	Disease management	2	50
Kandhamal	Feed and fodder technology	3	60
Kandhamal	Poultry management	5	100

#### 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	Toria	1.0	10.0	35
Kandhamal	Niger	0.5	5.0	20
Kandhamal	Blackgram	1.0	5.0	23
Kandhamal	Groundnut	5.0	5.0	50
Kandhamal	Cowpea	0.50	1.0	10

### Seedlings and Saplings distributed

Na	me of KVK	Crops		Quantity (No.s)	Coverage of area (ha)	Number of f	armers
Ka	andhamal			Seedlings			
Bio	o-control Agents						
Na	me of KVK		Bio-control Agents		Quantity (q)	Coverage of	No. of
						Area (ha)	farmers

#### (e) Bio-Fertilizer

(v) 210 1 v1 v11111111									
Name of KVK	Bio-Fertilizer	Quantity (kg)	Coverage of Area (ha)	No. of farmers					

#### (f) Verms Produced

Name of KVK	Verms Produced	Quantity (q)	Coverage of Area (ha)	No. of Farmers				
Kandhamal	E-foetida	0.02		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	Cultivation of fruits	115	230
Kandhamal	Drought tolerant crop and sort duration variety	322	1980
Kandhamal	Integrated Crop Management	54	105
Kandhamal	Irrigation Scheduling	20	52
Kandhamal	Mechanization	240	85
Kandhamal	Mulching	9000	12680
Kandhamal	SRI	1020	1532
Kandhamal	Water Management	2004	5005
Kandhamal	Weed management	754	958
Kandhamal	Direct seeding and weed management in Rice	200	687
Kandhamal	Early & drought tolerance varieties of Maize	1005	3310
Kandhamal	Drought tolerant crop and sort duration variety	490	1845

## (h) Awareness campaign

Name of KVK	Meetings		Gosthies		Field days Fa		Farmers fair		Exhibition		Film show	
	No.	No. of	No.	No. of	No.	No. of	No.	No. of	No.	No. of	No.	No. of
		farmers		farmers		farmers		farmers		farmers		farmers
Kandhamal	9	110	6	92	4	82	3	290	2	174	24	510

## 25. Status of KVK Website:

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

PROGRAMME CO-ORDINATOR KVK,KANDHAMAL