

ANNUAL REPORT PROFORMA (2004-05)

1. KVK code :
2. Name of the KVK : Krishi Vigyan Kendra, Nayagarh, Orissa
3. District : Nayagarh
4. Address of KVK : At- Panipoila, P.O.- Balugaon, Dist.
Nayagarh
Orissa Pin-752 070
- Telegraphic Address : -
- Telephone No. with STD : 0674-2335210 (WLL) –Office
0674- 2595283 –Residence
9437279444-Cell phone
e-mail : mituskpanda@yahoo.co.in
5. Name of Training Organiser : Dr.Santosh Kumar Panda
6. Name of the host Organization: Orissa University of Agriculture and
Technology
7. Name of Head of Host
Organisation : Dr.B.Senapati, Vice-Chancellor, OUAT
8. Address of the Host : Orissa University of Agriculture and
Technology, Bhubaneswar- 751 003,
Dist. –Khurda, Orissa
Tel- 0674-2407780
Fax-0674-2407780,
e-mail: ouatmain@hotmail.com
1. Letter No. and date by which
KVK was sanctioned by ICAR: F.No.2-10/98 AE II, dt. 29.05.2004
2. Month and year of
inception of the KVK : September 2004

3. Staff Position (as on March,2005) :

Sl No	Designation	Name	Discipline	Highest degree	Pay Scale	Date of joining	SC/ST/OBC/GEN
1.	Training Organiser	Dr.S.K.Panda	Entomology	Ph.D.	10,000-15,300/-	08.08.04	GEN
2.	Training Associate (Hort.)	Dr.G.Das	Horticulture	Ph.D.	8,000-13,500/-	24.01.05	GEN
3.	Training Associate (Ext.)	Mr.P.K.Benerjee	Extension	M.Sc. (Ag)	12,000-18,300/-	11.02.05	GEN
4.	T.A. (Home Sc.)	Mrs. G. Subudhi	Home Science	M.Sc (Ho.Sc.)	8,000-13,500/-	25.02.05	GEN
5.	T.A. (Fishery Sc.)	Mr. A.K.Swain	Fishery Sc.	M.F.Sc.	8,000-13,500/-	11.03.05	GEN
6.	Training Assistant	Vacant					
7.	Farm Manager	Vacant					
8.	Computer Assistant	Vacant					
9.	Office Supdt.-cum-Accountant	Mr.B.K.Kar	-		5,500-9,000/-	01.10.04	GEN
10.	Jr.Steno- cum-comp. Operator	Mr. L.K.Das	-		4,000-6,000/-	01.02.05	GEN
11.	Driver- cum-Mechanic	Vacant					
12.	Supporting staff	Mr.P.C.Bhol	-	Matriculation	2,550-3,200/-	05.01.05	OBC

12. Total Land with KVK (ha) : 21.73 ha

13. Infrastructural facilities :

Sl. No	Particulars	Unit (No)	Plinth area (Sq.feet)	Year of completion	Remarks
1.	Administrative building	-	-	-	KVK office is running in old SRS building
2.	Farmer's Hostel	-	-	-	
3.	Staff quarters	-	-	-	
4.	Demonstration unit	0.4 ha	-	-	Nutritional garden is established

14. Budget in current financial Year (in Rs):

Sl. No	Heads	Amount Sanctioned by ICAR (in lacs)	Amount released by ZC unit(in lacs)	Expenditure (Up to 31.03.2005) (Rs)
A.	Recurring			
1.	Pay and allowances	4.0	4.0	2,36,911
2.	TA	0.2	0.2	20,000
Sl. No	Heads	Amount Sanctioned by ICAR (in lacs)	Amount released by ZC unit(in lacs)	Expenditure (Up to 31 .03.05 in Rs)
3.	Recurring contingencies	2.0	2.0	2,00,000
a.	POL			17,652
b.	Office contingency			82,348
c.	Training of farmers and farm women			23,800
d.	Training/ Demonstration material			22,646
e.	Training of rural youths			-
f.	Training of in-service personnel			-
g.	On farm testing			5,130
h.	FLD other than oilseed and pulse crops			30,135
i.	(Maintenance of building)			18,164
j.	(Books, Journals etc.)			125
	Total A	6.2	6.2	2,00,000
B.	Non-recurring			
a.	Equipment	0.7	0.7	69,450
b.	Works (Revolving fund)	1.0	1.0	
c.	Library			
d.	Land			
e.	Vehicle a) Jeep	5.0	5.0	4,42,673
	b)Tractor and implements	5.0	5.0	4,88,247
	Total B	11.7	11.7	10,00,370
	Grand Total (A+B)	17.9	17.9	14,57,281

15. Amount released by the council : 17.9 (Rs in lakhs)

Amount released by host Institute : 14.57281

16. Details of KVK Bank Account

Sl.No	Particulars	Name of the bank	Location	Account No.
1.	Current Account	State bank of India(MainBranch)	Nayagarh, Orissa.	01000050271

17. Utilization of funds under FLD on Oilseed /Pulse: Not sanctioned

18. Status of revolving fund (in Rs) :Rs 1,00,000/- (not released)

Opening balance as on 01.04.2004 (Released by the council during Feb'05)
 Closing balance as on 31.03.2005 : Nil

19 (a) Salient Recommendations of SAC Meetings: Not conducted

(b) QRT Recommendations : Nil

20. Training Achievement:

A. Training of farmer/farm-women (from October '04 to March '05)

Title of Training	Duration in days	Number of participants											
		SC			ST			Other			Total		
		M	F	Total	M	F	Total	M	F	Total	M	F	Total
Crop Production													
Improved technology for increasing rice production	1	5	-	5	5	-	5	30	-	30	40	-	40
Advanced technology in oilseed cultivation	1	-	-	-	-	-	-	25	-	25	25	-	25
Sugarcane ratoon management	1	4	-	4	3	-	3	18	-	18	25	-	25
Preparation of compost	1	-	-	-	25	-	25	-	-	-	25	-	25
Nutrient management in cole crop	2	7	-	7	5	-	5	13	-	13	25	-	25
Intercropping in sugarcane	2	12	-	12	4	-	4	9	-	9	25	-	25
Weed management in sugarcane	2	-	-	-	-	-	-	25	-	25	25	-	25
Integrated nutrient management in rice	2	6	-	6	4	-	4	15	-	15	25	-	25
Total	12	34	-	34	46	-	46	135	-	135	215	-	215
Plant protection													
Pest management in rice	2	-	-	-	-	-	-	30	-	30	30	-	30
Insect pests of cole crop and their management	1	5	-	5	-	-	-	20	-	20	25	-	25
Pest and disease mgt. in solanaceous crop	2	4	-	4	-	-	-	22	-	22	26	-	26
Pest & diseases of oilseed crop and their mgt.	1	7	-	7	2	-	2	14	-	14	23	-	23
Total	6	16	-	16	2	-	2	86	-	86	104	-	104
Women in Agril.													
Cultivation of dhingri mushroom	1	-	11	11	-	3	3	-	36	36	-	50	50
Mgt. of house rat	1	-	7	7	-	4	4	-	9	9	-	20	20
Total	2	-	18	18	-	7	7	-	45	45	-	70	70
Rural Youth													
Paddy straw mushroom cultivation	2	-	-	-	-	-	-	25	-	25	25	-	25
Total	2	-	-	-	-	-	-	25	-	25	25	-	25
Grand Total (15 Trg.)	22	50	18	68	48	7	55	246	45	291	344	70	414

Summary of training for farmer/farm-women (Oct'04 to Mar'05)

Subject	No. of prog	Duration	Number of participants											
			SC			ST			Others			Total		
			M	F	Total	M	F	Total	M	F	Total	M	F	Total
Crop production	8	12	34	-	34	46	-	46	135	-	135	215	-	215
Horticulture	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Plant protection	4	6	16	-	16	2	-	2	86	-	86	104	-	104
Animal Sciences	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Agril. Engineering	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Women in Agriculture	2	2	-	18	18	-	7	7	-	45	45	-	70	70
Fisheries	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Rural youth	1	2	-	-	-	-	-	-	25	-	25	25	-	25
Total	15	22	50	18	68	48	7	55	246	45	291	344	70	414

- B Training of rural youths
(From April, 2004 to March, 2005) : 1
- C Training of In-service personnel
(From April, 2004 to March, 2005) : Nil
- D. Sponsored Training Programme : Nil
21. Impact of training programme carried out during 1st three years in the KVK adapted villages : Newly established
22. Developmental indicators for KVK operational area (in the KVK adopted villages) : Bench mark survey is being under taken
23. Extension activities:

Activity	Date	Number of participants												
		SC			ST			Other			Total			
		M	F	Total	M	F	Total	M	F	Total	M	F	Total	
Special day celebration (Pl. Specify)														
World food day	16.10.04	5	-	5	5	-	5	30	-	30	40	-	40	
Women in Agril. Day	04.12.04	-	11	11	-	3	3	-	36	36	-	50	50	
Total =		5	11	16	5	3	8	30	36	66	40	50	90	

24. Other Extension Activities : Nil

25. Survey work done during the year (enclose the survey reports):

1.	No. of villages selected for survey	5
2.	No. of villages surveyed	2
3.	No. of village for which survey report prepared	Nil
4.	No. of farm families selected for survey	10% from each village
5.	No. of farm families surveyed	Nil

26 Staff deputed for training/workshop

Sl.No.	Name	Designation	Title of Course/ Workshop	Institute where deputed	Period of training	
					From	To
1	Dr.S.K.Panda	Tr.Organiser	Orientation training on extension reform	IMAGE, Bhubaneswa	16.11.04	17.11.04
2	- do -	- do -	Organic Farming	DEE, OUAT, BBSR	27.12.04	31.12.04
3	- do -	- do -	7th AZRA Conference	OUAT Bhubaneswar	14.01.05	16.01.05

27. Frontline Demonstrations on oilseed
and pulse crops : Not sanctioned

28. Frontline demonstrations other than oilseed
and pulse crops : Given below

Agronomical information

Village	No. of farmers	Area (ha)	Type of farming situation					Area under demonstrations (ha)	Critical input given	Cost of critical input (Rs.)
			Source of irrigation	Soil type	Previous crop	Sowing date	Harvesting date			
FLD 1. Performance of TARM 1 mung variety										
Godipalli	7	1.0	Bore well	Sandy loam	Rice	10 th Jan.	23 rd - 27 th Mar	1.0	TARM 1 seed (24 kg)	735/-
FLD 2. Cultivation of Rabi ground nut										
Malatipur	3	0.6	Borewell	Sandy loam	Rice	30 th Nov.	16 th - 26 th Mar	0.6	AK 12-24 seed (1.75 q)	5075/-
Hariharpur	3	0.4	- do -	- do -	Early cauliflower	1st.Dec.	-do-	0.4	AK 12-24 seed (1.15 q)	3384/-
FLD 3. Performance of BT 10 tomato variety										
Godipalli	16	1.0	Bore well	Sandy loam	Rice	16 th Dec.	15 th - 23 rd Mar	1.0	BT 10 seedlings	9780/-
FLD 4. Pest control in mustard										
Godipalli	5	2.0	Bore well	Sandy loam	Rice	6 th Jan. 05	27 th - 31 st Mar	2.0	Quinalphos & dimethoate	1370/-
FLD 5. Cultivation of Hybrid sunflower										
Godipalli	7	1.25	Bore well	loamy	Cauliflower	20 th Jan	15 th - 21 st April	1.5	Jwala mukhi (10 kg)	2,800/-
Hariharpur	3	0.25	- do -	- do -	Rice	- do -	- do -	0.25	Jwala mukhi 0.4 kg	112
Khedapada	2	0.5	- do -	loamy	Rice	15 th Jan	-do-	0.5	Jwala mukhi 0.8 kg	224

FLD 6. Paira cropping of field pea in *kharif* rice

Village	No. of farmers	Area (ha)	Type of farming situation					Area under demonstrations (ha)	Critical input given	Cost of critical input (Rs.)
			Source of irrigation	Soil type	Previous crop	Sowing date	Harvesting date			
Khedapada	3	1.0	Rainfed	Loamy	Rice	20 th dec.	25 th Feb - 8 th Mar	1.0	Rachana (50 kg seed)	1508/-

Results

Crop	variety	Intervention	No. of farmers	Area(ha)	Yield (q/ha)			Increase in yield over local check	Cost of input (Rs)	
					Maximum	Demonstration	Local check		Demonstration	Local check
Kharif	Rachana	Introduction as paira crop in rice field	3	1.0	-	6 q/ha	Nil	-	1508/-	-

Interpretation and critical analysis of the results obtained: Germination of seed was very good where enough moisture was available but in area where water was drained out 3-4 days prior to sowing, germination of pea was affected. Hence, the seed should be sown one day after draining out of standing water in the field. However, farmers are convinced that pea is a good substitute for mung and urad as paira crop.

FLD 7. Cultivation of oyster mushroom

village	No. of farmers	Area (ha)	Type of farming situation					Area under demonstrations (ha)	Critical input given	Cost of critical input (Rs.)
			Source of irrigation	Soil type	Previous crop	Sowing date	Harvesting date			
Koska	10	60 beds	-	Unutilized space in house-	-	10.12.04	2.1.05	60 beds	Spawn Polythene bag	558/-

Results:

Crop	variety	Intervention	No. of farmers	Area (ha)	Yield			Increase in yield over local check	Cost of input (Rs)	
					Max	Demonstration	Local check		Demonstration	Local check
Mushroom	Oyster	Introduction	10	60 beds	-	1.5 Kg/bed	-	-	558/-	-

Interpretation and critical analysis of the results obtained:

Women farmers showed a great deal of interest in growing dhingri mushroom. They are highly convinced with its output (1.0 to 2.0 kg/bed). They are also convinced about the profit which they can make out of it but apprehend its marketing in the local market.

FLD 8. Paddy straw mushroom cultivation

Village	No. of farmers	Area (ha)	Type of farming situation					Area under demonstrations (ha)	Critical input given	Cost of critical input (Rs.)
			Source of irrigation	Soil type	Previous crop	Sowing date	Harvesting date			
Khedapada	10	50 beds	-	Unutilized space in house-	-	03.03.05 to 10.03.05	15.03.05 to 25.03.05	50 beds	Spawn & Polythene bag	600/-

Results:

Crop	variety	Intervention	No. of farmers	Area (ha)	Yield			Increase in yield over local check	Cost of input (Rs)	
					Maximum	Demn.	Local check		Demn.	Local check
Mushroom	Paddy straw	Introduction	10	50 beds	-	2.25 Kg/bed	-	-	600/-	-

FLD 9. Introduction of Apiculture (*Apis cerena indica*)

village	No. of farmers	Area (ha)	Type of farming situation					Area under demn. (ha)	Critical input given	Cost of critical input (Rs.)
			Source of irrigation	Soil type	Previous crop	Sowing date	Harvesting date			
Koska	5	5 colonies	Rain fed	Loamy	Rice	Established on 25 th March	-	5 colonies	Standard bee hive, iron stand with colony	7500/-

Results:

Crop	variety	Intervention	No. of farmers	Area (ha)	Yield			Increase in yield over local check	Cost of input (Rs)	
					Maximum	Demn.	Local check		Demn.	Local check
Apiculture	<i>Apis cerena indica</i>	Introduction	5	5 colonies	-	-	-	-	7500/-	-

On-farm Testing :

OFT 1

Subject: Horticulture

- a. Title of the experiment : Effect of micronutrients on Cauliflower
- b. Problem : Browning of curd reduces market value
- c. Hypothesis : Application of micronutrient will add to Whitening of curd and reduce stem Hollowness
- d. Treatment : T1- Farmer's practice (No use of micronutrient)
T2- Magnesium sulphate @ 2.5 g/l water
T3- Boron @ 2.5 g/l water
T4- Plantaid (Combination of Micronutrients) @ 3 ml/l of water
(Spraying of the compounds were made thrice at 20 days interval starting from 30 DAP)
- e. Plot size : 1000 sq.m.
- f. No. of farmers/ Replication : Five
- g. Date of sowing : 20.10.04
- h. Date of harvesting : 14 01.05
- i. Results with captions

Effect of micronutrient on brown spot development of cauliflower (%):

Treatment	Replication					Mean of results
	R1	R 2	R3	R4	R5	
Farmers Practice	20.1	16.4	21.3	18.7	25.4	20.38
Magnesium Sulphate	17.6	22.2	14.9	16.5	21.3	18.50
Boron	1.3	4.1	2.6	2.7	3.5	2.84
Plantaid (Combination)	2.0	3.1	2.7	4.3	3.9	3.20
C.D. 0.05						5.033

Effect of micro nutrient on formation of hallow stem:

Treatment	Replication					Mean of results
	R1	R2	R3	R4	R5	
Farmer's practice	25.1	23.2	28.9	33.6	19.7	26.10
Magnesium	21.3	27.4	18.6	29.7	20.3	23.46
Boron	5.3	2.9	7.6	3.1	4.6	4.70
Plantaid (Combination)	7.6	10.1	4.6	5.8	3.9	6.40
C.D. 0.05						8.39

Effect of micronutrient on yield of cauliflower:

Treatment	Replication					Mean of results
	R1	R2	R3	R4	R5	
Farmer's practice	256	290	301	275	246	273.6
Magnesium	258	298	290	300	298	284.8 (4.1%)
Boron	310	325	318	356	356	333.0 (21.7%)
Plantaid(Combination)	312	305	302	378	315	322.4 (17.8%)
C.D. 0.05						46.37

Result:

Application of micronutrient significantly improved the quality of the curd. Spraying of boron and Plantaid (combination of micronutrients) markedly reduced the intensity of browning of cauliflower (2.8-3.2%) and formation of hallow stem (4.7-6.4%) as compared to the Farmer's practice(20.4 and 26.1%) resulting in significant increase in yield(17.8-21.7% increase) over farmer's practice.

Farmer's reaction: Farmers are highly convinced with the quality improvement of cauliflower by application of boron and greater market acceptance of such curds.

OFT 2. Subject : Plant protection:

- a. Title of the experiment : Chemical control of diamond back moth
- b. Problem : DBM is the most serious pest threatening cultivation of cole crops in the locality.
- c. Hypothesis : DBM has already developed resistance to the conventional insecticides. Newer compounds may be helpful in tackling this pest in this locality.
- d. Treatment :T1- Farmer's practice (Spraying of Endosulphan,

monocrotophos and chloropyrifos at 4 days interval

T2- Profenofos @ 2ml/lit of water

T3- Profenofos + cypermethrin @ 2ml /lit. of water

T4- Cartap hydrochloride and *Bt* alternately @ 1g/lit water at ten days interval

(Insecticides were applied at 10 days interval starting from 30 DAP)

- e. Plot size : 1000 sq.m.
 f. No. of farmers/Replication : Five
 g. Date of sowing : 25.10.04
 h. Date of harvesting : 20. 01.04

Results with captions:

Effect of insecticidal sprayings on larval population (Nos /leaf) of DBM:

Treatment	Replication					Mean of results
	R1	R2	R3	R4	R4	
Farmer's practice	8.3	12.1	6.8	7.6	8.4	8.64
Profenofos	2.1	1.1	0.7	2.4	3.4	1.94
Profenofos + Cypermethrin	0.5	1.0	0.3	0.7	0.2	0.54
Cartap + Bt alternately	2.2	1.7	2.1	3.1	2.4	1.82
C.D. 0.05						3.35

Effect of insecticides on yield (q/ha) of cauliflower:

Treatment	Replication					Mean of results
	R1	R2	R3	R4	R5	
Farmer's practice	150	120	218	205	175	173.6
Profenofos	285	305	275	240	301	281.2 (62.0%)
Profenofos + Cypermethrin	320	350	400	425	375	374.0 (115.4%)
Cartap + Bt alternately	280	300	310	305	315	302.0 (73.9%)
C.D. 0.05						68.1

Result: Newly tested compounds have markedly lowered the larval population compared to that of farmer's practice and increased the yield. Among the test insecticides, Profenofos + cypermethrin numerically lowered the larval

population with an incidence of 0.54 larva /leaf as against 8.64 in FP. Highest yield increase of 115% was recorded from this treatment over FP.

Farmer's reaction: Farmers were highly satisfied with the performance of profenofos + cypermethrin in controlling DBM., but expressed their doubt about its long term use.

29. Literature developed/ published (give details): Nil

31. Constraints:

a. Administrative : KVK needs its own administrative block along with secured brick wall boundary.

b. Financial : Funds should be allocated for farmer's hostel, training hall, and demonstration units. Provision should be made for furniture of the office, hostel and training hall. Digital Handy cam is a felt necessity for taking photographs and making documentary.

32. Feed backs from farmers:

1. Little leaf is a menace for brinjal
2. In year of low rainfall rice suffers from more mealy bug attack
3. Adding cows urine to onion crop is beneficial
4. Sugarcane variety Co 86032 having high productivity suffers from more wilt and red rot in low lying areas
5. Parrot is a severe problem for sunflower at the time of maturity.
6. DBM is not controlled by any of the conventional pesticides
7. Hybrid tomato suffers from more wilt
8. Cultivation of mung as a paira crop is less remunerative
9. Toria is less remunerative due to heavy pest load and low productivity

33. Linkages with different organization

Sl No.	Name of the organization	Nature of linkage
1.	District Agriculture Officer	Training, conducting FLD and OFT
2.	Horticulturist, Nayagarh	- do -
3	FACSIMILE-ORISSA , NGO, Nayagarh	Contact SHGs for Training and demonstrations
4.	Office of the PD ,DRDA	Campus development and exploring irrigation potentiality
5.	Office of the Zilla Parishad	Participate in block Agril. development programme

34. (A)Performance of demonstration units (other than crops) : NIL
34. (B) Performance of instructional farm (crops including seed production/ Planting material production) : A crop museum has been established recently
34. (C).Seed/seedling/Sapling Production in KVK farms : NIL
35. Particulars of vehicles/tractor (as on 31-03-2005) :Purchased
36. Utilization of hostel facilities : Hostel not established
37. Indicate any innovative technology or any innovative methodology of transfer of technology developed during the year : Nil
38. Indicate indigenous technology Practiced by the farmers in the KVK operational area which can be considered for technology development (in details with suitable photographs) : Nil
39. Indicate the methodology followed for identification of courses :
- Farmer : Based on feed back information, group discussion and exploiting secondary sources
- Rural youth : Based on group discussion with rural yourth club members
- In service personnel : Not yet initiated
40. Any other information justifying the achievements (with data) of the KVK presented under extension activities column : Nil
41. Meteorological data (From Sept'04 to Mar'05)

Month	Meteorological week No.	Rainfall (mm)	Temperature		
			Maximum	Minimum	Average
Sept'04		127	30.6	28.6	
Oct'04		226	28.1	26.7	
Nov'04		Nil	25.3	19.6	
Dec'04		Nil	25.38	19.64	
Jan'05		Nil	23.6	20.7	
Feb'05		26	26.8	23.5	
Mar05'		40	32.4	25.6	

42. Progress report on front line demonstration of improved farm implements and machinery through KVKs : Not conducted
43. Progress report of any other projects such as water shed management, multi-location testing etc. : Not taken up
44. Success stories (give the success stories here and include coloured photograph) : Coloured photos relating to some of our achievements within this short tenure are annexed.

Signature of Training Organiser



Diamond back moth damage in farmer's practice



Effective control of DBM by profenofos + cypermethrin



Nutritional garden in KVK campus –A new born baby



Strawberry in KVK campus- climate is no barrier



Inauguration of Women in Agriculture Day celebration



Distribution of spawn bottles by the chief guest



Field pea as piara crop in rice field



BT 10 a wilt tolerant tomato variety promoted by KVK



Cauliflower grown under farmer's practice



Effect of Boron in On Farm Testing

**Diamond back moth damage in
farmer's practice**

**Effective control of DBM by
profenofos + cypermethrin**

