ANNUAL REPORT FOR THE YEAR 2005-2006

1. KVK Code : To be given by Zonal coordinating Unit.

2. Name of the KVK : Krishi Vigyan Kendra, Nayagarh, Orissa.

3. Address of KVK : At - Panipoila, P.O. - Balugaon,

Dist. - Nayagarh, State - Orissa.

PIN - 752070

(a) Telegraphic Address : Not available

(b) Telephone Numbers :

	STD Code	Phone No.
Office	0674	2335210
Residence	0674	2595283
Mobile	9437279444	

(c) E-mail Address : mituskpanda@ yahoo.co.in

4. Name of the Host Institution: Orissa University of Agriculture & Technology

5. Address of Host Institution : P.O. - Bhubaneswar, Dist. — Khurda,

State - Orissa, PIN - 751003.

(a) Telegraphic Address : AGRITECH

(b) Telephone Nos. with STD:

	STD Code	Phone No.
Office	0674	2402677
Residence	0674	2561606
Fax	0674	2407780

(c) E-mail Address : <u>ouatmain@hotmail.com</u>.

6. Staff Position (as on 31st March, 2006):

Sl.	Designation	Name*	Discipline	Highest	Pay scale	Date of	SC/ST
No.				degree	with present basic pay.	joining	/OBC/ GEN
1	2	3	4	5	6	7	8
1.	Training Organizer	Dr.S.K.Panda	Entomology	Ph.D	12,000-18,300 13,680/-	08.08.04	Gen
2.	Training Associate	Mr.P.K.Banerjee	Extn.Edn.	M.Sc(Ag)	12,000-18,300 13,260/-	11.02.05	Gen
3.	Training Associate	Mr.S.Biswal	Agronomy	M.Sc(Ag)	10,000-15,300 11,650/-	10.03.06	Gen
4.	Training Associate	Dr.G.Das	Horticulture	Ph.D	8,000-13,500 8,000/-	24.01.05	Gen
1	2	3	4	5	6	7	8

5.	Training Associate	Mrs.G.Subudhi	Home Sc.	M.Sc	8,000-13,500	25.02.05	Gen
					8,000/-		
				(H.Sc)			
6.	Training Associate	Mr.A.K.Swain	Fishery Sc.	M.F.Sc	8,000-13,500	11.03.05	Gen
					8,000/-		
7.	Training Associate	Vacant	Plant Prot.	-	-	-	-
8.	Training Assistant	Mrs.C.Mohanty	Horticulture	M.Sc(A	5,500-9,000	18.01.06	Gen
				g)	5,500/-		
9.	Farm Manager	Mr.B.K.Panda	Horticulture	M.Sc(A	5,500-9,000	27.01.06	Gen
				g)	5,500/-		
10.	ComputerAssistant	Miss.R.Praharaj	-	B.Sc(Zo	5,500-9,000	10.03.06	Gen
				ol)	5,500/-		
11.	Office Suptd-cum-	Mr.K.Rahman	-	B.A	4,750-9,000	07.03.06	Gen
	Accountant				4,750/-		
12.	Jr.Steno-cum-	Mr.L.K.Das	-	B.A	4,000-6,000	01.02.05	Gen
	computer Operater.				5,000/-		
13.	Driver-cum-	Mr.P.K.Barik, P.L.	-	10 th	2,550-3,200	02.05.05	OBC
	Mechanic	working against		Pass	3,140/-		
		the post.					
14.	Driver-cum -	Mr.U.Mohanty	-	6 th Pass	3,050-4,590	01.03.06	Gen
	Mechanic				4,135/-		
15.	Supporting staff	Mr.P.C.Bhol	-	Matricu	2,550-3,200	05.01.05	OBC
				lation	3,140/-		
16.	Supporting staff	Vacant	-	-	-		-

* For those staff who are in position.

7. Total land with KVK : 21.73 ha.

a. Under Building	1.50 ha.
b. Under Demn.Units.	0.40 ha.
c. Under Crops	2.00 ha.
d. Orchard/Agro-forestry	6.50 ha.
e. Others	11.33 ha.

8. Infrastructure facilities*:

	Tastructure raemine		7011 1			~
Sl.	Particulars	Unit	Plinth area	Sta	ge	Cost
No.		(No)	Sq.meter)	-		(Estimate for New
				Incomplete	Complete	Building)
1.	Administrative	1	479.55	Incomplete		Rs.35,01,600/-
	building			_		
	$(479.55.\text{m}^2)$					
2.	Farmer's hostel	-	-	-	-	-
	(200 Sq.m)					
3.	Staff quarters	-	-	-	-	-
	(100 Sq.m)					
4.	Demonstration	-	-	-	-	-
	Unit (in ha)					
	/ (20 Sq.m)					

^{*} Give details with plinth area.

9. Details of KVK Bank Account:

S1.	Particulars	Name of the Bank	Location	Account No
No				
1.	With Host Institute	State Bank of India	OUAT	
			branch	
2.	With the KVK	State Bank of India	Nayagarh	01000050271

10. Description of Agro-Climatic Zone and farming situations of the district:

The district of Nayagarh comes under East and South Eastern Coastal Plane Agro climatic zone and is situated between 20.5'N to 20.24'N latitude and 85.5'E to 85.12'E longitude. The geographical area of the district is 4242 sq.km. (3, 94,110ha) of which 1, 36,841 ha are under cultivation. Out of three types of cultivated area, high land consists of 40% (53,192ha); medium land 34% (46,866ha) and low land 26% (36.783ha). The area of the district can be characterized as rain fed with low irrigation potential and major portion falling under hilly terrains, high lands & forests. The soil is sandy loam type; average annual rainfall 1449mm. and the cropping intensity is 140%.

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

- i. Varietal replacement of extra early and early duration paddy in rain-fed uplands.
- ii. Cultivation of new location specific HYV paddy in medium and low lands.
- iii. Crop substitution from paddy to more remunerative non-paddy crops like maize, groundnut and vegetables in up lands.
- iv. Need based application of eco-friendly pesticides and bio-control agents in the IMP practice for effective control of sugarcane pests and diseases.
- v. INM practices including balanced use of chemical and bio-fertilizers, in corporation of crop residues, use of micro nutrients specially in Cole crops and vegetables as well as application of FYM, green manures and compost to restore soil fertility and sustainable crop production.
- vi. Scientific method of freshwater fish production including composite pisciculture, "scampi" prawn culture and integrated pisciculture practices.

vii. Remunerative agro based enterprises like preparation of value added products such as jam, jelly, squash, ketchup, pickle etc., mushroom production, breeding of ornamental fish, bee- keeping, poultry farming and floriculture for self employment of rural youths and SHGs.

12. Training Achievement -On Campus:

A. Training of farmers / farm-women (period: from April 2005 to March 2006)

Discipline / Title of	Dur				No.	of F	Particij	pants					
Training	atio n		SC	7		S	Γ		Other	•		Tot	al
		M	F	Total	M	F	Tot al	M	F	Tot al	M	F	Tot al
	day						aı			ai			ai
	S												
Horticulture	1	1					l				1	1	
1. Commercial	1	8	0	8	6	6	12	0	1	1	14	7	21
cultivation of													
Drumstick.													
2. Cultivation of	2	1	0	1	0	0	0	22	0	22	23	0	23
tuber crops.													
3. Control of flower	2	1	0	1	0	0	0	21	0	21	22	0	22
and fruit drop in													
Mango and Coconut													
Total	5	10	0	10	6	6	12	43	1	44	59	7	66
Plant Protection		1 40		- 10		I 0	l 0	1.0		140	1		1
1. Pest and diseases	2	12	0	12	0	0	0	13	0	13	25	0	25
of summer													
vegetables and their management													
then management													
2. Safe use of	1	0	0	0	0	0	0	25	0	25	25	0	25
pesticides													
3. Use of Neem as	2	1	0	1	0	0	0	21	3	24	22	3	25
Pesticide													
Total	5	13	0	13	0	0	0	59	3	62	72	3	75
Women in agriculture		T	1				1	1		1		1	1
1. Preservation of	2	0	3	3	0	0	0	0	20	20	0	23	23
fruits and vegetables	1												
2. Preparation of	2	0	0	0	0	0	0	0	25	25	0	25	25
various mushroom													
products													
3. Preparation of	2	0	1	1	0	0	0	0	24	24	0	25	25
Agarbati													
Total	6	0	4	4	0	0	0	0	69	69	0	73	73

Fisheries	Fisheries													
1. Composite fish	2	0	0	0	0	0	0	25	0	25	25	0	25	
Culture.														
2. Pond management	2	4	0	4	0	0	0	21	0	21	25	0	25	
in fish culture.														
Total	4	4	0	4	0	0	0	46	0	46	50	0	50	
Grand Total	20	27	4	31	6	6	12	148	73	221	181	83	264	

Summary of training for farmers / farm-women (period: from April 2005 to March 2006)

Subject	No of	Du						No.	of Par	ticipa	nts			
	Progr	rati		SC			ST			Ot	her	Total		
	amme	on (da ys	M	F	To tal	M	F	Tot al	M	F	Total	M	F	Total
Horticulture	3	5	10	0	10	6	6	12	43	1	44	59	7	66
Plant Protection	3	5	13	0	13	0	0	0	59	3	62	72	3	75
Women in Agril.	3	6	0	4	4	0	0	0	0	69	69	0	73	73
Fisheries	2	4	4	0	4	0	0	0	46	0	46	50	0	50
Total	11	20	27	4	31	6	6	12	148	73	221	181	83	264

B. Training of Rural Youths (period: from April 2005 to March 2006)

Discipline /	Du				N	Vo.	of Par	ticipaı	nts				
Discipline / Title of training	rati on		SC			S	Γ		Other			Tota	1
Title of training	(da ys)	M	F	Tot al	M	F	Tot al	M	F	Tot al	M	F	Tot al
Horticulture	•			•			•	•			•	•	
1. Nursery raising and techniques of propagation of fruit crops.	5	1	0	1	0	0	0	5	0	5	6	0	6
Total	5	1	0	1	0	0	0	5	0	5	6	0	6
Agril. Extension	•			•			•					•	
1.Formation of Agro consultancy.	3	1	0	1	0	0	0	14	0	14	15	0	15
2.Leadership development for Community work.	3	0	0	0	0	0	0	15	0	15	15	0	15
3.Techniques of organizing SHG for self sustainability.	3	0	0	0	0	0	0	15	0	15	15	0	15
Total	9	1	0	1	0	0	0	44	0	44	45	0	45

Women in agriculture													
1.Management	2	0	0	0	0	0	0	0	25	25	0	25	25
of house rat.													
2.Commercial cultivation of	2	0	2	2	0	0	0	0	23	23	0	25	25
Dhingri mushroom.													
Total	4	0	2	2	0	0	0	0	48	48	0	50	50
Fisheries													
1.Ornamental fish culture	3	1	0	1	0	0	0	19	0	19	20	0	20
Total	3	1	0	1	0	0	0	19	0	19	20	0	20
Grand Total	21	3	2	5	0	0	0	68	48	116	71	50	121

Summary of training for Rural Youth (period: from April 2005 to March 2006)

		Du						No.	of Par	ticipa	nt			
Cubicat	No. of	rati		SC	,		ST	Γ		Other			Total	
Subject	Programme	on (da	M	F	To	M	F	То	M	F	Tot	M	F	Tot
		y)			tal			tal			al			al
Horticulture	1	5	1	0	1	0	0	0	5	0	5	6	0	6
Agril.Extension	3	9	1	0	1	0	0	0	44	0	44	45	0	45
Women in Agril.	2	4	0	2	2	0	0	0	0	48	48	0	50	50
Fisheries	1	3	1	0	1	0	0	0	19	0	19	20	0	20
Total	7	21	3	2	5	0	0	0	68	48	116	71	50	121

C. Training of in-service Personnel (Period: from April 2005 to March 2006)

Title of Training	Du						No. o	of Par	ticipar	nt			
	rati	SC	1		S	Γ		Othe	r		То	tal	
	(D	M	F	Tot	M	F	Tot	M	F	Tot	M	F	Tot
	ay)			al			al			al			al
Agril.Extension													
1.Agro ecosystem analysis for resource characterization.	3	2	0	2	0	0	0	15	0	15	17	0	17
2.Community organization, Team building, capacity building and project management.	4	1	1	2	0	0	0	8	1	9	9	2	11
Total	7	3	1	4	0	0	0	23	1	24	26	2	28

Summary of training for In-service Personnel (*Period*: from April 2005 to March 2006)

Summary of training I	01 111 001 1100 1	Du	101 (<u> </u>		of Part					
Subject	No. of	rati		SC	7		S	Γ	(Other			Total	
	Programme	on (da y)	M	F	Tot al	M	F	Tot al	M	F	Tot al	M	F	Tot al
Agril.Extension	2	7	3	1	4	0	0	0	23	1	24	26	2	28
Total	2	7	3	1	4	0	0	0	23	1	24	26	2	28

13. Training Achievement - Off Campus:

A. Training of farmer / farm-women (Period: from April 2005 to March 2006)

Training of farmer / farm-wome	Du	va: _]	iron	ı Aprı			of Part						
Title of Training	rati		SC			ST			Other			Total	
	on (da y)	M	F	Tot al	M		Tota 1	M	F	Tot al	M	F	Total
Crop Production	1			ı	1		1					1	1
1.Water and nutrient mgt. in Oilseed crops.	2	5	0	5	1	0	1	19	0	19	25	0	25
2.Sugarcane ratoon mgt.	2	0	0	0	0	0	0	25	0	25	25	0	25
Total:	4	5	0	5	1	0	1	44	0	44	50	0	50
Horticulture													
1.Improved method of pointed gourd cultivation.	2	3	0	3	0	0	0	23	0	23	26	0	26
2.Growing of early vegetables for higher profit.	2	0	0	0	0	0	0	29	0	29	29	0	29
3. Papaya cultivation.	1	0	0	0	0	0	0	25	0	25	25	0	25
4.Tissue culture banana Cultivation.	2	4	0	4	0	0	0	19	0	19	23	0	23
Total:	7	7	0	7	0	0	0	96	0	96	10	0	103
Plant Protection							•						•
1. IPM in rice.	2	0	0	0	0	0	0	23	0	23	23	0	23
2. Insect pest of cole crops and their management.	2	0	0	0	0	0	0	25	0	25	25	0	25
3. Pest and diseases of Solanaceous crops and their Management.	2	6	0	6	0	0	0	19	0	19	25	0	25
4. Biological control of sugarcane borers.	2	7	5	12	4	4	8	3	2	5	14	11	25
5. Management of eriophyid mite in coconut.	2	4	0	4	1	0	1	15	0	15	20	0	20
Total:	10	1 7	5	22	5	4	9	85	2	87	10 7	11	118
Women in Agriculture													
1. Cultivation of paddy straw mushroom	2	0	0	0	0	0	0	0	25	25	0	25	25
2. Cultivation of paddy straw Mushroom.	2	0	0	0	0	0	0	0	25	25	0	25	25
3. Planning and mgt. of nutritional garden.	2	0	0	0	0	0	0	0	25	25	0	25	25
4. Medicinal plants for Home Garden.	1	0	1	1	0	0	0	0	24	24	0	25	25
Total:	7	0	1	1	0	0	0	0	99	99	0	10 0	100

Fisheries													
1. Fingerling production.	2	5	0	5	0	0	0	20	0	20	25	0	25
2. Integrated fish farming.	2	0	0	0	0	0	0	25	0	25	25	0	25
Total:	4	5	0	5	0	0	0	45	0	45	50	0	50
Grand Total	32	39	6	40	6	4	10	270	101	371	310	111	421

Summary of training for farmer/farm-women (period: from April 2005 to March 2006)

		Durat						No	o. of P	articipar	nt			
Subject	No. of	ion		SC			ST		О	ther			Total	
	Programme	(day)	M	F	То	M	F	То	M	F	Tot	M	F	Tot
					tal			tal			al			al
Crop	2	4	5	0	5	1	0	1	44	0	44	50	0	50
Production														
Horticulture	4	7	7	0	7	0	0	0	96	0	96	103	0	103
Plant	5	10	17	5	22	5	4	9	85	2	87	107	11	118
Protection														
Women in	4	7	0	1	1	0	0	0	0	99	99	0	100	100
Agril														
Fisheries	2	4	5	0	5	0	0	0	45	0	45	50	0	50
Total	17	32	39	6	40	6	4	10	270	101	371	310	111	421

B. Training of Rural Youth (Period: from April 2005 to March 2006)

	Du						No. o	of Par	ticipar	nt			
Title of Training	rati		SC	7		S	Γ		Other			Tota	1
	(da	M	F	Tot	M	F	Tot	M	F	Tot	M	F	Tot
	y)			al			al			al			al
Women in Agriculture													
1. Commercial cultivation of	2	0	0	0	0	0	0	0	25	25	0	25	25
dhingri mushroom													
Total:	2	0	0	0	0	0	0	0	25	25	0	25	25
Grand Total	2	0	0	0	0	0	0	0	25	25	0	25	25

Summary of training for Rural Youth (Period: from April 2005 to March 2006)

		Du			No.	of I	Parti	cipant						
Subject	No. of	rati	SC	1		Sī	Γ		C	Other			Total	
	Programme	on (da	M	F	Tot	M	F	Tot	M	F	Tot	M	F	Tot
		y			al			al			al			al
Women in Agril.	1	2	0	0	0	0	0	0	0	25	25	0	25	25
Total	1	2	0	0	0	0	0	0	0	25	25	0	25	25

C. Training of In-Service Personnel (Period: from April 2005 to March 2006)

	Du				No	o. of	Parti	cipant					
Title of Training	rati on	S	С		5	ST		O	ther		Т	otal	
	(da	M	F	Tot	M	F	То	M	F	Tot	M	F	Tot
	y)			al			tal			al			al
Plant Protection								•	•				
1. Management of coconut Eriophyid mite.	2	3	0	3	0	0	0	16	0	16	19	0	19
2. Formation of core trainers Group.	4	2	0	2	0	0	0	16	0	16	18	0	18
3. First aid for Pesticide Poisoning.	3	3	0	3	0	0	0	18	0	18	21	0	21
Total:	9	8	0	8	0	0	0	50	0	50	58	0	58
Agril.Extension													
1. Preparation and use of Audio visual aids.	3	3	0	3	0	0	0	14	0	14	17	0	17
2. Techniques of conducting a	2	2	0	2	0	0	0	12	0	12	14	0	14
Demonstration.			U		U	U	U	12	U	14	14	U	14
Total:	5	5	0	5	0	0	0	26	0	26	31	0	31
Grand Total	14	13	0	13	0	0	0	76	0	76	89	0	89

Summary of training for In-Service Personnel (Period: from April 2005 to March 2006)

Subject	No of	Durat]	No.	of Par	ticipa	nt				
	Program me	ion days	SC			S	Γ		(Other		T	otal	
	inc	days	M	F	Tot	M	F	Tot	M	F	Tot	M	F	Tota
					al			al			al			1
Plant Protection	3	9	8	0	8	0	0	0	50	0	50	58	0	58
Agril. Extension	2	5	5	0	5	0	0	0	26	0	26	31	0	31
Total	5	14	13	0	13	0	0	0	76	0	76	89	0	89

D. Sponsored Training Programme (Period: from April 2005 to March 2006)

Title of Training	Sponsor	Durat					No.	of Pa	rticipa	ant				
	ed by	ion	SC		2	ST		(Other		T	otal		
		(Day	M	F	Tot al	M	F	Tot al	M	F	Tot al	M	F	Total
Nil	Nil	Nil	Nil	N il	Nil	N il	N il	Nil	Nil	Nil	Nil	Nil	N il	Nil

14. Result of Front Line Demonstration:

(A) Oilseeds (Year: 2005-2006):

Crop	Season	Area	Area (ha	a.)	No. of fa	rmers / I	Demn.	
		(ha.)						Remarks
			Proposed	Actual	SC/ST	Other	Total	
Groundnut	Kharif	5	5	5	2	9	11	Var.Smruti was
								given.
Groundnut	Rabi	5	5	5	7	8	15	Var.TMV-2
								was given.

Proof photographs with title at the back of photographs in pencil attached.

(B) Pluses (Year: 2005 - 2006):

Crop	Season	Area (ha)	Area (ha	1)	No of fa	armers/[Demn.	Remarks
- T			Proposed	Actual	SC/ST	Other	Total	
Green -gram	Rabi	5	5	5	4	11	15	Nayagarh local grown with fertilizer and plant protection measures.

Poof photographs with title at the back of photographs in pencil attached.

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

Crop	Seas on	Sowing Date	Harvestin g Date	Situati on	Soil type	Agro- climatic Zone	Previous crop pattern	Status of NPK	Rainfal l Distrib ution
Ground nut	Khari f 05	4.07.05 to 13.07.05	6.11.05 to 17.11.05	High to mediu m land.	Sandy loam to loamy	East and SE coastal plane zone.	Fallow/ local moong	Mediu m to low	Normal
Ground nut	Rabi 05- 06	03.01.06 to 17.01.06	20.4.06 to 28.4.06	High to mediu m land.	Loamy sandy to clay loam	-Do-	Paddy	Mediu m to low	Normal

Variety	No. of farmers	Area (ha)	Yield of D	emonstration	n (q/ha	a)	Increase in Yield	Cost of a (Rs/ha)	ddl. cash
			Highest	Lowest	Avg.	Local	(%)	Demo.	Local
						Check			Check
Smruti	11	5	9.2	6.0	7.5	5.0	50	4500/-	3000/-
TMV-2	15	5	18.3	14.5	15.5	10.0	55	5270/-	3400/-

(D) Farming situation and results of demonstration on pulse crops:

Crop	Seas on	Sowing Date	Harvest ing Date	Situa tion	Soil type	Agro- climatic Zone	Previous crop pattern	Status of NPK	Rainfal 1 distribu tion
Moong Variety Nayaga rh local	Rabi 2005 - 2006	28.1.06 to 31.2.06	6.04.06 to 14.04.06	Mediu m to low land.	Sandy loam to clay loam	East and SE coastal plane zone.	Kharif paddy only.	Mediu m to low	Normal

Variety	No. of	Area	Yield of Do	emonstration	n (q/ha)		Increase	Cost of a	dditional
	farmers	(ha)					in Yield	cash (R	s/ha)
			Highest	Lowest	Avg.	Local	(%)	Demo.	Local
						Check			Check
Nayaga rh local	15	5	8.7	5.3	7.5	4.8	56.25%	2344/-	1500/-

(E) Analytical review of component demn. (Cropwise separate table required):

(1) Groundnut (Kharif 2005):

	Farming	Average	Local check	Percentage increase in
Component	situation	yield	yield	Productivity over Local
				yield
1. Seed Variety "Smruti"	High &	7.5 q/ha	5.0 q/ha	50 %
2. Plant Protection (Bavistin & Chloropyriphos)	Medium land			

(2) Groundnut (Rabi 2005 - 2006):

Component	Farming situation	Average yield	Local check yield	Percentage increase in Productivity over Local yield
Seed Variety "TMV-2" Plant Protection (Bavistin & Chloropyriphos)	High & Medium land	15.5q/ha	10.0q/ha	55%

(3) Greengram (Rabi 2005 - 2006):

Component	Farming situation	Average yield	Local check yield	Percentage increase in Productivity over Local yield
 Rhizobium culture. Fertilizer Management. Plant Protection (Bavistin & Chloropyriphos). 	Medium to low land.	7.50q/ha	4.80q/ha	56.25%

(F) Technical Feedback:

- 1. Smruti variety of Groundnut was found to be a good substitute to paddy in rain fed up land during kharif season.
- 2. Groundnut could be successfully cultivated in Rabi season with little management and protection against white ants and tikka diseases.
- 3. Cultivation of Greengram with rhizobium culture, SSP application and spraying against pod borer increased the productivity by 56 percent over local check..

(G) Farmer's reaction:

- 1. Performance of groundnut varieties *Smruti* and *TMV-2* were appreciated by the farmers.
- 2. Farmers realized that seed treatment and control against white ants in Groundnut help increase the yield.
- 3. Farmers appreciated the increase in yield of locally preferred greengram variety *Nayagarh local* by treatment with rhizobium culture, application of SSP and spraying against pod borer.

(H) Extension and Training activities:

Field	Days organized	Farmers' Training			
Date	Number of Participants	Date	Number of Participants		
04.11.2005	40	Nil	Nil		
25.03.2006	40	Nil	Nil		
29.03.2006	30	Nil	Nil		

(I) Result of FLDs Other than Oilseed and Pulse Crops $\,$ (Year 2005-2006):

	1	1 .		(1) /	NI C	<u> </u>		
Constant / Fortenessins	G	Area		(ha) /	No of	farme	rs /	D 1
Crop / Enterprise	Season	(ha)/ Unit	Units		Demonst	ration.		Remarks
		Unit	Dron	Actu	SC/ST	Other	Tot	
			Prop osed	al	SC/S1	Other	al	
1. Med. Duration rice for rain	Kharif	2.80	2.80	2.80	2	8	10	Var. <i>Pratikshya</i> Yielded
fed upland.	2005.	2.00	2.60	2.60	2	8	10	10% extra over local
red upland.	2003.							check.
2. IPM in rice	Kharif	2.80	2.80	2.80	_	10	10	Demn.plot yielded 26%
2. If We he rice	2005	2.00	2.00	2.00		10	10	more than local.
3. Paira cropping of field pea	Rabi	1.00	1.00	1.00	3	7	10	Av.yield of field pea
in up land rice.	05- 06	1.00	1.00	1.00		,	10	was 6quintal/ha.
4. Growing wilt resistant	Rabi	0.50	0.50	0.50	_	10	10	BT-12 var.yielded 350
HYV tomato.	05- 06							quintal/ha.
5. Cultivation of tissue	Kharif	50	50	50	2	3	5	Average yield per plant
culture banana.	2005.	plant						was 52.5 kg.
6. Introduction of Elephant	Kharif	100k	10	10	7	3	10	Average weight of yam
foot yam var. Gajendra.	2005.	g						was 3.5 kg per plant.
		tuber						
7. Introduction of Ginger var.	Kharif	0.053	5	5	2	3	5	Av.yield from demn.
suprava.	2005.							plot was 756q/ha.
8. Introduction of capsicum.	Rabi	0.03	10	10	2	8	10	Av.yield from demn.
	05- 06							plot was 196 q/ha.
9. Biological control of	Kharif	10.00	10	25	4	21	25	Av. 102 q/ha extra
Sugarcane borer.	2005.							yield obtained from
					_			Demn.plot over local.
10. Composite Fish Culture.	Kharif	10.00	10	10	3	7	10	Av.wt. of fish from
	2005.					-		Demn.pond was 855g.
11. Integrated Fish Farming.	Kharif	6.00	10	10	2	8	10	Good growth of fish &
10.0	2005.	10	10	10		10	1.0	Banana plantation.
12. Ornamental Fish Culture.	Kharif	10	10	10	-	10	10	Gopi, Mulli & PlatySpp
12 L . 1 .: CD	2005.	0	0	0	2		0	were successful.
13. Introduction of Bee	Kharif	8	8	8	2	6	8	Colony growth is
keeping.	2005.	0.40			2	2	5	satisfactory.
14. IPM in Brinjal.	Rabi 05-06	0.40	5	5	2	3	3	Av. yield from demn.
15. Microbial Control of	Rabi	0.20	10	10	2	8	10	plot was 248 q/ha. Av. yield from demn.
Brinjal F & S borer.	05- 06	0.20	10	10		0	10	plot was 223 q/ha.
16. Paddy straw mushroom	Kharif	50	10	10		10	10	Average yield per bed
cultivation.	2005	30	10	10	_	10	10	was 1.45kg.
17. Oyster mushroom	Rabi	50	10	10		10	10	Average yield per bed
cultivation.	05-06		10	10	_	10	10	was 1.70 kg.
Cultivation.	05 00		<u> </u>	<u> </u>				,, ab 1.70 Rg.

18. Development of	Kharif-	0.10	0.10	0.10	2	8	10	Average vegetable
Nutritional Garden.	Rabi							yield/year/unit was
	05-06							183kg.
19. Introduction of <i>Banaraja</i>	Rabi	10	10	10	10	-	10	Av.wt.of Chick in 16
Poultry.	05-06							weeks was 1.52kg.

(J) Farming situation and results of demonstration on other than oilseed and pulse crops.

Crop	Seaso	Sowing	Harves	Situa	Soil	Agro-	Previous	Status	Rainfall
	n	Date	ting Date	tion	type	climatic Zone	crop pattern	of NPK	distribut ion
Upland rice.	Kh- 2005	10.06.05 to 12.06.05	10.11.05 to 21.11 05	Upland	Sandy Loam to clay loam	East & SE Coastal Plane Zone	Rabi Pulses/ Rice	Low to medium	Normal
IPM in rice.	Kh- 2005	22.06.05 to 27.06.05	26.11.05 to 30.11.05	Medium & Low Land.	Sandy Loam to clay loam	East & SE Coastal Plane Zone	Rabi Pulses/ Rice	Low to medium	Normal
Paira cropping of fi eld pea	Rabi 2005- 06	23.11.05 to 28.11.05	29.01.06 to 27.02.06	Med.& Low Land.	Clay loam	East & SE Coastal Plane Zone	Kharif Paddy	Low to medium	Normal
Wilt Res. HYV tomato.	Rabi 2005- 06	12.12.05 to 16.12.05	07.03.06 to 15.03.06	Upland	Sandy Loam	East & SE Coastal Plane Zone	Paddy	Medium to High	Normal
Tissue culture banana.	Kh- 2005.	05.07.05 to 11.07.05	17.03.06 to 23.03.06	Kitchen Garden	Loamy to Clay loam	East & SE Coastal Plane Zone	Vegetable s/ Fallow	Medium to High	Normal
Elephant foot yam.	Kh- 2005.	10.05.05 to 18.05.05	23.12.05 to 28.12.05	Kitchen Garden	Clay loam	East & SE Coastal Plane Zone	Fallow	Medium to High	Normal
Ginger var. suprava	Kh- 2005.	12.06.05 to 17.06.05	02.02.06 to 06.02.06	Upland	Loamy	East & SE Coastal Plane Zone	Colocacia	Medium to High	Normal
Capsicum.	Rabi 05-06	05.01.06 to 8.1.06	22.02.06 to 13.3.06	Upland	Sandy Loam	East & SE Coastal Plane Zone	Vegetable	Medium to High	Normal
Control of S.Cane borer.	Kh- 2005.	12.02.05 to 18.02.05	22.11.05 to 30.11.05	Up /Med ium land	Sandy Loam	East & SE Coastal Plane Zone	Sugar cane	Medium to High	Normal
Composite Fish Culture	Kh- 2005.	29.08.05 to 03.09.05	24.04.06 to 07.05.06	Pond	Sub- merged	East & SE Coastal Plane Zone	Local Fishes	Low	Normal
Integrated Fish Farming	Kh- 2005.	26.08.05 to 30.08.05	05.05.06 to 18.05.06	Pond	Sub- merged	East & SE Coastal Plane Zone	Only Fish	Low	Normal

Ornamental Fish Culture	Kh- 2005.	24.12.05 to 30.12.05	Conti nuing.	Court yard	-	East & SE Coastal Plane Zone	Nil	-	Normal
Bee Keeping	Rabi 05- 06	30.12.05 to 03.01.06	Continu ing.	Court yard	Sandy Loam to Clayey	East & SE Coastal Plane Zone	Unused space	-	Normal
IPM in Brinjal.	Rabi 05-06	28.11.05 to 30.11.05	23.02.06 to 17.03.06	Upland	Sandy Loam	East & SE Coastal Plane Zone	Seasonal Vegetable	Medium to low	Normal
Microbial Control of Brinjal F & S borer.	Rabi 05- 06	22.11.05 to 30.11.05	02.02.06 to 23.03.06	Upland	Sandy Loam	East & SE Coastal Plane Zone	vege tables	Medium to low	Normal
Paddy straw mushroom cultivation.	Kh- 2005	16.07.05 to 20.07.05	27.07.05 to 10.08.05	Home stead	Clayey	East & SE Coastal Plane Zone	Unused space	-	Normal
Oyster mush room cultivation.	Rabi 05-06	17.12.05 to 24.12.05	04.01.06 to 11.01.06	Home stead	Sandy Loam to Clayey	East & SE Coastal Plane Zone	Unused space	-	Normal
Nutritional Garden	Kh. & Rabi 05-06	15.06.05 to 13.03.06	23.07.05 to 10.05.06	Kitchen garden	Sandy Loam	East & SE Coastal Plane Zone	Fallow	Medium	Normal
Banaraja Poultry rearing	Rabi 05- 06	08.02.06	Conti nuing.	Back yard	-	East & SE Coastal Plane Zone	-	-	Normal

Variety	N o.	Area (ha)	Yield of Demo	nstration (q	Increase in Yield	Cost of additional cash (Rs/ha)			
	of far m ers	/Unit	Highest	Lowest	Avg.	Local Check	(%)	Demo.	Local Check
1	2	3	4	5	6	7	8	9	10
Midium land rice.	10	2.80	44.60	40.25	42.40	38.50	10.13	2335/-	1680/-
IPM in rice.	10	2.80	46.60	42.00	43.30	34.40	25.87	4015/-	2500/-
Paira cropping of field pea	10	1.00	7.5	4.8	6.0	-	-	1600/-	-
Wilt Res. HYV tomato.	10	0.50	285.0	197.0	214.4	162.0	32.35	8700/-	6350/-
Tissue	5	50 plant	485.6	403.0	445.0	360.0	23.61	6000/-	4500/-

			1						
Culture banana.									
Elephant foot	10	100kg	266	193	243	-	-	1500/-	-
yam.		tuber							
Ginger var.	5	0.053	135.0	116.5	127.6	-	-	6800/-	-
suprava									
Capsicum.	10	0.03	188.0	163.0	186.0	-	-	4800/-	-
control of	25	10.00	134	109	122	102	19.60	5000/-	4000/-
S.Cane									
borer.									
Composite Fish	10	10.00	32.0	21.0	27.5	16.0	711.86	6600/-	2400/-
Culture									
Integrated Fish	10	6.00	43.5	38.5	40.0	18.0	122.2	8500/-	2500/-
Farming									
Ornamental	10	10	New install	New	-	-	-	2000/-	-
Fish Culture				install					
Bee	8	8	New install	New	-	-	-	1500/-	-
Keeping				install					
IPM in Brinjal.	5	0.40	287.0	235.0	248.0	174.0	42.53	5250/-	4300/-
Micro	10	0.20	280.0	195.0	223.0	170.0	31.18	4700/-	3600/-
bial Control of									
Brinjal F & S									
borer.									
Paddy straw		50 beds	1.7	1.3	1.4	-	-	1250/-	-
mush	10								
room cultivn.									
Oyster mush		100	1.9	1.4	1.6	-	-	1200/-	-
room cultivn.	10	bags							
Nutritional		0.10	315	265	283	134	111.2	2200/-	800/-
Garden	10								
Bana	10	10	Laying stage	Laying	-	60-80	-	120/-	-
raja Poultry			not reached.	stage not		eggs		year/he	
rearing				reached.		/year/h		n	
-						en			
•						/year/h			

Interpretation and critical analysis of the results obtained:

1.Medium duration	HYV Pratikshya yielded 10.13% extra over the existing popular variety Swarna
rice for rain fed med. land	masuri in rain fed med.land.Considering its grain quality and yield. The variety
	has become popular among the farmers of the district.
2. IPM in rice	Rice var.surendra having multiple resistances to insect pests with a single
	appln.of bio-pesticides against leaf folder, at the flag leaf stage contributed 26%
	higher yield over the local check in rain fed situation.
3. Paira cropping of field pea in	Farmers are convinced that pea is better & more remunerative substitute of
up land rice.	moong and urad as paira crop. However, to have better germination and good
	plant stand,pea seed should be sown one day after draining out of water from
	the yield.
4 Growing wilt resistant HYV	The yield performance of BT-12 tomato was highly satisfactory with increase of
tomato	32% yield over the local check. The variety had no wilt incidence as against
	about 6-9% in local varieties. However, the quality of fruit does not fetch good

	market price because of thin skin and low keeping quality.
5Cultivation of tissue culture	The banana varieties Robusta and D.C were introduced for the first time by
banana.	KVK. The varieties shown excellent performance (Av.yield of 52.5 kg/plant)
	without any disease & pest incidence and were well accepted by the farmers.
	There is increased demand for more tissue culture banana plants from the
	farming community. However, local people do not prefer the green skin colour
	of these bananas.
6. Introduction of Elephant foot	Elephant foot yam Vr. Gajendra gained popularity in tribal areas of the district.
yam var. Gajendra	Farmers accept this new crop because of this palatability, low cost of cultivation
	and high return.
7. Introduction of Ginger var.	Cultivation of Ginger was introduced for the first time by KVK. The
Suprava	performance of varity suprava was quite encouraging with an average yield of
	116.5 q/ha. Due to more return in comparision to other local upland crops,
	farmers showed much interest in growing Ginger, Which has adaptability to
	local agro climatic situation.
8. Introduction of capsicum	Introduced successfully by KVK, the crop gained wide acceptance among the
	local farmers. With an average yield of 186q/ha. The fruit had good market
	demand with a remunerative price, which encouraged the farmers for its
	cultivation.
9. Biological control of	Sugarcane grower were made aware of the biological control of sugarcane
Sugarcane borer.	internode borers by using the egg parasites <i>T.chilonis</i> . Release of this parasite
	@ 50,000 per ha. Six times, effectively controlled the borer with a record of less
	than 5% as against 12% in near-by areas and increased the cane yield by about
	20%.
10. Composite Fish Culture.	Growing of composite fish with Rohu, Catla and Mrigal gave more return of
	71.86% over the local practice. The fish morality was highly reduced due to
	scientific management practices as per guidance of KVK scientist, which
	encouraged the beneficiaries.
11. Integrated Fish Farming.	Growing fish along with Papaya & banana along the bond gave 122.2% more
	return to the farmers in comparision to growing fish alone. This has gained wide
	acceptance by the farmers.
12. Ornamental Fish Culture.	Growing livebearer ornamental fishes like Gopi, Platy and Mulli was found
	remunerative for the rural youth. They found it easy to manage & generate good
	income with less investment, time and labour.

13. Introduction of Bee keeping	Newly introduced bee-keeping practice was found very much encouraging for
	the rural youth. They have showed lot of interest in knowing the technique. The
	bee colonies are growing up well & will take more time for establishment as
	well as generating income.
14. IPM in Brinjal.	Proper monitoring of borer incidence, setting pheromone traps, clipping of
	affected shoots & spraying of neem oil in Brinjal gave extra yield of 42.53%
	over the traditional practice of spraying chemical pesticides alone.
15. Microbial control of Tomato	Microbial Control of tomato fruit borer with spraying of NPV @ 250 i.e per ha.
fruit borer.	thrice at 15 days interval starting from appreciable insect damage gave an extra
	yield of 31.2% over the local practice of persistent insecticides spraying. This
	microbial control was found effective against fruit & shoot borer and can reduce
	the environmental pollution as well as health hazards.
16. Paddy straw mushroom	Rural women showed much interest in growing paddy straw mushroom and are
cultivation.	quite satisfied with its successful performance (1.3 to 1.7 kg/bed). Some women
	SHG groups have shown interest for its commercial cultivation.
17. Oyster mushroom	Women farmers showed a great deal of interest in growing dhingiri mushroom.
	They are highly convinced with its output (1.4 to 1.9 kg/bag). They are also
	convinced about the profit from Oyster mushroom cultivation but apprehend its
	local marketing.
18. Development of Nutritional Garden.	Ten Nutritional gardens developed by rural women in village Khedapada & Koska during 2005-06, under the guidance of KVK, could able to supply an average of 283 kg of fresh seasonal vegetables/ year to the farm families as against 134 kg from the local check. The fruit tree saplings of mango, guava & papaya grown in the nutritional gardens are yet to contribute to family nutrition.
19.Introduction of <i>Banaraja</i>	The Banaraja breed of poultry introduced for the first time in a tribal village
Poultry	developed much interest & curiosity among people. The birds are growing well under the supervision of KVK scientists and the performance is yet to be
	judged.

15. On-farm Testing

(i) Subject: Agronomy

- a. Title of the experiment: Medium duration scented rice cultivation.
- b. Problem: Low return from existing scented rice.
- c. Hypothesis: Promising traditional rice varieties of other area may give higher return.

d. Experiment year: I

e. Plot size: 0.01 ha

f. No.of farmers/replication: 5

g. Date of sowing: 15.07.05

h. Date of Harvesting: 27.11.05

i. Results with captions:

Treatment		Replication								
	1	2	3	4	5	results				
T ₁ = Badsahabhog	19.8	18.7	20.2	21.3	19.5	19.90				
T ₂ =Lilabati	18.6	17.6	18.7	19.5	18.8	18.64				
T ₃ =Dubaraj	19.2	18.5	19.3	18.7	19.1	18.96				
T ₄ =Acharamati	18.3	18.4	17.9	18.2	17.7	18.10				
T ₅ =Local check	17.5	16.6	17.8	18.0	16.2	17.22				

Interpretation and critical analysis of the results obtained: The test varieties yielded more than 18q/ha as against 17.2q/ha in local check. However, the traditional scented rice, Badsahabhog and Dubaraj performed better in Nayagarh district and yielded about 15% extra over the local check. These two varieties may be recommended for cultivation in the district.

(B)

- a. Title of the experiment: Weed control in Groundnut.
- b. Problem: Weed growth at an early stage of the crop leads to very low yield of up land rice
- c. Hypothesis: Use of chemical weedicide may effectively check the weed growth and increase the yield of groundnut.

d. Experiment year - I

e. Plot size:100 square meter

f. No.of farmers/replication:

g. Date of sowing: 23.06.05

h. Date of Harvesting: 30.10.05

Weed count (No./m2) of groundnut in Defferent treatments

Treatment					Replica	ition					Mean
	1	2	3	4	5	6	7	8	9	10	of
											results
T_1 = Farmer's practice	13	18.0	14.0	22.0	16.0	19.0	18.0	20.0	18.0	17.0	17.5
T_2 = F.P. + Pre emergence application of	7	10.0	8.0	10.0	6.0	11.0	9.0	5.0	7.0	13.0	8.6
Oxyflurofen @ 0.4kg a.i./ha.											
T ₃ = Pre emergence appln. of weedicide	9	12	10.0	11.0	8.0	14.0	12.0	8.0	10.0	14.0	10.8
alone.											
T ₄ = Line sowing + Weedicide	12	13	11.0	12.0	9.0	16.0	14.0	12.0	13.0	16.0	12.8
application.											

Effect of treatments on yield (q/ha) of Groundnut during Kharif, 2005

Effect of trea		on yre	14 (9/11	<i>u</i>) 01 01	Ounanc	at auri		, – 00			
Treatment		Replication									Mean
	1	2	3	4	5	6	7	8	9	10	of
											results
T_1 = Farmer's practice	2.1	1.75	1.8	1.9	1.8	2.0	1.9	1.9	1.7	1.9	1.88
T_2 = F.P. + Pre emergence application of	2.6	2.8	3.2	2.3	3.0	3.1	2.7	2.8	3.0	2.8	2.85
Oxyflurofen @ 0.4kg a.i./ha.											
T_3 = Pre emergence appln. of weedicide	2.48	2.75	3.1	2.6	2.9	2.7	2.7	2.6	2.6	2.7	2.71
alone.											
T ₄ = Line sowing + Weedicide	2.45	2.65	2.8	2.3	2.8	2.6	2.6	2.4	2.4	2.4	2.54
application.											

<u>Interpretation and critical analysis of the results obtained</u>: Pre-emergence application_of Oxyflurofen @ 100g/ac along with farmer's practice was the best treatment with low weed plants and high yield. This was followed by pre-emergence application of Oxyflurofen alone.

(C) a. Title of the experiment: Phosphorous management in moong.

b. Problem: No use of fertilizer.

c. Hypothesis: Use of PSB may supplement Phosphorous to moong crop.

d. Experiment year – I

e. Plot size: 400 square meterf. No.of farmers/replication: 5g. Date of sowing: 15.12.05

h. Date of Harvesting: 13.03.06

i. Results with captions: Effects of treatments on yield of Moong (q/ha) during Rabi 2005-2006.

Treatment		Replication									
	1	results									
T ₁ =Farmer's Practice (No Fertiliser)	4.8	3.8	4.6	5.0	4.1	4.46					
T ₂ =Use of PSB	5.5	6.0	4.8	6.5	5.0	5.56					
T ₃ =PSB + SSP (50%)	6.8	7.2	6.7	7.4	6.5	6.92					
T ₄ =SSP alone	5.1	4.8	3.9	5.3	4.2	4.66					

Interpretation and critical analysis of the results obtained: Treatment with PSB and SSP (50%) gave the highest yield in Rabi moong (6.92 q/ha) followed by the use of PSB alone (5.56 q/ha). Sole application of SSP gave a yield of 4.66q/ha. Due to slow release of Phosphorus. It is recommended to the farmers of Nayagarh district to go for the use of PSB along with SSP in moong for higher return.

(ii) Subject: Plant Protection.

A) a. Title of the experiment: Fruit and shoot borer in brinjal.

b. Problem: Low yields due to fruit & shoot borer damage.

c Hypothesis: Timely management can appreciably reduce avoidable loss in brinjal.

d. Experiment year – I

e. Plot size: 100 square meterf. No.of farmers/replication: 5g. Date of sowing: 26.07.05h. Date of Harvesting: 11.11.05

i. Results with captions:

Yield of Brinjal (q/ha) from diff. Treatment during Kharif 2005.

Treatment	UIII UIII.				J.	Mannaf
Treatment]	Replication	1		Mean of
	1	2	3	4	5	results
T _I = Farmer's Practice	102	138	127	115	122	120.8
T ₂ = Need based appln.of	197	243	231	229	240	228.0
Triazophos/Thiodicarb alternating with						
Cartap hydrochloride @ 0.25kg a.i./ha.						
T ₃ =Appln.of neem cake @ 0.5q/ac. +	161	147	154	166	150	115.6
Spraying of neem pesticide @ 3ml/l. of						
water at weekly interval.						
T ₄ =Hand removal of affected shoot &	198	205	178	162	193	187.2
fruits + spraying of neem pesticides @						
3ml/l.of water + Need based spray of						
Thiodicarb @ 0.075kg a.i./ha.						

Interpretation and critical analysis of the results obtained: The best control_against Brinjal fruit & shoot borer was obtained from Treatment No.2 i.e need based application of Triazophos/Thiodicarb alternating with Cartap Hydrochloride @ 0.25 kg a.i. per ha. However, the second best treatment i.e hand removal of affected shoot & fruits + spraying of neem pesticides @ 3ml/l. of water + Need based spray of Triazophos @ 0.5 kg a.i./ha may be recommended from the point of view of environmental safety.

a. Title of the experiment: Control of Diamond back moth in cauliflower.

b. Problem: The most serious insect pest which threatens cole crop cultivation in the locality

c. Hypothesis: Without effective chemical control of Diamond Back Moth commercial Cultivation of cauliflower is not possible.

d. Experiment year – II

e. Plot size: 100 sq. meter

f. No.of farmers/replication: 5

g. Date of sowing: 1.10.05

h. Date of Harvesting: 25.12.05

i. Results with captions:

Effect of insecticide spray on larval population (No./Leaf) of DBM

Treatment]	Replication	1		Mean of
	1	2	3	4	5	results
T ₁ = Farmer's Practice (Spraying of	10.6	9.2	7/8	8/4	11.3	9.46
Endosulfan & monocrotophos)						
T ₂ =Spraying of Fipronil (Regent) 5%	2.1	2.4	0.8	1.3	1.2	1.56
SC 1.0ml/l.of water.						
T ₃ =Spraying Profenofos +	0.6	1.0	0.5	0.8	0.4	0.66
Cypermethrin (Rocket) 44% @ 2ml/l.of						
water						
T ₄ =Spraying Cartap Hydrochloride	3.2	2.8	2.1	2.6	1.7	2.4
(Cartriz) 50 SP @ 1.5g./l.of water						
alternatively with Bacillus thuringiensis						
(Halt) @ 1g./l.of water.						

Effect of insecticide spraying on yield of Cauliflower (q/ha)

Treatment]		Mean of		
	1	2	3	4	5	results
T ₁ = Farmer's Practice (Spraying of	180	254	218	190	205	209.4
Endosulfan & monocrotophos)						
T ₂ =Spraying of Fipronil (Regent) 5%	280	310	298	288	302	293.6
SC 1.0ml/l.of water.						
T ₃ =Spraying Profenofos +	318	320	306	396	308	329.6
Cypermethrin (Rocket) 44% @ 2ml/l.of						

water						
T ₄ =Spraying Cartap Hydrochloride	300	298	304	292	303	299.4
(Cartriz) 50 SP @ 1.5g./l.of water						
alternatively with Bacillus thuringiensis						
(Halt) @ 1g./l.of water.						

Interpretation and critical analysis of the results obtained: Newly tested compound have markedly lowered the larval population compared to that of farmer's practice and increased the yield. Among the tested insecticides, Profenofos + Cypermethrin lowered the larval population distinctly and remained at par with acetamiprid. Highest yield increase of 57% was recorded from this treatment over farmer's practice. Farmers were highly satisfied with the performance of Profenofos + Cypermethrin in controlling the DBM, but expressed their doubt its long-term use.

(iii) Subject: Horticulture

- a. Title of the experiment: Effect of micronutrient on cauliflower.
- b. Problem: The browning of curd reduces the market value.
- c. Hypothesis: Application of micronutrients will prevent development of brown spots and rotting of stem.
- d. Experiment year II
- e. Plot size: 100 sq.meter
- f. No.of farmers/replication: 5
- g. Date of sowing: 3.10.05
- h. Date of Harvesting: 28.12.05

i. Result with captions:

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

Treatment]	Replication	n		Mean of
	1	2	3	4	5	results
T ₁ =Farmer's Practice (No use of	18.7	16.8	20.2	21.3	18.8	19.16
Micronutrient)						
T ₂ =Boron @ 2.5g./l.of water.	1.8	3.2	2.4	1.7	3.5	2.52
T ₃ =Magnesium Sulphate @ 2.5g/I.of	16.4	17.6	18.6	20.4	17.2	18.04
water						
T ₄ =Plantaid (Combination of	2.6	3.6	2.8	4.2	3.7	3.38
micronutrients) @ 3ml./l.of water.						

Effect of micronutrient on formation of hollow stem in cauliflower (%)

Treatment]		Mean of		
	1	2	3	4	5	results
T ₁ =Farmer's Practice (No use of	23.6	22.8	25.6	27.2	23.2	24.48
Micronutrient)						
T ₂ =Boron @ 2.5g./l.of water.	5.7	4.6	2.7	7.3	3.1	4.68
T ₃ =Magnesium Sulphate @ 2.5g/I.of	20.3	18.7	22.6	26.8	21.5	21.98
water						
T ₄ =Plantaid (Combination of	6.8	7.2	8.6	9.1	5.8	7.5
micronutrients) @ 3ml./l.of water.						

Effect of micronutrient on Yield of cauliflower (q/ha)

Treatment]	Replication	1		Mean of
	1	2	3	4	5	results
T ₁ =Farmer's Practice (No use of	257	275	305	280	260	273.4
Micronutrient)						
T ₂ =Boron @ 2.5g./l.of water.	310	318	325	315	320	317.6
T ₃ =Magnesium Sulphate @ 2.5g/I.of	255	295	298	301	288	287.4
water						
T ₄ =Plantaid (Combination of	290	310	278	302	312	298.4
micronutrients) @ 3ml./l.of water.						

Interpretation and critical analysis of the results obtained: Application of micronutrient significantly improved the quality of curd. Spraying of Boron and Plaintaid (Combination of micronutrient) markedly reduce the intensity of browing of C.flower and formation of hollow stem as compared to the farmer's practice resulting in significant increase in yield. Farmers are highly convinced with quality improvement of C. flower by application of Boron and greater market acceptanceof such curds.

(iv) Subject: Women in Agriculture.

a. Title of the experiment: Performance of different strains of Oyster mushroom.

b. Problem: Lack of information on suitable strain of Oyster mushroom.

c. Hypothesis: Use of suitable strain will enhance yield of mushroom.

d. Experiment year – I

e. Plot size: 5 bags per strain

f. No.of farmers/replication: 5

g. Date of sowing: 30.11.05

h. Date of Harvesting: 19 – 28.12.05

i. Results with captions:

Treatment		Replication				
	1	2	3	4	5	results
T ₁ =Pleurotus sajarcaju	1.34	1.63	1.55	1.47	1.70	1.54
T ₂ = Pleurotus florida	1.55	1.40	1.62	1.44	1.25	1.45
T ₃ = Pleurotus eous	1.26	1.44	1.05	1.33	1.58	1.33
T ₄ = Pleurotus citrinopeletus	1.15	1.25	1.45	1.06	1.35	1.25

Interpretation and critical analysis of the results obtained: Among the four different strains of Dhingiri mushrooms tested, the average yield obtained from *P.Sajarcaju* was the highest (1.54kg/bag). The average yield of *P.florida* (1.54kg/bag) was at par with that of *P.Sajarcaju.However*, *Pleurotus citrinopeletus* recorded the lowest yield of 1.25kg/bag and hence, was not found profitable for the farmers.

i) Subject: Fishery.

a. Title of the experiment: Fresh water prawn (Scampi) cultivation.

b. Problem: Low return from existing fish culture.

c. Hypothesis: Fresh water prawn *Scampi* will give more return.

d. Experiment year – I

e. Plot size: 0.4 ha.

f. No.of farmers/replication: 5g. Date of sowing: 05.09.05

h. Date of Harvesting: 27.04.06

i. Results with captions:

Treatment]		Mean of		
	1	2	3	4	5	results
T ₁ = Indian Major Carps (Local	14	17	18	12	16	13.2
Check)						
T ₂ = IMC and Exotic Carps	29	25	26	23	27	26.0
T ₃ = IMC + Exotic Carps + <i>Scampi</i>	38	32	42	35	40	37.4
T ₄ = IMC + Mixed Prawn	24	19	23	21	17	20.8

Interpretation and critical analysis of the results obtained: a combination of different varieties of indigenous and exotic carps along with fresh water prawn Scampi recorded highest harvest of 37.4 q/ha of fishes as against the sole culture of indigeneous craps(13.2q/ha) only. Due to high preference and good price of the prawn in local market, the farmers could get highest profit from this combination. Farmers are greatly convinced to grow Scampi with indigenous and exotic craps.

16. Literature developed / Published (give details)

a. Research papers: Nilb. Technical Reports: Nilc. Technical bulletins: Nil

d. Popular articles: 3 Nos. appeared in the Oriya Daily *The Dharitri*.

1. Agua Chasira Jia Chasha.(On Vermiculture)

2. Pesiposana Kadali Chasha.(On Tissue Culture Banana Cultivation)

3. Contract Farming. (On Contractual farming).

e. Extension Literature: Nil

17. Success Story/Case Study if any (Two-three pages write-up with suitable photographs)

Hariharpur is a village of 500 farm families near one of the KVK adopted villages Godipalli has good name and frame for seasonal vegetables cultivation. The villagers had little interest in pisciculture even though five good sizable ponds existed in the village. Lack of interest was mainly because of recurring losses encountered by them due to traditional way of fish cultivation. Looking at the immense potentiality for profitable pisciculture, KVK, Navagarh motivated a group of youth of that village, A farmers' Club was organized in that village with the sponorship of NABARD and KVK scientists imparted training to them on Composite and Integrated Fish farming. Club members were persuaded to initiate fish farming in all the five ponds under guidance of KVK scientists. The fish fry provided by KVK as critical input FLD programme was released during August 2005. The club members were given proper guidance at every step and the Trg.Assoc. (Fishery) closely monitored all activities from time. With all advanced scientific mananement practices, the fingerlings could grow to a size of 600 to 750g. by the end of March 2006 as against 200 to 300g size of fish they used to get earlier. Further, the fish fry mortality could be reduced significantly resulting optimum fish density in the ponds. The demonstration site was visited by the hon'ble Vice-Chancellor of) O.U.A.T., Asst.General Manager, NABARD and the District Lead Bank Manager, Nayagarh. The success was observed through netting. Mean while, from a single catch, the club members recovered their entire cost. From the remaining ponds, they expected to get a minimum profit of Rs.1,00, 000/- in two to three catches. The club members are now highly encouraged and showed their obligation to KVK, Nayagarh for their successful guidance and have promised to carryout this commercial cultivation of fish every year in a more scientific way under the guidance of KVK.

18. Constraints:

- a. Administrative: The KVK Admn. Building and Farmers Hostel need to be completed early.
- b. Technical: Lack of demonstration units in the campus, permanent source of irrigation and fencing of land is the major constraints, Audio-visual like OHP, slide projector, Amplifier, TV and CD player could improve the equipments trainees.
- c. Financial: Provisions under T.A for the financial year 2005-06 was limited which restricted the movement of scientists. More over, grant under Office Expences is also quite inadequate to catre the need of vehicle mobility and to meet the regular office expenses.

19. Functional Linkage with different Organizations

Sl.	Name of the organization	Nature of linkage
No		
1	District Agril. Officer, Nayagarh.	Training, conducting FLD and OFT.
2	Horticulturist, Nayagarh	Training, conducting FLD and OFT.
3	FASCIMILE, Orissa, NGO, Nayagarh	Contact SHGs for training & demonstration
4	Collecter & PD, DRDA, Nayagarh.	Campus development & drinking water provision
5	Zilla Parisad Office, Nayagarh	Participation in Block Development Programmes.
6	NABARD Office, Nayagarh.	SHG training, financial assistance to KVK trainees.
7	Lead Bank Officer, Nayagarh	Financial assistance to KVK trained SHGs & Youths.

20. Performance of demonstration units (other than crops)

Sl.	Demonstration Unit	Total	Cost of	Gross income	Net income
No		production	Inputs(Rs)	(Rs)	(Rs).
1	Ornamental Fish Hatchery.	500 fish fry	150.00	500.00	350.00
2	Honey beehives.	5 nos.	Newly	Not generated.	Not generated
			Installed		

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

Sl.	Crop	Area	Variety	Date of	Date of	Total	Cost of	Gross	Remarks
No		Covered		sowing	harvesting	production	inputs	income	
		(ha)				(please	(Rs)	(Rs)	
						specify			
						the unit of			
						yield)/Nos			
1	Seasanum	1.5	Nirmala	13.07.05	16.10.05	3.9qtl.	6,901	7.020	-
2	Seedlings	0.01	HYV	21.10.05	25.12.05	25,000plant	2,500	9,600	-
	of tomato								
	Brinjal,								
	capsicum								
	and								
	cauliflower.								

22. Utilization of Hostel facilities

Accommodation available (No of beds): Hostel not yet constructed.

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

- 1. Group motivation through training and demonstration.
- 2. Persuasion through local Banks for financial assistance to KVK trainees.

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

No such noteworthy indigenous technology practiced by the farmers in KVK operational area.

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

- Identification of courses for farmers/farm women: Based on feed back information discussion & exploiting secondary sources.
- Rural Youth: Based on group discussion with rural youth club members.
- In-service Personnel: Based on discussion with district level officer of line departments.

26. Any other special programme undertaken by the KVK which has been financed by state Govt. /Other Agencies: No such Programme under taken by KVK, Nayagarh.

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

		Seed	seedling	Sapling
Crop	Variety	production	production	Production
		(quintals)	(No)	(No)
		(grain crops)	(vegetable crops)	(Fruit trees, forest and
				others
1 Seasanum	Nirmala	3.9 quintals	-	-
		(Non-seed)		
2 Brinjal	Utkala	-	6,000	-
	keshri			
3. Tomato	BT-12	-	12,000	-
4. Cauliflower	Snowball	-	5,000	-
5. Capsicum	Sungold	-	4,000	-

NB: In case of Vegetables, If seed is produced, it may be given in Kg or quintals.

28. Scientific Advisory Meeting(s) (SAC): Please indicate the date(s) of meetings(s):

S1.	Date of SAC	Salient Recommendation	Action taken	
No.				Remar
				ks
1.	15.07.05	(1) To create awareness among farmers to adopt	Adopted one village	
		organic farming.	named Koska for this.	
		(2) Encouragement of the use of <i>Trichogramma</i>	Taken up under the	
		chilonis bio control agent of sugarcane borers.	FLD programme.	
		(3) Introduction of neem based produt in pest	Introduced in OFT for	
		control through O.F.T	Brinjal F&S borer.	
		(4) Popularisation of Dhingiri & Paddy straw	Taken of since last	
		mushroom cultivation as a self-employment	year.	
		enterprise.	Started subscribing	
		(5) To subscribe imp-journals to up-date the	the journals.	
		knowledge of the working scientists.	Included in the action	
		(6) Encourage Sulphur application in Oilseed crops	plan.	
		particularly mustard to increase its quality.	Taken of FLD on	
		(7) Introduction of tuber crops like elephant foot	Elephant foot yam &	
		yam, sweet potato and yam in suitable areas.	yam	
		(8) Popularisation of tissue culture banana in this	Taken up in the FLD	
		district.	Taken under OFT.	
		(9) Introduction of fresh water prawn Scampi	Searching for suitable	
		cultivation.	land farmer to start.	
		(10) To take suitable silvi-horticulture system of	Take up under FLD	
		cropping in the hilly & undulating areas of the	on Oilseed & pulse	
		district	prog.	
		(11) To popularize Arhar cultivation in this locality	Taken up in FLD	
		to boost up pulse production.	prog.	
		(12) Encouragement of apiculture in this district.	Included in Action	
		(13) To impart training for preparation of	Plan Liasoning with	
		vermicompost.	diff. NGOs for this	
		(14) Faciliating marketing of locally prepared value	purpose.	
		added products.		

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

villages: Training Programmes were conducted since one year. Impact assessment not done.

Sl.	Name of the specific technical	No. of trainees	%of	Change in income	
No	skill transferred		adoption	In (Rs.)	
				before	After

30. Field activities

i. Number of villages adopted: 5

ii. Number of farm families selected: 93

iii. Number of Survey/PRA conducted: 2

31. Other Extension Activities

Activities	Date	No. of beneficiaries (Farmers/Rural youth)		aries	No. of Extension Functionaries			
		Male	Female	Tot al	Male	Female	Total	
Field Days								
1.Planning & Mgt. of Kitchen Garden.	03.12.05	0	50	50	0	0	0	
2.Kharif Groundnut Cultivn.	04.11.05	18	22	40	7	-	7	
3. Rabi Groundnut Cultivn.	25.03.06	35	05	40	6	-	46	
4. Scintiofic moong cultivn.	29.03.06	30	0	30	5	-	5	
Kisan Mela								
1.Exhibition on KVK Activities & interaction	23.03.06	47	03	50	11	-	11	
Film Show		Nil		-			•	
Radio Talk (Give Topic)		Nil						
TV Show (Give Topic)		Nil						
News Paper Coverage (Give								
Topic)								

- 1. First Scientific Advisory Committee meeting of KVK, Nayagarh held.
- 2. Celebration of World food day by KVK, Nayagarh.
- 3. Celebration of Woman in Agriculture Day at KVK campus.
- 4. Kissan Mela & opened a Stall in the district Level Exhibition-cum-Cultural Ceremony

Any Other

- 1. KVK, Nayagarh participated in the District Agriculture Exhibition by giving its stall.
- 2 KVK participated & opened a stall in the District Level Exhibition-cum-Cultural Ceremony

32. Utilization of KVK funds during the year 2004-05

Item	Sanctioned	Released	Expenditure
	(In lakh Rs.)	(In lakh Rs.)	(In lakh Rs.)
Pay& allowances	18.000	15.609	15.609
Recurring contingencies	4.422	4.422	4.422
Non-Recurring contingencies	0.60	0.60	0.60
Total	23.022	20.631	20.631

33. Utilization of funds under FLD on Oilseed/Pulse:

Sl. No	Item	Sanctioned by ZC (Rs.)		Released by Institute (Rs.)		Expenditure up to 31-03-2006 (Rs.)		Unspent Balance (Rs.) as on
		Kharif	Rabi	Kharif	Rabi	Kharif	Rabi	01-04-2006
A. C	ilseed (Grou	ındnut) :		1	1	1	1	
1.	Critical inputs	12,250.00	12,250.00	12,250.00	12,250.00	12,250.00	12,250.00	Nil
2.	Extension activities	1,750.00	1,750.00	1,750.00	1,750.00	1,750.00	1,750.00	Nil
3.	TA/DA/POL	1,750.00	1,750.00	1,700.00	1,700.00	1,700.00	1,700.00	Nil
	Total A	15,750.00	15,750.00	15,700.00	15,700.00	15,700.00	15,700.00	Nil
B. F	Pulse (Green	gram):					•	
1.	Critical inputs	9,187.50	9,187.50	Nil	9,187.50	Nil	9,187.50	9187.50
2.	Extension activities	1,312.50	1,312.50	Nil	1,312.50	Nil	1,312.50	1312.50
3.	TA/DA/P OL	1,965.00	1,965.00	Nil	1,915.00	Nil	1,915.00	1965.00
	Total B	12,465.00	12,465.00	Nil	12,415.00	Nil	12,415.00	12,465.00

34. Status of Revolving Fund (in lakh) for 3 years:

Year			Expected Inco	me	Net balance in hand
	Sanctioned	Balance	Fixed Deposit	Farm income	As on 1 st April of each year
2005-2006	1,00,000.00	Nil	Nil	119.00	93,099.00

35. Please indicate information which has not been reflected above (write in detail): Weather report for the year 2005-06.

WEATHER DATA

District: Nayagarh Season:

Year: 2005-2006 Location of weather station: Nayagarh

Sl No.	Meteorological week	Rainfall	No. of	Any other like			Remarks
		(mm)	Rainy	Max.	Min.	Humidity	-
		, ,	Days	Temp.	Temp.		
1.	01.04.05 - 07.04.05	1.14	2	32.6	29.3	72.6	
2.	08.04.05 - 14.04.05	2.57	1	32	29.1	75.3	
3.	15.04.05 – 21.04.05	-	-	32.9	30.9	70.9	
4.	22.04.05 - 28.04.05	-	-	36	31	78.3	
5.	29.04.05 - 05.05.05	1	2	35.7	29.7	71.4	
6.	06.05.05 - 12.05.05	-	-	37	30.6	78.3	
7.	13.05.05 - 19.05.05	-	-	38.7	32.4	84.7	
8.	20.05.05 - 26.05.05	4.57	3	38.4	32.1	80.9	
9.	27.05.05 - 02.06.05	-	-	39	32.6	68.1	
10.	03.06.05 - 09.06.05	0.85	1	39.1	32.6	72.3	
11.	10.06.05 - 16.06.05	1.85	1	42	36.3	77.9	
12.	17.06.05 - 23.06.05	12.28	3	42.6	33.4	80.6	
13.	24.06.05 - 30.06.05	10.85	6	40.6	29.3	90.7	
14.	01.07.05 - 07.07.05	3.42	4	31.1	29.4	88.4	
15.	08.07.05 - 14.07.05	7.28	4	29.9	28.4	87.3	
16.	15.07.05 – 21.07.05	6.57	3	30.4	29.9	84.9	
17.	22.07.05 - 28.07.05	19.14	6	28.9	28	88.9	
18.	29.07.05 - 04.08.05	35.14	7	27.1	26.1	94	
19.	05.08.05 - 11.08.05	0.28	1	28.7	27.3	82.3	
20.	12.08.05 - 18.08.05	1.42	3	29.1	28.4	80.6	
21.	19.08.05 – 25.08.05	29.57	5	29.7	27.9	N.A.	
22.	26.08.05 - 01.09.05	4.57	5	30.6	29	N.A.	
23.	02.09.05 - 08.09.05	5.71	5	30.4	28.7	N.A.	
24.	09.09.05 - 15.09.05	58.42	5	30.4	28.6	N.A.	
25.	16.09.05 – 22.09.05	11.42	5	30.6	28.1	N.A.	
26.	23.09.05 – 29.09.05	.85	1	31.1	29.1	N.A.	
27.	30.09.05 - 06.10.05	2.85	4	28.1	25.3	N.A.	
28.	07.10.05 – 13.10.05	3.42	2	28	24.1	N.A.	
29.	14.10.05 – 20.10.05	4.57	4	25.4	22.4	N.A.	
30.	21.10.05 – 27.10.05	5.14	4	26	23.7	N.A.	
	28.10.05 – 03.11.05	3.28	1	25.3	21.4	N.A.	
32.		-	-	25.1	21	N.A.	
	11.11.05 – 17.11.05	-	-	25	22.3	N.A.	
34.	18.11.05 – 24.11.05	-	-	25.4	21.4	N.A.	
35.	25.11.05 – 01.12.05	-	-	23.3	17.4	N.A.	
36.		-	-	24.1	20.7	N.A.	
37.		-	-	23.6	19.7	N.A.	
38.		-	-	21.5	18.4	N.A.	
39.	23.12.05 – 29.12.05	-	-	22.2	16.9	N.A.	

40.	30.12.05 - 05.01.06	-	-	21.1	14.1	N.A.	
41.	06.01.06 - 12.01.06	-	ı	22	15	N.A.	
42.	13.01.06 - 19.01.06	-	ı	24.3	18.6	N.A.	
43.	20.01.06 - 26.01.06	-	1	23.4	20.4	N.A.	
44.	27.01.06 - 02.02.06	-	1	24.6	22.4	N.A.	
45.	03.02.06 - 09.02.06	-	1	24.1	21.6	N.A.	
46.	10.02.06 - 16.02.06	-	1	28.7	25.6	N.A.	
47.	17.02.06 – 23.03.06	-	-	34.0	28.4	N.A.	
48.	24.02.06 - 02.03.06	-	-	33.7	26.1	N.A.	
49.	03.03.06 - 09.03.06	2	3	33.4	19	N.A.	
50.	10.03.06 - 16.03.06	1.28	1	34.7	19.9	N.A.	
51.	17.03.06 – 23.03.06	-	-	36.1	20	N.A.	
52.	24.03.06 - 30.03.06	-	-	36.9	21.4	N.A.	
53.	31.03.06 - 06.04.06	-	ı			N.A.	
54.	07.04.06 - 13.04.06	-	ı			N.A.	
55.	14.04.06 - 20.04.06	1.57	1			N.A.	
56.	21.04.06 - 27.04.06	-	ı			N.A.	
57.	28.04.06 - 04.05.06	1.57	1			N.A.	
58.	05.05.06 - 11.05.06	-	-			N.A.	
59.	12.05.06 - 18.05.06	-	ı			N.A.	
60.	19.05.06 - 25.05.06	-	ı			N.A.	
61.	26.05.06 - 02.06.06	-	-			N.A.	

(Signature of Training Organiser)