

**ANNUAL REPORT
APR.06-MAR-07
KVK-MAYURBHANJ**

**BRIEF DESCRIPTION
ON
KRISHI VIGYAN KENDRA
MAYURBHANJ, SHAMAKHUNTA**

The Krishi Vigyan Kendra, Mayurbhanj is established at Shamakunta as per the sanction of ICAR vide letter No.3-56-93-AE-II dt.19.05.05 of the Deputy Secretary (AE), ICAR and is functioning from 28th May, 2005. As a premier institution for transfer of technology from lab to land, Krishi Vigyan Kendra is aiming to solve the problems of farmers in his own field through the principle of learning by doing and seeing is believing, covering all the branches of agriculture and allied lines like animal husbandry, fishery, agriculture engineering, forestry and home science etc. Krishi Vigyan Kendra is a multidisciplinary approach for overall upliftment of the farmers through self-development in knowledge, skill, attitude and behavioral attributes.

Mandate:

- i) Vocational training to farmers/farm women/rural youth on agriculture and allied fields like animal husbandry, fishery, Agril, Engineering, forestry and home science.
- ii) In-service training to extension functionaries on advanced technology.
- iii) Frontline demonstration on different crops and practices.
- iv) On-farm testing in a location specific farming system perspective.

Basic information of the district

(A) Geographical

➤ Latitude	85°40' to 87°11' East
➤ Longitude	21°16' to 22°34' North
➤ Altitude	20m to 1165m MSL
➤ Geographical Area	10,41,8 (' 000 ha)
➤ Forest area	434 (' 000 ha)
➤ Misc & tree grooves	15 (' 000 ha)
➤ Permanent pasture	24 (' 000 ha)
➤ Culturable waste	10 (' 000 ha)
➤ Land put to non agril use	50 (' 000 ha)
➤ Barren and unculturable land	27 (' 000 ha)
➤ Current fallow	65 (' 000 ha)
➤ Other fallow	376 (' 000 ha)
➤ Cultivable area	441 (' 000 ha)
➤ Net area sown	376 (' 000 ha)
➤ Gross cropped area	440 (' 000 ha)
➤ Annual normal rainfall	1600 mm in 77 rainy day
➤ Temperature	Max: 39°C & Min: 4°C
➤ Cultivable Land	437 ('000 ha)
High lad	43%
Medium land	28%
Low land	29%

(B) Administrative:

➤ No. of subdivision	4
➤ No. of Blocks	26
➤ No. of villages	3965
➤ No. of AAO/JAO circle	52
➤ No. of AO/VAW circle	398
➤ No. of DAO circle	3
➤ No. of ADAO circle	4
➤ Total no. of market yards	14
➤ Godown with capacity	2150 MT
➤ Krishak Bazaar	2
➤ No. of Tahasils	9
➤ No. of Municipality / NACs	4
➤ No. of assembly contingencies	10

(C) Census (According to population census, 2001)

➤ Total population	2223000
Male	112300
Female	110000
➤ Population density per sq.km	213
➤ Literacy rate	51.91

(D) Agricultural

➤ Farm families		
a) Small farmers	1,63,122 ha.	
b) Marginal farmers	1,34,204 ha.	
c) Big farmer	43,476 ha.	
d) Agricultural labourers	2,23,601	
➤ Major crops grown:		
Kharif:	Paddy, Maize, Small millet, Arhar, Mung, Biri, Cow pea, Kulthi, Ground nut, Niger, Sweet potato, other vegetables, Turmeric, Ginger, Mesta, Sunhemp.	
Rabi:	Paddy, Maize, Small millets, Arhar, Mung, Biri, Cow pea, Kulthi, Gram, Lentil, Ground nut, Mustard, Niger, Linseed, Sweet potato, Potato, Onion, Other vegetables, Chilli, Coriander, Garlic.	
➤ Kharif cropped area	364000 ha	
➤ Rabi Cropped area	61,000 ha	
➤ Cropping intensity (%)	121	
➤ Total fertilizer consumption (kg/ha.)	11.98 (X 1000 MT)	
Nitrogen	Kharif 5.94 + Rabi 1.67 = 7.61	
Phosphorus	Kharif 2.19 + Rabi 1.03 = 3.22	
Potash	Kharif 0.45 + Rabi 0.70 = 1.15	
➤ Per ha. Fertilizer consumption (kg/ha)		
Kharif:	24	
Rabi:	63.48 kg	
➤ Soil type	Sandy loam, Red lateritic	
➤ Irrigation from different sources (in ha.)		
Medium irrigation project :	4709	
Minor irrigation project :	1548	
Govt. L.I.P :	6213	
Private L.I.P:	7491	
Dug well / Million well:	1963	
Other sources including W.H.S	18627	
Total	40551	
➤ Bio- Fertilizer Consumption (in ha.)		
	<u>Rabi</u>	<u>Kharif</u>
Green manuring	7800	8000
Azolla	900	1000
B.G.A	700	1000
R.Culture	1010	2000
PSM	610	1500
Azotobacter	300	500
Total:	11320	14000
➤ Organic manure consumption (in MT)	2,24,900 (Rabi)	6,10,700 (Kharif)
➤ Pesticide consumption		
Liquid	4500 lit.	
Dust	2000 kg	
Granular	2000 kg	
➤ Agricultural Credit : (In Rabi 2005-06)		
Nationalized commercial bank	1000 lakhs	
Regional Rural Banks		
Cooperatives	2196 lakhs	
Total	3196 lakhs	
➤ Soil testing	3433 nos. (Soil samples)	

E AGRICULTURAL IMPLEMENTS STATUS

➤ Tractor	2500
➤ Power Tiller	500
➤ Reaper	27
➤ Power Thresher	1000
➤ M.B.Plough	15
➤ Axial Flow	8
➤ Transplanter (Self propelled)	3
➤ Power sprayer	10
➤ Manual Transplanter	1

F. STATUS OF ANIMAL RESOURCE IN MAYURBHANJ DISTRICT

➤ Cattle	Indigenous : 888446 (M-577795+F-310651) Crossbred : 47703(M-15765+F-31938)
➤ Bullock	Indigenous: 26260(M-15443+F-10817) Crossbred: Nil
➤ Sheep	Male: 68825 Female: 97811 Total: 166636
➤ Goat	Male: 249543 Female: 437242 Total: 686785
➤ Pigs	Male: 37739 Female: 43163 Total: 80902
➤ Poultry	Desi-2072473+Improved-598817=2671290
➤ Duck	Desi-112326+Improved-1308=113634
➤ Milk Production	32.21 TMT
➤ Egg production	67.41 million
➤ Meat production	3.29T MT
➤ No. of V.H	2
➤ No. of Vety. Dispensary	42
➤ No. of LAC	166
➤ L.A.C with A.I	104
➤ Farm	1
➤ Fodder farm / seed farm	2+1
➤ Gomitra	44
➤ Mobile A.I. Centre	35
➤ Chilling Plant	8
➤ M.P.C.S	15
➤ Feed Mixing Centre	2
	a) Eastern Hatchery Chhanch b) Mayurbhanj, Baripada
➤ District Diagnosis Laboratory	1

ANNUAL REPORT
(April, 2006 to March, 2007)

1. KVK Code :
2. Name of the KVK : KRISHI VIGYAN KENDRA, SHAMAKHUNTA
3. Address of KVK : Krishi Vigyan Kendra, Mayurbhanj
At/P.O.- Shamakhunta
Dist. Mayurbhanj, Orissa Pin. - 757049

Telegraphic Address :
Telephone No. with STD :

	STD Code	Phone Nos
Office		
Residence		
Fax		

E-mail : kvkmayurbhanj@rediffmail.com
4. Name of the Host Institution : Orissa University of Agriculture and Technology,
Bhubaneswar
5. Address of the Host Institution : At / PO: Bhubaneswar – 751 003
Telegraphic Address :
Telephone No. with STD :

	STD Code	Phone Nos
Office	0674	2392677
Residence	0674	2391606
Fax	0674	2397780

E-mail : vc@ouat.nic.in

6. Staff Position (as on 01.01.06 to 31.12.06):

Sl.	Designation	Name	Discipline	Highest degree	Pay-Scale with present basic pay	Date of joining	SC/ST/OBC/GEN
1	Programme Coordinator	Dr.Bhagirathi Panigrahi	Animal Sc. (LPM)	Ph.D.	12000 – 18300/- 17438/-	06-07-05	GEN
2	Subject Matter Specialist	Dr.Sangram Keshari Swain	Ag. Eng.	Ph.D	10000-15,500 17438/-	07-01-06	GEN
3	Subject Matter Specialist	Sri Jagannath Patra	Agriculture Extn.	M. Sc. (Ag)	8000-13500/- 12413/-	18-07-05	OBC
4	Subject Matter Specialist	Mrs. Manasi Bhol	Home Sc.	M.Sc (Home Sc.)	8000-13500/- 12000	02-01-06	OBC
5	Subject Matter Specialist	Mrs.Sanghamitra Pattanayak	Horticulture	M. Sc. (Ag)	8000-13500/- 12000/-	10.01.06	GEN
6	Subject Matter Specialist	Mrs.Arundhati Sasmal	Plant Protection	M. Sc. (Ag)	8000-13500/- 12413/-	10.01.06	GEN
7	Subject Matter Specialist	Vacant			8000-13500/-		
8	Programme Assistant (Agriculture)	Sri Dillip Ranjan Sarangi	Soil Sc.	M. Sc. (Ag)	5500-9000/- 8250/-	20.01.06	GEN
9	Farm Manager	Sri Kishor Chandra Sahoo	Agronomy	M. Sc. (Ag)	5500-9000/- 8250/-	03.08.06	OBC
10	Programme Assistant (Comp)	Sri Jitendra Kumar Panda	Information Technology	M. Sc. (IT)	5500-9000/- 8250/-	27.01.06	GEN
11	Office Suptd.-cum- Accountant	Sri Sarat Chandra Das			5500-9000/- 10350/-	07.06.06	OBC
12	Junior Steno. Cum Computer Operator	Sri Raghunath Pati		+3 Arts	4000-6000/- 6000/-	16.10.06	GEN
13	Driver cum Mechanic	Vacant					
14	Driver cum Mechanic	Vacant					

15	Supporting Staff	Sri Manoranjan Nandi	-	Under Matric	2550-3200/- 4823/-	08-08-05	OBC
16	Supporting Staff	Sri D.N. Bera	-	Under Matric	2550-3200/- 4820/-	06-09-05	SC

7. **Total Land with KVK (ha)** : 27.94 ha

8. **Infrastructural facilities** :

Sl. No.	Particulars	Unit (No.)	Plinth area (Sq. feet)	Stage (Plinth Area)		Cost (Estimate for New Building)
				Complete	Incomplete	
1	Administrative building	one	8118		near completion	42.00004 lakh
2	Farmers' hostel	one	3280		near completion	25.15918 lakh
3	Staff quarters (100 sq.mt.)	13 nos.	-	Very old (more than 50 years)		Needs Renovation
4	Demonstration Unit (in ha) (20 sq. mt.)	Nil	-	-		-
5	Compound Wall	-	-	-	Under process	7.0 lakh
6	Threshing Floor (Covered)	-	-	-	near completion	1.7 lakhs

9. **Details of KVK Bank account** :

Sl. No.	Particulars	Name of the Bank	Location	Account No.
1.	With the Host Institute			
2.	With the KVK	State Bank of India	Shamakhunta	01000040235

10. **Description of Agro-Climatic zones and farming situation of the district.**

Agro climatic zone	:	North central plateau
Characteristic	:	Hot and moist, subhumid
Rain fall	:	Normal
Mean Annual Rain fall (mm.)	:	1534 mm
Mean max. temp. (Summer)	:	36.6 °C
Mean min. temp. (Winter)	:	11.1 °C
Broad Soil group	:	Laterite, Red & Yellow, Mixed Red & Black
Agro-ecological situation (AES)	:	Four
AES – I		
Characteristics	:	Low Rainfall, Low Elevation
Blocks (Five)	:	Tiring, Rirangpur, Rasgovindpur, Bahalda, Shuliapada
AES – II		
Characteristics	:	Low Elevation, Medium Rainfall
Blocks (Fifteen)	:	Baripada, Badasahi, Shamakhunta, Khunta, GB Nagar Betonati, Muruda, Kuliana, Bangiriposi, Udala, Saraskana, Kusumi, Bishoyee, Bijatota, Jamuda
AES – III		
Characteristics	:	Low Elevation, High Rainfall
Blocks (One)	:	Kaptipada
AES – IV		
Characteristics	:	Medium Elevation, Medium Rainfall
Blocks (Five)	:	Karanjia, Sukruli, Jashipur, Raruan, Thakurmunda

11. **Thrust areas identified through PRA, Survey or any other method**

- Seed production technique in Paddy and vegetables
- Vermi-composting and organic farming
- Off-season vegetable cultivation
- Commercial floriculture
- Paddy straw and Oyster mushroom cultivation
- Value addition of fruits and vegetables
- Nutritional garden
- Broiler farming and backyard synthetic poultry rearing

- ix. Commercial goatery
- x. Use of improved farm implements like paddy thresher and paddy winnower, Groundnut planter, fertilizer broadcaster, Power tiller, tractor operated implements

12. Training Achievement – On Campus

A. Training of farmer/farm-women (Period : From April, 2006 to March, 2007)

Title of Training	Dur (Days)	No. of participant											
		SC			ST			Other			Total		
		M	F	Total	M	F	Total	M	F	Total	M	F	Total
Plant protection													
1. Preparation of spraying solution and spraying methods	2	1	-	1	8	-	8	16	-	16	25	-	25
Total	2	1	-	1	8	-	8	16	-	16	25	-	25
Agricultural Engineering													
1. Use & Maintenance of Primary & Secondary Tillage implements	2	-	-	-	7	-	7	18	-	18	25	-	25
2. Use & operation of different seeding and planting machineries	2	-	-	-	6	-	6	19	-	19	25	-	25
Total	4	-	-	-	13	-	13	37	-	37	50	-	50
Women in Agriculture													
1. Value addition of fruits and vegetables	2	-	-	-	-	1	1	-	24	24	-	25	25
Total	2	-	-	-	-	1	1	-	24	24	-	25	25
Grand Total	10	1	-	1	21	1	22	53	24	77	75	25	100

Summery of training for farmer/farm-women (Period : From April, 2006 to March, 2007)

Subject	No. of Progra mme	Dura tion days	No. of participant											
			SC			ST			Other			Total		
			M	F	Total	M	F	Total	M	F	Total	M	F	Total
Plant protection	1	2	1	-	1	8	-	8	16	-	16	25	-	25
Agriculture Engineering	2	4	-	-	-	13	-	13	37	-	37	50	-	50
Women in Agriculture	1	2	-	-	-	-	1	1	-	24	24	-	25	25
Total	4	10	1	-	1	21	1	22	53	24	77	75	25	100

B. Training of Rural Youths (Period : From April, 2006 to March, 2007)

Title of Training	Dur (Days)	No. of participant											
		SC			ST			Other			Total		
		M	F	Total	M	F	Total	M	F	Total	M	F	Total
Agriculture Engineering													
1. Operation and use of power operated pulse thresher	2	-	-	-	16	-	16	9	-	9	25	-	25
Total	2	-	-	-	16	-	16	9	-	9	25	-	25
Agricultural Extension													
1. Paddy straw mushroom cultivation	3	1	-	1	3	6	9	11	4	15	15	10	25
Total	3	1	-	1	3	6	9	11	4	15	15	10	25
Grand Total	5	1	-	1	19	6	25	20	4	24	40	10	50

Summery of training for Rural youth (Period: from April, 2006 to March, 2007)

Subject	No. of Progra mme	Dura tion days	No. of participant											
			SC			ST			Other			Total		
			M	F	Total	M	F	Total	M	F	Total	M	F	Total

Agriculture Engineering	1	2	-	-	-	16	-	16	9	-	9	25	-	25
Agricultural Extension	1	3	1	-	1	3	6	9	11	4	15	15	10	25
Total	2	5	1	-	1	19	6	25	20	4	24	40	10	50

13. Training Achievement – Off Campus

A. Training of farmers/ farm-women (Period : From April, 2006 to March, 2007)

Title of Training	Duration (Days)	No. of participant												
		SC			ST			Other			Total			
		M	F	Total	M	F	Total	M	F	Total	M	F	Total	
Livestock Production and management														
1. Management of dairy animals for optimum milk production	2	2	-	2	12	-	12	11	-	11	25	-	25	
Total	2	2	-	2	12	-	12	11	-	11	25	-	25	
Plant Protection														
1. IPM in Paddy	2	1	-	1	22	1	23	1	-	1	24	1	25	
2. Seed Treatment technique	2	1	-	1	14	-	14	10	-	10	25	-	25	
3. Major insect pests of oilseed crop and their management	2	-	-	-	20	1	21	4	-	4	24	1	25	
Total	6	2	-	2	56	1	58	15	-	15	73	2	75	
Horticulture														
1. Improve varieties of Brinjal & Tomato	2	-	-	-	-	-	-	25	-	25	25	-	25	
2. Package and practices of gourds	2	4	-	4	9	-	9	12	-	12	25	-	25	
Total	4	4	-	4	9	-	9	37	-	37	50	-	50	
Women in Agriculture														
1. Preparation of Low cost diet by using locally available cereals	2	-	-	-	-	-	-	-	25	25	-	25	25	
2. Care of child and pregnant women	2	-	7	7	-	15	15	-	3	3	-	25	25	
Total	4	-	7	7	-	15	15	-	28	28	-	50	50	
Grand Total	16	4	-	4	54	13	67	59	70	129	123	83	175	

Summary of training for farmer/farm-women (Period : From April, 2006 to March, 2007)

Subject	No. of Pragma - mme	Duration (Days)	No. of participant											
			SC			ST			Other			Total		
			M	F	Total	M	F	Total	M	F	Total	M	F	Total
Horticulture	2	4	4	-	4	9	-	9	37	-	37	50	-	50
Plant Protection	3	6	2	-	2	56	1	58	15	-	15	73	2	75
Livestock Production and management	1	2	2	-	2	12	-	12	11	-	11	25	-	25
Women in Agriculture	2	4	-	7	7	-	15	15	-	28	28	-	50	50
Total	8	16	8	7	15	77	16	94	63	28	91	148	52	200

B. Training of Rural Youths (Period : From April, 2006 to March, 2007): Nil

C. Training of In-service personnel (Period : From April, 2006 to March, 2007)

Title of Training	Duration (Days)	No. of participant												
		SC			ST			Other			Total			
		M	F	Total	M	F	Total	M	F	Total	M	F	Total	
Agriculture Engineering														
1. use and repair of low volume sprayer	2	0	-	-	1	-	1	11	3	14	12	3	15	
Total	2	0	-	-	1	-	1	11	3	14	12	3	15	

Title of Training	Dur (Days)	No. of participant												
		SC			ST			Other			Total			
		M	F	Total	M	F	Total	M	F	Total	M	F	Total	
Agricultural Extension														
1. Training Needs Assessment & Formulation of Training Programme	3	-	-	-	2	-	2	11	2	13	13	2	15	
2. PRA techniques	4	-	-	-	-	-	-	11	4	15	11	4	15	
Total	7	-	-	-	2	-	2	22	6	28	24	6	30	
Women in Agriculture														
1. Improved post harvest technology of food grains	2	-	1	1	-	1	1	-	18	18	-	20	20	
Total	2	-	1	1	-	1	1	-	18	18	-	20	20	
Grand Total	11	-	1	1	3	1	4	33	27	60	36	29	65	

Summary of training for In-service personnel (Period : From April, 2006 to March, 2007)

Subject	No. of Programme	Duration days	No. of participant											
			SC			ST			Other			Total		
			M	F	Total	M	F	Total	M	F	Total	M	F	Total
Agricultural Engineering	1	2	0	-	-	1	-	1	11	3	14	12	3	15
Agricultural Extension	2	7	-	-	-	2	-	2	22	6	28	24	6	30
Women in Agriculture	1	2	-	1	1	-	1	1	-	18	18	-	20	20
Total	4	11	-	1	1	3	1	4	33	27	60	36	29	65

D. Sponsored Training Programme (Period : From April, 2006 to March, 2007) : NIL

14. Result of Front Line Demonstration

(A) Oilseeds

Year : 2006-07

Crop	Season	Area (ha)	Area (ha)		No. of farmers/ Demo			Remarks
			Proposed	Actual	SC/ ST	Other	Total	
Groundnut	Kharif	5.0	5.0	5.0	7	5	12	
Groundnut	Rabi	5.0	5.0	5.0	11	6	17	

(B) Pulses

Year : 2006-07

Crop	Season	Area (ha)	Area (ha)		No. of farmers/ Demo			Remarks
			Proposed	Actual	SC/ ST	Other	Total	
Arhar	Kharif	5.0	5.0	5.0	10	2	12	
Greengram	Rabi	5.0	5.0	5.0	11	2	13	

(C) Farming situation and results of demonstration on Oilseed crops

Crop	Season	Sowing Date	Harvesting Date	Situation	Soil Type	Agro-climatic Zone	Previous crop pattern	Status of NPK	Rainfall distribution in (mm)
Groundnut	Kharif	09.07.06	10.11.06	Medium irrigated	Loamy	North Central Plateau	Groundnut – Vegetables – Oilseed (Til)	N- Avg. P- Poor K-Poor	July- 361 Aug. 544 , Sept 423, Oct.-Nil, Nov-38 Dec.-nil Jan,07-4.2mm Feb-42.2mm Mar-40.6mm
Groundnut	Rabi	13.01.07-18.01.07	15.05.07-20.05.07	Medium irrigated	Sandy loam		paddy-fallow		

Variety	No. of farmers	Area (ha)	Yield of Demonstration (q/ ha)				Increase in yield (%)	Cost of additional cash (Rs/ha)	
			Highest	Lowest	Avg.	Local check		Demo	Local Check
TMV-2	12	5.0	17.26	16.70	16.82	12.13	38.66	2450	1100
AK-12-24	17	5.0	18.70	16.20	17.40	-	-	2450	-

(D) Farming situation and results of demonstration on Pulse crops

Crop	Season	Sowing Date	Harvesting Date	Situation	Soil Type	Agro-climatic Zone	Previous crop pattern	Status of NPK	Rainfall distribution
Arhar	Kharif	12.07.06	24.12.06	Upland rain fed	Clay	North Central Plateau	Arhar – vegetables	N- Poor P- Avg. K-Poor	July- 361 Aug. 544 , Sept 423 , Oct.-Nil, Nov-38 Dec.-nil Jan,07- 4.2mm Feb- 42.2mm Mar-40.6mm
Green gram	Rabi	15.01.07to 17.01.07	2 nd Week of Apr.07	medium land Irrigated	sandy loam		paddy-fallow		

Variety	No. of farmers	Area (ha)	Yield of Demonstration (q/ ha)				Increase in yield (%)	Cost of additional cash (Rs/ha)	
			Highest	Lowest	Avg.	Local check		Demo	Local Check
UPAS-120	2	1	13.50	12.80	13.18	8.39	57.04	1850	1045
ICPL-85063	10	4	14.20	13.40	13.82	-	64.71	-	-
K-851	13	5	8.5	6.5	7.5	-	-	1837	-

(E) Analytical Review of component demonstration

Crop: Groundnut (Kharif)

Component	Farming Situation	Average yield	Local yield	Check	% increase in productivity over local yield
Fertilizer management and plant protection	Medium irrigated land	16.82	12.13	38.66	

Crop: Groundnut (Rabi)

Component	Farming Situation	Average yield	Local yield	Check	% increase in productivity over local yield
Bio-fertilizer culture + Fertilizer management and plant protection	Medium irrigated land	17.40	-	-	

Crop: Arhar (Kharif)

Component	Farming Situation	Average yield	Local yield	Check	% increase in productivity over local yield
Improved seed +	Upland land	13.50	8.39	60.90	

Fertilizer management and plant protection	Rainfed			
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Crop: Greengram (Rabi)

Component	Farming Situation	Average yield	Local yield	Check	% increase in productivity over local yield
Improved seed + Bio-fertilizer culture + Fertilizer management and plant protection	Medium land irrigated	7.5	-	-	-

(F) Technical Feedback

1. Use of Gypsum in Groundnut is reducing the yield due to increase in acidity in soil.
2. Soil amelioration required by using lime & paper sludge.
3. More latest variety of groundnut is required like Smruti
4. Bio-fertilizer (PSB) should be incorporated for nitrogen fixation and maintaining soil health.
5. Farm mechanization in groundnut cultivation is most required due to peak period of labour requirement in Kharif season.
6. Marketability of arhar and greengram should be improved through value addition by processing with dal mill.
7. Reduction of mung due to soil acidity

(G) Farmers' Reaction

1. As oilseed & pulse cultivation will be a suitable diversification in Kharif season.
2. The area should be increased adopting scientific cultivation
3. In Rabi season it is a suitable option for oilseed and pulse crop due to high and quick return

(H) Extension and Training Activities

Filed Days organized		Farmers Training	
Date	Number of participants	Date	Number of Participants
05.12.2006	12	16.3.07-17.03.07	25
06.12.2006	22		
29.03.07	28		
30.03.07	17		

(I) Results of FLDs other than Oilseed and Pulse Crops

Year : 2006-07

Crop	Season	Area (ha)	Area (ha)		No. of farmers/ Demo			Remarks
			Proposed	Actual	SC/ ST	Other	Total	
Pedal operated Paddy Thresher	Kharif, 06	2.0	2.0	2.0	nil	05	05	
Fertilizer Broadcaster (Paddy)	Kharif, 06	2.0	2.0	2.0	nil	05	05	
Brinjal	Rabi	1.6	2.0	1.6	-	04	04	
Paddy (IPM)	Rabi	1.0	1.0	1.0	3	2	5	
Oyster Mushroom	Rabi	50 nos.	100	50	44	6	50	
Tractor drawn inclined plate planter	Rabi	2.0	2.0	2.0	-	5	5	
Bee Keeping	Rabi	10 nos.	10	10	-	10	10	Contg .

(J) Farming situation and results of demonstration on other than Oilseed and Pulse crops

Crop	Season	Sowing Date	Harvesting Date	Situation	Soil Type	Agro-climatic Zone	Previous crop pattern	Status of NP K	Rainfall distribution
Paddy Thresher)	Kharif	25.07.06	20.12.06	Medium irrigated	Sandy loam	North Central Plateau	Rice-Fallow	-	July- 361 Aug- 544 Sep- 423, Oct.-Nil, Nov-38 Dec.-nil Jan,07- 4.2mm Feb- 42.2mm Mar- 40.6mm
Fertilizer Broad caster (Paddy)	Kharif	25.07.06	18.12.06	Medium irrigated	Sandy loam		Rice-Fallow	-	
Brinjal	Rabi	25.01.07	30.04.07	Medium irrigated	Sandy loam		Vegetable	-	
Paddy (IPM)	Rabi	17.01.07	25.04.07	Medium irrigated	Clayey loam		paddy-paddy	-	
Oyster Mushroom	Rabi	24.02.07	17.03.07	Homestead	-		-		
Tractor drawn inclined plate planter	Rabi	19.03.07	Not harvested	Medium land partially Irrigated	sandy loam		Paddy-Greengram		
Bee Keeping	Rabi	31.03.06	27.12.06	Homestead	-				

FLD – 1: Use of Paddy Thresher (Pedal Operated)

Variety	No. of farmers	Area (ha)	Output of Demonstration (kg/ hr.)				Increase in yield (%)	Cost of additional cash (Rs/hr)	
			Highest	Lowest	Avg.	Local check		Demo	Local Check
Swarna	05	2 ha.	43.0	39.0	41.0	10.2	301.96	Rs.5/-	Nil

Interpretation and Critical Analysis of the results obtained :

The pedal operated Paddy Thresher was highly appreciated by the farmers because with the additional cost of only Rs.5/- per hour (towards existing hiring charge of thresher), the farmers are getting 3 times more output.

FLD – 2: Introduction of Fertilizer Broadcaster

Variety	No. of farmers	Area (ha)	Yield of Demonstration (q/ ha)				Increase in yield (%)	Cost of additional cash (Rs/ha)	
			Highest	Lowest	Avg.	Local check		Demo	Local Check
Swarna	05	2 ha.	42.5	39.8	41.28	38.0	8.63	581.6	524.8

Interpretation and Critical Analysis of the results obtained :

The manually operated fertilizer broadcaster will be a suitable implement for the farmers because 8.63% more yield is possible per hectare with only additional expenditure of Rs.36/- due to uniform distribution of nutrients.

FLD -3: Wilt Resistant variety of Brinjal

Variety	No. of farmers	Area (ha)	Yield of Demonstration (q/ ha)				Increase in yield (%)	Cost of additional cash (Rs/ha)	
			Highest	Lowest	Avg.	Local check		Demo	Local Check
BB-45-C	04	1.6	230.0	210.0	220.0	180.0	22.22	6000	2000

Interpretation and Critical Analysis of the results obtained :

Farmer gets an average of 220 q/ha from wilt resistant variety of Brinjal (BB-45-C) whereas in local check(Bluestar) , it is only 180 q/ha. The incidence of wilting is very less in Bb-45-C as compared to local check.

FLD – 4: IPM in Paddy

Variety	No. of farmers	Area (ha)	Yield of Demonstration (q/ ha)				Increase in yield (%)	Cost of additional cash (Rs/ha)	
			Highest	Lowest	Avg.	Local check		Demo	Local Check
<i>Ashoka</i>	06	1.0	23.0	19.0	20.4	17.0	16.66	3000	2000

Interpretation and Critical Analysis of the results obtained :

IPM in Rabi paddy gives 16.66 % more yield over the local check. IPM using Bio-pesticides, pheromone traps and tricho-cards may be more expensive as compared to the chemical pesticide. But it is good for sustainable yield and environmental pollution without hampering the yield loss.

FLD –5: Oyster Mushroom cultivation

Variety	No. of farmers	Area (ha)	Yield of Demonstration (kg per bed)				Increase in yield (%)	Cost of additional cash (Rs/demo)	
			Highest	Lowest	Avg.	Local check		Demo	Local Check
<u><i>Pleurotus Sajarcaju</i></u>	50 nos.	50 nos.	2.2	1.4	1.8	-	-	Rs.15/-	-

Interpretation and Critical Analysis of the results obtained:

Oyster Mushroom cultivation is very promising income generating activity by which an entrepreneur gets Rs.30/- to Rs.35/- profit from one bed by investing only Rs.15 to Rs.20/- only and having good marketing potentiality.

FLD – 6: Tractor Drawn Plate Planter

Variety	No. of farmers	Area (ha)	Yield of Demonstration (q/ ha)				Increase in yield (%)	Cost of additional cash (Rs/ha)	
			Highest	Lowest	Avg.	Local check		Demo	Local Check
<i>Local mung</i>	05	2 ha.	Not harvested				-	-	-

FLD – 7: Bee Keeping

Variety	No. of farmers	Area (ha)	Yield of Demonstration (q/ ha)				Increase in yield (%)	Cost of additional cash (Rs/ha)	
			Highest	Lowest	Avg.	Local check		Demo	Local Check
<i>Apis indica</i>	10	10 nos.	In progress				-	-	-

15. On-farm Testing**OFT-1**

- Title of experiment : Different harvesting methods in paddy
- Problem: Conventional method of paddy harvesting by local sickles involves higher cost, labour & time.
- Hypothesis: Power operated paddy thresher can reduce the cost, labour & time requirement for paddy harvesting as compared to conventional method of harvesting by local sickle.
- Experiment Year: 1st
- Treatment: 3 nos.
- Plot Size: 1 acre each
- No. of farmers/ replication: 5 nos.
- Date of Sowing: 10.07.06
- Date of harvesting: 08.12.06
- Results with captions :

Treatment	Replication					Mean of results
	1	2	3	4	5	
A. Field Capacity (Man hours / acre)						
T ₁ – Local sickle	52	50	48	50	46	49.2
T ₂ – Improved sickle	50	46	45	48	48	46.8
T ₃ - Power reaper	2.5	2.3	2.0	2.2	2.1	2.22
B. Cost of operation (Rs./acre)						
T ₁ – Local sickle	346.32	333.0	319.68	333	326.34	331.67
T ₂ – Improved sickle	333.0	306.36	299.70	319.68	315.68	
T ₃ - Power reaper	133.25	122.68	106.68	117.35	112.01	118.39

C. Performance of Power Reaper

- i) Forward speed : 2 – 2.5 km/hr
- ii) Width of cut : 1.12m
- iii) Height of cut : 10.54 cm
- iv) Fuel consumption : 1.1 lit Kerosene per hour

Interpretation and Critical Analysis of the results obtained :

Performance of the Power reaper is efficient & economical to the other two methods considering cost of operation and labour requirement. The labour requirement of the improved sickle was 4.88% less than the local sickle.

OFT-2

- a. Title of experiment : Performance of wilt tolerant variety of tomato
- b. Problem: Low yield of tomato due to wilting
- c. Hypothesis: Use of wilt tolerant variety may increase the retention of higher plant population in the field.
- d. Experiment Year: 1st
- e. Treatment: 3 nos.
- f. Plot Size: 100 sq.mt each
- g. No. of farmers/ replication: 06 nos.
- h. Date of Sowing: 28.10.06
- i. Date of harvesting: 20.02.07
- j. Results with captions :

Treatment	Replication (Q/Ha)						Mean of results
	1	2	3	4	5	6	
T ₁ – BT-10	386	396	392	375	397	395	390
T ₂ – BT-12	416	422	414	424	428	417	420
T ₃ - Local	240	244	252	246	258	260	250

Interpretation and Critical Analysis of the results obtained :

Yield of wilt tolerant variety of tomato (BT-12 and BT-10) found 68% and 58% more yield respectively over local check. The wilting of 40% in local variety is occurred whereas no wilting found in BT-12 and BT-10 variety.

16. Literature developed/published (give details)

- a. Research paper:
 1. An integrated approach towards management of rice pest with particular reference to leaf folder in western Orissa
- b. Technical Reports
 1. Annual Report for Zonal Workshop - 2006
 2. EFC draft report
 3. Success story Report to District Magistrate on Mushroom Cultivation.
 4. Bio-manure status of Mayurbhanj district.

- c. Technical bulletins
 - 1. Periodical bulletins under ATMA, consultation with KVK
- d. Popular articles
 - 1. Nirapada Panipariba Fasal Utpadana pani nimara babahara
- e. Extension Literature
 - 1. Mayurbhanjare gramanchalare eka upadeya udyog- Rangin Kukuda palan
 - 2. ajira ahyana – basamati dhanaChasa
 - 3. Babasyayika Fulachasa
 - 4. Jia Khata Prastuti o Upakarita

17. Success Story/ Case Study: Mushroom cultivation

Assessing the need of the district & studying the market demand, the scientists of KVK, Mayurbhanj found that there is tremendous potential of mushroom cultivation in the district in a commercial basis. There is also good availability of inputs for mushroom cultivation like straw, bamboo, labour force in a cheaper rate. The most problem was the availability of spawns. Mrs. Gitarani Mohanty an young women entrepreneur of Takatpur, Baripada, Mayurbhanj started her own unit of 20 kg capacity of mushroom cultivation for daily produce, which gives a stable income of Rs.20,000/- monthly. After that, she is deputed to OUAT to receive training on mushroom spawn production. Then she started her own spawn production unit with the financial assistance from Central Horticulture Board, which gives her more income. It also solved of problem of collecting spawns from Bhubaneswar. Citing her success, a field day was conducted on 28.03.2006 by KVK in which District Magistrate & Collector was also a guest among other extension functionaries from line departments. This effort and example inspired other aspiring entrepreneurs to adopt the mushroom cultivation as commercial basis. (others attached in separate page)

18. Constraints

- a. Administrative : Lack of Infrastructural facilities like Administrative building, training Hall, Compound Wall, Water supply etc.
- b. Technical : Lack of demonstration units, Sophisticated Audio visual Aids
- c. Financial :

19. Functional Linkage with different organization

Sl. No	Name of the organization	Nature of Linkage
1	Department of agriculture, Govt. of Orissa	Forward and backward technical linkage like passing advanced researches and receiving feedbacks. Input supply and field demonstrations
2	Department of horticulture, Govt. of Orissa	-do-
3	Department of soil conservation, Govt. of Orissa	-do-
4	Department of animal resource development, Govt. of Orissa	-do-
5	Department of fishery, Govt. of Orissa	-do-
6	Department of forestry, Govt. of Orissa	-do-
7	Seed certification office, Govt. of Orissa	Seed and seedling production programme
8	Orissa state seed corporation	-do-
9	Central Rice Research Institute, Cuttack	Technical support and procuring recently released seeds
10	Central Avian Research Institute, Bhubaneswar	Technical support and collection of synthetic chicks
11	Central Institute Of Fresh Water Aquaculture,	Technical support and supply of fingerlings

	Bhubaneswar	
12	ATMA, Mayurbhanj	Serving as resource person and conducting OFT & demonstration with collaborative mode
13	District and local administration	Administrative support
14	Banks and MRT division of SBI	Market led extension
15	Women and child development department	Extension through SHG
16	Gramina Vikasa trust	Seed production programme and demonstration

20. Performance of demonstration units (other than crops)

Sl. No.	Demonstration Unit	Total Production	Cost of Inputs (Rs.)	Gross income (Rs.)	Net income (Rs.)
1	Azolla	In progress	Rs.500/-	-	-

21. Performance of instructional farm (crops) including seed production

Sl No.	Crop/ Unit	Area (ha)/ No.	Variety	Date of sowing	Date of harvesting	Total Prod.	Cost of Inputs (Rs)	Gross Income (Rs)	Remarks
1.	Paddy	2.5	Ashoka	03.08.06	30.10.06	40.8 q	40,000	48,000	
		4.0	Khandagiri	11.08.06	20.11.06	82.5 q	72,000	89,981	
		9.0	Swarna	22.07.06	15.12.06	413.4 q	1,59,000/-	4,53,971	

22. Utilization of Hostel facilities : Not available

23. Indicate any innovative technology or any innovative methodology of Transfer of Technology developed during the year. : Nil

24. Indicate indigenous technology practiced by the farmers in the KVK operational area which can be considered for technology development (in details with suitable photographs).

a) Value addition of Sabai Grass

The traditional practice of rural people of Mayurbhanj district on the value addition of Sabai grass by making ropes is identified by the KVK Scientist. The rope is prepared by knitting manually, rubbing between hands and finally they make it tight (compact) by means of a manual roller (prepared using a common by-cycle rim).

25. Indicate the specific training need tools/ methodology followed for

- Identification of courses for farmers/ farm women : PRA outputs. Group discussion, Observation
- Rural Youth: PRA outputs, Secondary data
- In-service personnel : Questionnaire, Brainstorming, Group Discussion

26. Any other special programme taken up by the KVK which has been financed by the state Govt./ Other Agencies

A poultry brooding house of 1000 sq.ft is already to be completed very soon with the financial assistance from Rastriya Srama Vikas Yojana through District Rural Development Agency (DRDA), Mayurbhanj under State Govt. at a sum of Rs.4,20,000/-. It is a NABARD sponsored grant, which will enable poultry growers to get synthetic strains of poultry like: Vanaraja, Giriraja, Gramapriya easily from the KVK farm.

27(A). Seed/ Seedling/ Sapling and sold to the farmers

Crop	Variety	Seed Production (Quintals) (grain crops)	Seedling Production (No)(vegetable crops)	Sapling Production (No) (fruit trees, forest and others)
Tomato	BT-10 & BT-12	-	11675 nos.	-
Paddy	Ahoka	40.8	-	-
	Khandagiri	82.5	-	-
	Swarna	413.4	-	-
Brinjal	BB – 45 – C	-	800 nos.	-

28. **Scientific Advisory Meetings(s) (SAC) :** Not held

29. **Impact of training programmes carried out during last three years in the KVK adopted villages:** New KVK

30. **Field activities**

- i. Number of Villages adopted : 5 nos.
 ii. Number of farm families selected : 425 nos.
 iii. Number of Survey/ PRA conducted : 5 nos.

31. **Other Extension Activities**

Activities	Date	No. of beneficiaries (farmers/ Rural youth)			No. of Extension Functionaries		
		Male	Female	Total	Male	Female	Total
Field Days							
1. Farm mechanization on ground nut harvesting	31.05.06	47	05	52	7	-	7
2. Field days on Arhar	5.12.06	11	01	12	02	02	04
3. Field days on Groundnut (Kharif)	6.12.06	22	00	22	02	02	04
4. Field days on Groundnut (Rabi)	29.03.07	27	01	28	03	02	05
2. Field days on Greengram	30.03.07	17	00	17	05	02	07
Kisan Mela							
1. Implements for pulse production & processing techniques	08.06.06	56	-	56	09	-	09
Radio Talk (Give Topic) AIR, BARIIPADA							
• Pasu Palanaru Jibka Aarjana Sambhaba Ki	04.07..06						
• Krushi Vigyan Kendra Kaha Pani	26.04.06						
• Phala O Panipariba Samrakshana	02.06.06						
• Dhana Chasare Unnata Krushi Jantrapatira Byabahara	08.07.06						
• Sankuchita Biswa.	23.08.06						
• Baigana fasala re poka lagi paristithi bichari prakrutika niyantrana	13.12.06						
• Unnata Krishi jantrapati o tahara Byabahara	12.01.07						
• Krishi Bazara samprasarana Sikhya	15.02.07						
TV Show (Give Topic)							
1. Paddy Reaper	OTV 12.12.06						
2. Seed production programme on paddy	OTV 18.12.06						
News Paper Coverage (Give Topic)							
KVK tarafaru mahu chasa sambadhiya talim pradan	13.04.06 Samaj						
Zilla stariya krusi pradarsani udghatita	30.04.06 Dharitri						
Krushi Yantrapati ra khetra pradarsani	17.06.06 Samaj						
Krushijibi Mahila dibasa palita	08.12.06 Sambad						
Krushijibi Mahila dibasa palita	12.12.06 Samaj						
Celebration of special days							
1. Women in Agriculture day	04.12.06	-	50	50	-	3	3

32. **Utilization of KVK funds during the year 2006-07**

Item	Sanctioned by ZC	Released	Expenditure
Pay and allowances	18,00,000	-	1720092
Recurring Contingencies	2,75,000	2,65,000	2,65,000

Non-Recurring Contingencies	35,000 Adm. Build.-4200004 Far. Hostel-2515918 Th. Floor-170000 Comp. wall-700000	34400	34400 Adm. Build.-4200004 Far. Hostel-2515918 Th. Floor-170000 Comp. wall-700000
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33. Utilization of funds under FLD on Oilseed/ Pulse

Sl. No.	Item	Sanctioned by ZC		Released by Institute		Expenditure upto 31-12-2006		Unspent balance
		Kharif	Rabi	Kharif	Rabi	Kharif	Rabi	
A. Oilseed								
1.	Critical Inputs	12250	12250	15575	15575	15575	15575	Nil
2.	Extension Activities	1750	1750					
3.	TA/ DA/ POL	1750	1750					
Total A		15,750	15,750					
B. Pulse								
1.	Critical Inputs	9190	9190	12295	12295	12295	12295	Nil
2.	Extension Activities	1315	1315					
3.	TA/ DA/ POL	1965	1965					
Total B		12,470	12,470					

34. Status of Revolving Fund (Rs.) for 3 years

Year	Total Sanctioned	Opening Balance	Expected Income		Net balance in hand as on 1 st April of each year
			Fixed Deposit	Farm income	
2005-06	64,000/-	Nil	Nil	82,120	Nil
2006-07	1,00,000/- (ICAR) 1,71,000/- (OUAT)	Nil	Nil	5,91,952	Nil

35. Please indicate information, which has not been reflected above (write in detail).

**Programme Coordinator
KVK, Mayurbhanj**