

KRISHI VIGYAN KENDRA NAYAGARAH

Annual Report 2007-08 (01.10.2007 TO 30.09.2008)



***ORISSA UNIVERSITY OF AGRICULTURE AND TECHNOLOGY
BHUBANESWAR-751003***

PROFORMA FOR ANNUAL REPORT

(1-10-2007 to 30-09-2008)

1. GENERAL INFORMATION ABOUT THE KVK

1.1. Name and address of KVK with phone, fax and e-mail

KVK	Postal Address with Pin code	Telephone			E mail
		STD	Office	FAX	
Krishi Vigyan Kendra, Nayagarh, Orissa	At – Panipoila, P.O – Balugaon, Dist – Nayagarh, State – Orissa, Pin – 752070	0674	2904125	-	nayagarhkvk@yahoo.co.in nayagarhkvk@rediffmail.co

1.2 .Name and address of host organization with phone, fax and e-mail

Host Institute name	Postal Address with Pin code	Telephone			E mail
		STD	Office	FAX	
Orissa University of Agriculture & Technology	P.O. – Bhubaneswar, Dist – Khurda, State – Orissa, Pin – 751003	0674	2402677	2407780	ouatmain@hotmail.com

1.3. Name of the Programme Coordinator with phone & mobile No

Name	Telephone / Contact		
	Residence	Mobile	Email
Dr. Prasannajit Mishra	-	9437406114	-

1.4. Year of sanction: 29.05.2004 (F.NO.2-10/98 AE II, Dt29.05.04 of ICAR)

1.5. Staff Position (as on 25 .08. 2008)

Sl. No.	Sanctioned post	Name of the incumbent	Designation	Discipline	Pay Scale with present basic	Date of joining	Permanent /Temporary	Category (SC/ST/OBC/ Others)
1	Programme Coordinator	Dr. P. J. Mishra	Programme Coordinator	Agronomy	12,000-18,3000 13,680/-	01.07.07	Temporary	Gen
2	Subject Matter Specialist	Dr. G. Das	SMS	Horticulture	8,000-13,500 8,825/-	24.01.05	Temporary	Gen
3	Subject Matter Specialist	Mrs. G. Subudhi	SMS	Home Sc.	8,000-13,500 8,825/-	25.02.05	Temporary	Gen
4	Subject Matter Specialist	Mr. A. K. Swain	SMS	Fisheries	8,000-13,500 8,825/-	11.03.05	Temporary	Gen
5	Subject Matter Specialist	Mr. P. K. Prusty	SMS	Plant Prot.	8,000-13,500 8,550/-	22.08.06	Temporary	Gen
6	Subject Matter Specialist	Mr. S. Nayak	SMS	Forestry	8,000-13,500 8,550/-	22.12.06	Temporary	Gen
7	Programme Assistant	Mr. B. K. Parimanik	Prog. Asst.	Forestry	5,500-9,000 5,675/-	16.10.06	Temporary	Gen
8	Computer Programmer	Miss. R. Praharaj	Prog. Asst.	Computer	5,500-9,000 5,800/-	10.03.06	Temporary	Gen
9	Farm Manager	Miss. R. K. Bhol	Farm Manager	Plant Physiology	5,500-9,000 5,675/-	25.08.06	Temporary	Gen
10	Accountant / Superintendent	Mr. B. N. Mohanty	Accountant / Superintendent	-	5,900-9,000 7,100/-	17.07.06	Temporary	Gen
11	Stenographer	Mr. A. Patnaik	Steno cum Comp. Ope.	Stenographer	4,000-6,000 4,100/-	06.07.07	Temporary	Gen
12	Driver	Sri Rabinarayan Mohapatra	Driver	-	3050/- Consolidated	22.07.08	Temporary	Gen
13	Driver	Sri Mamta Ali Khan	Driver	-	3050/- Consolidated	25.07.08	Temporary	Gen
14	Supporting staff	Sri.Gunanidhi Bauta	Peon/Watchman	-	2,550-3,200 2550/-	19.12.07	Temporary	Gen
15	Supporting staff	Ri.Prasanna Martha	Peon/Watchman	-	2,550-3,200 2550/-	19.12.07	Temporary	Gen

1.6. Total land with KVK (in ha):

S. No.	Item	Area (ha)
1	Under Buildings	1.50 ha.
2.	Under Demonstration Units	0.40 ha.
3.	Under Crops	2.00 ha.
4.	Orchard/Agro-forestry	6.50 ha.
5.	Others	11.33 ha.

1.7. Infrastructural Development:

A) Buildings

S. No.	Name of building	Source of funding	Stage					
			Complete			Incomplete		
			Completion Date	Plinth area (Sq.m)	Expenditure (Rs.)	Starting Date	Plinth area (Sq.m)	Status of construction
1.	Admin. Building	ICAR	Feb. 08	-	-	-	-	-
2.	Farmers Hostel	ICAR	-	-	-	2007	300	Under cons
3.	Staff Quarters (6)	--	-	-	-	-	-	-
4.	Demo. Units (2)	--	-	-	-	-	-	-
5	Fencing	ICAR	-	-	-	2007	6 Ac.	Under cons
6	Rain Water harvesting system	--	-	-	-	-	-	-
7	Threshing floor	ICAR	2006	225	Completed	-	-	-
8	Farm godown	--	-	-	-	-	-	-

B) Vehicles

Type of vehicle	Year of purchase	Cost (Rs.)	Total kms. Run	Present status
TATA SUMO (Jeep)	2005	4,42,673	53535 km (Dt.17.08.08)	Running condition
Tractor with implements	2005	4,88,247	130.1Hr (Dt.17.08.08)	Running condition

C) Equipments & AV aids

Name of the equipment	Year of purchase	Cost (Rs.)	Present status
Computer	2005	69,450	Running condition
Laptop & LCD Projector	2007	99,642	Running condition
Digital copier with printer	2008	56,259	Running condition
Digital camera	2008	9,490	Running condition
Public address system	2008	18,640	Running condition

1.8. A). Details SAC meeting conducted in the year (1.4.07-31.3.08) :

Details of SAC Recommendations held on dt.26.10.07

Sl. No.	Date	Number of Participants	Salient Recommendations	Action taken
1.	26.10.2007	22	<ol style="list-style-type: none"> Demonstration of integrated farming system and cropping system models in the district to achieve food security and maximizing profit. Development of agro based employment generating avenues for ensuring at least 100 days engagement of agriculture workers in the year. Promote crop intensification programme around water harvesting structures. Encourage farmers to synchronize planting period of 	<p>Front Line Demonstrations, On farm trials and Trainings were designed and incorporated in the action plan 2008-09 as per the recommendations of</p>

		<p>vegetables and fruits with market demand in the district.</p> <ol style="list-style-type: none"> 5. Support the SHGs of sugarcane growers in the district for increase in area, production and productivity of sugarcane. 6. Encourage progressive farmers to develop hatchery for supply of fish fry in the district. 7. Create awareness among farming community to adopt organic farming. 8. Promote tissue cultured sugarcane plants and feasibility study of cane cultivation during kharif season. 9. Popularization of paddy straw and dhingri mushroom cultivation as a self employment enterprise. 10. Conduct micro level analysis of farming situation in the KVK operational areas. 11. Subscribe to important journals for updating knowledge of scientists. 12. Strengthen cooperation with all line departments in the district. 13. Promote value addition to agricultural produce. 14. Create one or two ideal village(s) with cooperation of all line department personnel. 15. Documentation of success stories with detailed economics and photographs. 	<p>the SAC committee held on dt.26.10.07</p>
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*** Attach a copy of SAC proceedings along with list of participants**

2. DETAILS OF DISTRICT (2007-08):

2.1 Major farming systems/enterprises (based on the analysis made by the KVK)

S. No	Farming system/enterprise
1.	<p>Crop Enterprises - (Paddy, Sugarcane, Greengram, Blackgram, Colocasia & Seasonal vegetables, Ground nut, Sunflower, Toria), Sugarcane – fallow, Paddy – Greengram, paddy – Blackgram, paddy – Sunflower, paddy – vegetables, paddy – Groundnut, paddy – Toria</p> <p>Horticultural crops – Mango, Papaya, Guava, Cashew, and Banana</p> <p>Other Enterprises – Dairy, Fishery, Goatery, and poultry.</p>
2.	<p>Water scarcity, mostly used for direct seeded kharif paddy / kharif groundnut / vegetable</p> <p>Used for transplanted paddy and sugarcane cultivation in kharif and blackgram / greengram in rabi.</p>
3.	<p>Long duration kharif paddy followed by paira cropping of greengram / blackgram.</p> <p>Paddy followed by pulses / vegetables / sunflower / groundnut</p> <p>Direct seeded short duration kharif paddy / Kharif vegetables</p>

2.2 Description of Agro-climatic Zone & major agro ecological situations (based on soil and topography)

Sl. No	Agro-climatic Zone	Characteristics
1.	East and South Eastern Coastal Plane Zone	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. (4, 24,200ha) of which 1, 36,841 ha are under cultivation. Out of three types of cultivated area, high land consists of 33% (45ha); medium land 39% (ha) and low land 28% (37ha).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 alluvial, red, mixed red and black types; average annual rainfall 1449mm. and the cropping intensity is 174%.

S. No	Agro ecological situation	Characteristics
1	Situation - I	▪ Rain fed up-land with red soil.
2	Situation - II	▪ Rain fed medium land with alluvial soil.
3	Situation – III	▪ Rain fed low land with alluvial soil.
4	Situation – IV	▪ Irrigated medium land with alluvial soil.
5	Situation – V	▪ Drought prone hilly terrains.
6	Situation – VI	▪ Flood prone medium and low land.
7	Situation - VII	▪ Water logged areas and water bodies. (WHS, ponds, reservoirs)

2.3 Soil type/s

S. No	Soil type	Characteristics	Area in ha
1	Red soil Red laterite soils Alluvial soil	Low soil fertility, poor drainage, soil erosion	396000 ha

2.4. Area, Production and Productivity of major crops cultivated in the district

S. No	Crop	Area (ha)	Production (Qtl)	Productivity (Qtl /ha)
Kharif				
1	Paddy (local)	18981	364800	19.2
2	Paddy (hyv)	79019	2009180	25.4
3	Maize (local)	765	17750	23.2
4	Maize HYV)	3588	137490	38.3
5	Ragi	653	8030.3	12.3
6	Moong	504	1880.2	3.7
7	Biri (Urad)	5896	22010	3.7
8	Arhar	1326	8210	6.1
9	Groundnut	729	10210	14
10	Sesamum	4640	12800	2.7
11	Castor	49	170	3.4
12	Total Oilseeds	5426	23160	4.2
13	Mesta	597	1910	3.4
14	Sunhemp	160	480	3
15	Ginger	101	1820	18
16	Turmeric	241	3810	15.8

17	Chillies	651	6640	10.2
18	Total condiment & spices	1003	12150	12
Rabi				
1	Wheat	75	898	10.64
2	Paddy(HY)	168	4690	27.91
3	Maize (HYV)	124	4400	35.48
4	Moong	32523	70800	2.17
5	Biri (Urad)	8326	20170	2.42
6	Kulthi	5695	14060	2.47
7	Gram	102	350	3.40
8	Field pea	202	950	4.7
9	Groundnut	380	4520	11.92
10	Sesamum	1813	3810	2.10
11	Castor	21	80	3.7
12	Sunflower	221	1300	5.8
13	Mustard	1674	2060	1.1
14	Linseed	590	1560	2.60
15	Safflower	12	50	4.16
16	Potato	157	6350	40.44
17	Sugarcane	4447	3246880	730
18	Onion	561	30710	54.74
19	Garlic	253	9840	38.8
20	Coriander	229	1010	4.4
21	Chillies	258	2000	7.7

2.5. Weather data

Month	Rainfall (mm)	Temperature °C		Relative Humidity (%)
		Maximum	Minimum	
Oct.'07	54.38	29.23	25.32	77.81
Nov.'07	0.5	28.04	22.22	70.49
Dec'07	0	24.67	19.72	58.29
Jan'08	14.45	25.06	18.87	80.16
Feb'08	5.9	27.74	20.32	73.31
March'08	14.94	32.15	25.18	56.68
April'08	93.12	36.4	24.44	73.76
May'08	43.05	38.55	27.73	65.48
June'08	293.7	33.09	29.0	78.5
July'08	331.6	30.5	26.6	84.0
Aug'08	265.44	29.3	26.58	82.9

2.6. Production and productivity of livestock, Poultry, Fisheries etc. in the district

Category	Population	Production	Productivity
Cattle			
<i>Crossbred</i>	3277	15.75th.MT	-
<i>Indigenous</i>	84062	-	-
Buffalo	8582	-	-
Sheep			
<i>Crossbred</i>	-	-	-
<i>Indigenous</i>	-	-	-
Goats	97017	1030	-
Pigs	54	-	-
<i>Crossbred</i>	-	-	-
<i>Indigenous</i>	-	-	-
Rabbits	-	-	-
Poultry			
Hens	104875	9.92 M eggs	-
<i>Desi</i>	-	-	-
<i>Improved</i>	-	-	-
Ducks	1024	-	-
Turkey and others	-	-	-
Fish	5728.77Ha	6330 MT	1.1 MT
<i>Marine</i>	-	-	-
<i>Inland</i>	5728.77Ha	6330 MT	1.1 MT
Prawn	2507.00Ha	2 MT	0.0008 MT
Scampi	2507.00Ha	1 MT	0.0004 MT
Shrimp	-	-	-
Category	Population	Production	Productivity
Cattle			
<i>Crossbred</i>	3277	15.75TMT	
<i>Indigenous</i>	84062		
Buffalo	8582		
Sheep			
<i>Crossbred</i>			
<i>Indigenous</i>			
Goats	97017	1030	
Pigs	54		
<i>Crossbred</i>			
<i>Indigenous</i>			
Rabbits			
Poultry	104875	9.92M eggs	
Hens			
<i>Desi</i>			
<i>Improved</i>			
Ducks	1024		
Turkey and others			
Fish	5728.77Ha	6330 MT	1.1 MT
<i>Marine</i>	-	-	-
<i>Inland</i>	5728.77Ha	6330 MT	1.1 MT
Prawn	2507.00Ha	2 MT	0.0008 MT
Scampi	2507.00Ha	1 MT	0.0004 MT
Shrimp	-	-	-

Details of Operational area / Villages (2007-08)

Sl. No.	Taluk	Name of the block	Name of the village	Major crops & enterprises	Major problem identified	Identified Thrust Areas
1.	Nayagarh	Nayagarh	Kantabania, Koska Panipoila Barabati Narialli Balugaon Khedapada	Sugarcane, paddy, groundnut, banana, mushroom, fresh water prawn ornamental fish, backyard poultry	Reduction in cane yield due to borer damage Increasing cost of production and reducing yield response High production cost and low pod yield due to initial weed infestation Low yield from traditional types with damage due to winds. Non / underutilization of paddy straw and sugarcane baggage. Low income from fish culture with less export value No income from backyard of house	High rate of borer infestation in sugarcane Less use of organic manure Low yield of groundnut Development of high yielding Tissue cultured banana plantation Income generation activities for empowerment of rural women Scientific culture practice with pond and tank based freshwater Unemployed rural youths with non professional avenue income generation
2	Khandapada	Khandapada	Biridihi, Ranipada	Paddy, sugarcane, , banana, mango	Reduction in cane yield due to borer damage Increased cost of production and reduced yield response High production cost and low pod yield due to initial weed infestation Low yield from traditional types with damage due to winds. Old and sick orchards bear little or no fruits	High rate of borer infestation in sugarcane Less use of organic manure Low yield of groundnut Development of high yielding Tissue cultured banana plantation Low yield from old and traditional orchards

3	Nuagaon	Nuagaon	Khanguri, lingiribari, bakalbandha, kanigiri	Sugarcane, paddy, groundnut, banana, mushroom, fresh water prawn, ornamental fish, backyard poultry, Yam and elephant foot yam	Reduction in cane yield due to borer damage Increased cost of production and reduced yield response High production cost and low pod yield due to initial weed infestation Low yield from traditional types and damage by winds. No /underutilization of paddy straw and sugarcane baggage. Low income from fish culture with less export value No income from backyard of house Acrid quality of local cultivars and low yield of yam and EFY	High rate of borer infestation in sugarcane Less use of organic manure Low yield of groundnut Development of high yielding Tissue cultured banana plantation Income generation activities for empowerment of rural women Scientific culture practice with pond and tank based freshwater Unemployed rural youths with non professional avenue for income generation. High return from improved tuber crops
4	Bhapur	Bhapur	Rampada	mushroom, fresh water prawn	Low income from fish culture with less export value	Scientific culture practice with pond and tank based freshwater
5	Odogaon	Odogaon	Hariharpur, Godipalli	Sugarcane, paddy, groundnut, banana	Reduction in cane yield due to borer damage Increasing cost of production and reducing yield response High production cost and low pod yield due to initial weed infestation Low yield from traditional types with damage due to winds. .No/ underutilization of paddy straw and sugarcane baggage. Low income from fish culture with less export value No income from backyard of house Acrid quality of local cultivars and low yield	High rate of borer infestation in sugarcane Less use of organic manure Low yield of groundnut Development of high yielding Tissue cultured banana plantation Income generation activities for empowerment of rural women Scientific culture practice with pond and tank based freshwater Unemployed rural youths with non professional avenue income generation High return from improved tuber crops

6	Daspalla	Daspalla	Tumandi, janisahi, madhyakhanda, Dakabara	Sugarcane, paddy, groundnut, banana, mushroom, fresh water prawn ornamental fish, backyard poultry Yam and elephant foot yam	Reduction in cane yield due to borer damage Increasing cost of production and reducing yield response High production cost and low pod yield due to initial weed infestation Low yield from traditional types with damage due to winds. No/ underutilization of paddy straw and sugarcane baggage. Low income from fish culture with less export value No income from backyard of house Acrid quality of local cultivars and low yield from yam and EFY	High rate of borer infestation in sugarcane Less use of organic manure Low yield of groundnut Development of high yielding Tissue cultured banana plantation Income generation activities for empowerment of rural women Scientific culture practice with pond and tank based freshwater Unemployed rural youths with non professional avenue income generation High return from improved tuber crops
7	Ranpur	Ranpur	Akhupadar	banana, paddy, moong, blackgram, vegetable	Low yield from traditional types with damage due to winds.	Tissue cultured banana plantation

2.7 Priority thrust areas

S. No	Thrust area
1.	Varietal substitution in paddy, particularly for rainfed upland and medium land types.
2.	Crop diversification from paddy to pulse (Arhar), oilseed (Sunflower, ground nut) sugarcane and tuber crop based cropping systems
3.	Integrated nutrient management by incorporation of crop residues/forest litters, green manuring, improvised composting and balanced use of inorganic and biofertilisers.
4.	Popularizing ecofriendly pesticides and biocontrol agents and IPM practices for borers in sugarcane and brinjal.
5.	Revolutionizing fresh water fish farming by including freshwater prawn (Scampi) in Composite pisciculture system.
6.	Empowerment of rural youth and SHGs through remunerative agro based enterprises like value addition of fruits and vegetables, mushroom production, bee keeping, floriculture and poultry farming.
7.	Rejuvenating mango and cashew orchards and developing Alternative Land Use system model.
8.	Scientific method of fish production with freshwater prawn culture, integrated farming system research and ornamental fish culture
9.	Income generation from backyard poultry for economic upliftment.
10.	Raising of fuelwood , timber and fodder yielding species to meet the local demand and production , value addition of minor forest produces.

3. TECHNICAL ACHIEVEMENTS

3.1. A. Abstract of interventions undertaken

S. No	Thrust area	Crop/ Enterprise	Identified Problem	Interventions					
				Title of OFT if any	Title of FLD if any	Title of Training if any	Title of training for extension personnel if any	Extension activities	Supply of seeds, planting materials etc.
1.	Less use of organic manure	Paddy Pulses	Poor crop yield due to low nitrogen efficiency	-	Green manuring Dhanicha in direct seeded paddy.	1.INM in rice(F/FW) 2.Use of bioinoculant in pulses.(F/FW) 3. Use of bioinoculant in non legume crops.(F/FW)	-	TV talk – 1 Leaf let – 1	Dhanicha seeds
2.	Low cost of inputs in sugarcane	Sugarcane	Low yield in sugarcane	1.Assessment of pit method of planting in sugarcane	-	Planting technique in sugarcane(F/FW)	-	TV talk – 1 Leaf let – 1	Seed cane
3.	Weed management	Greengram, Sugarcane	Weed is a major problem which hampers yield	1.Assessment of herbicide in Green gram 2.Assessment of herbicide in colocassia	Weed control in spring planted sugarcane.	Integrated weed management in spring planted sugarcane.(F/FW)	-	TV talk – 1 Leaf let – 1	Herbicide (Targa Super)
4.	Micro nutrient application	Sunflower	Low yield in sunflower	-	Micro nutrient application in sunflower.	-	-	Leaflet-1	-
5.	Injudicious use of fertilizer	Sugarcane Greengram	Farmers are not conversant by use of urea in sugarcane and proper fertilizer application in greengram.	-	Fertiliser management in greengram.	Nitrogen mgt. in spring planted sugarcane. .(F/FW)	-	Leaf let – 1	Seed cane, nitrogenous fertiliser
6	Seed production	Sunflower	Low seed setting	-	-	Hand pollination to Increase seed setting in sunflower.(F/FW)	-	-	-
7	Intercropping system	Intercrops	Mono cropping failure occurs in rainfed upland. Intercrops will be an insurance against failure of main crop and judicious utilization of land.	-	-	Intercropping systems in riskprone rainfed upland.(F/FW)	Farming system approach in organic farming.	-	-

8	Organic fertilizer production	Vermicompost, organic waste recycling, Azolla, BGA	Farmers are not well conversant with the production technology of organic fertilisers. -	-	Enrichment of rural compost.	1.Organic waste recycling and production of enriched compost.(RY) 2.Production and marketing of azolla & BGA.(RY)	-	-	-
9	Management of problematic soils	Soil management	Low yield even failure of crops due to high acidic nature of soil and low nutrient status.	-	-	Method of soil sample collection for quality analysis.(RY)	1.Management of acid soil. 2.Nutrient management in organic farming.	-	-
10	Development of high yielding Tissue cultured banana plantation	Banana	Low yield from traditional types with damage due to winds.	-	Introduction Tissue cultured Banana plantation	1.Development of high yielding tissue cultured banana plantation(F/FW).	-	Village meeting & discussion	Tissue cultured banana sapplings
11	Introduction of high variety of turmeric	Turmeric	Very low yield from traditional variety with high fibre content and no use of orchard space	-	Varietal substitution in turmeric	1.Raised bed planting of ginger and turmeric(F/FW) 2. Value addition of turmeric through curing(F/FW)	-	Village survey and field visit	Supply of Ranga, Rasmi, roma and Suroma high yielding variety of turmeric
12	Rejuvenation of old and senile mango orchards	Mango	Old and senile orchards bear little or no fruit	-	-	Rejuvenation of old and senile mango orchards(F/FW) Management of fruit drop in coconut and mango. (F/FW)	-	Survey, field visit and discussion	-
13	Crop substitution in elephant damage prone area	Arrowroot	Heavy crop damage of traditional crop in medium land by elephants	-	Crop substitution with arrowroot	-	-	Field visit, discussion	Supply of seedlings
14	Cashew orchard mgt.	Cashew nut	Poor mgt. of cashew orchards with no use of intercropping space	-	-	Care and maintenance of existing cashew orchards(F/FW)	-	Survey, field visit and discussion	Supply of cassava seedlings
15	Employment generation for unemployed rural youth	-	Low employment rate for rural youth	-	-	1.Propagation technique for raising improved fruit sapplings.(RY)	-	Survey, field visit and discussion, Film show	-

16	Off season vegetable cultivation	Vegetables	Low return from seasonal crop	-	-	1.Raising of cauliflower/cabbage as a catch crop(F/FW) 2.Raising of kharif onion(F/FW) 3.Pest management in cucurbits(F/FW)	1.Protective cultivation of high value offseason crops	Survey, field visit and discussion, Discussion with marketing channel operatives	-
17	Hybrid papaya cultivation	Papaya	High percentage of male and low yield from traditional variety	Assessment of protray and synthetic growth media for raising papaya seedling	Introduction of hybrid papaya (Red lady)	-	-	Survey, field visit and discussion, Film show	Red lady saplings
18	High return from improved tuber crops	Yam, Elephant foot yam	Low yield from traditional and non acrid varieties	-	Introduction of Elephant foot yam	-	-	Survey, field visit and discussion, Film show	Hatikhojia and Gajendra
19	Low yield of Rice	Rice	Reduced yield in Rice due to increasing pest menance	-	IPM in Rice	IPM in Rice(F/FW)	IPM strategies for crop pest management	News paper – 1 TV talk – 1	Biopesticides, Botanicals, Bio agents and eco friendly chemicals
20	Low yield in Brinjal	Brinjal	Reduced yield in brinjal due to wilt problem and fruit and shoot borer attack	Assessment of brinjal variety swarna shymali against wilt complex.	IPM for fruit and shoot borer and wilt mgt. in Brinjal	IPM in Brinjal(F/FW)	-Use of News paper – 1 biopesticide and botanicals for pest management in organic faring	Leaf let – 1 News paper – 1 TV talk – 1	Bio pesticides, Pheromone trap and botanicals
21	High rate of borer infestation in sugarcane	Sugarcane	Reduction in cane yield due to borer attack	-	-	Biological control of sugarcane borers(F/FW)	-	TV talk – 1 Leaf let – 1	-
22	Income generation	Bee Keeping	Unemployment of rural youth	-	Bee Keeping	Bee keeping for self employment(RY)	-	Booklet – 1 News paper – 1	Bee colony and smoker
23	Mgt. of field rats	Mgt. of field rats	Large scale of crop damage due to field rats	-	Mgt. of field rats	- Rodent Management in Agriculture(F/FW)	-	News paper – 1	Zinc phosphide,
24	Low yield of groundnut	Groundnt	High mortality due to fungal wilt at early stage of crop growth	-	-	Wilt mgt. in Groundnut(F/FW)t	-	TV talk – 1 Leaf let – 1 News paper – 1	Pesticide(Vitavax Power)
25	High rate of borer and termite infestation in sugarcane	Sugarcane	Reduction in cane yield due to borer and termite attack	Assessment of insecticides for termite and ESB control in sugarcane	-	IPM in Sugarcane(RY) Pest management in sugarcane(F/FW)	-	Leaf let – 1 News paper – 1	Pesticide(Fipronil)

26	Scientific culture practice with pond and tank based pisciculture.	Freshwater prawn (Scampi)	Low income from fish culture with less export value	-	Freshwater prawn culture	Freshwater prawn culture(F/FW)	-	Exposure visit, video show, booklet	<i>M rosenbergii</i> (Scampi) seed
27	Unemployed rural youths with non professional avenues for income generation	Ornamental fish	Nil income from backyard of house	-	Ornamental fish culture	Ornamental fish culture & breeding(RY)	-	Booklet on ornamental fish Opening of aquashop	Ornamental fish as brooder
28	Integrated farming system approach with agriculture & allied activities.	Fish fingerling Scampi seed Duckery Tissue culture banana papaya	Low income from pond based pisciculture unit	Assessment of mixed fish culture practice	Pond based farming system	Pond management in fish culture (F/FW) Control of EUS by CIFAX (F/FW)	-	Video show Literature	Fingerling(IMC), scampi seed Duckery Tissue culture banana(Bantala Papaya,coconut
29	Water resources for multiple fish culture	Fish yearling	Low income from single culture practice	-	Introduction of stunted fingerling and yearlings for more production	Fish fingerling and yearling production (RY) Fish seed production (F/FW) Multiple stocking and harvesting in pisciculture (F/FW)	-	Booklet	-
30	Removal of predatory fishes, weeds, & feed management to enhance fish prodn.	Indian major carps and exotic carps	Low yield from fish mortality and no supplementary feed	-	-	Predatory and weed fish management (F/FW) Feeding management in fish pond (F/FW) Fish Feed production & management (RY) Aquatic weed control in fish pond (F/FW)	-	-	-
31	Backyard poultry rearing	Vanaraja dual purpose poultry	Low yield as meat egg from desi bird	-	Backyard poultry rearing(RY)	Backyard poultry rearing (F/FW)	-	-	Vanaraja chicks of 21 days old

32	Income generation activities for empowerment of rural women	Mushroom	1. Non/ underutilization of paddy straw and sugarcane baggage 2. High market demands on mushroom 3. Non under utilisation of leisure time of housewives	-	1. Paddy straw mushroom production 2. Oyster mushroom production	1. Commercial cultivation of P. S. Mushroom (RY) 2. Commercial cultivation of Oyster mushroom (RY)	-	TV talk – 2 News paper- 1 Leaflet – 1	Spawn, Polythene and pulse powder.
33	Value addition	Vegetables & fruits	Market value goes down maximum during production season	-	1.Preparation of preserved products from mango and lemon.	1. Value addition to vegetables (RY) 2. Value addition to fruits (RY)	-	Leaflet – 2	Permitted food preservatives and colours
34	Drudgery reduction	-	Drudgery associated with women in Agril.	-	-	1. Use of manual winnower (F/FW). 2. Use of paddle operated paddy thresher (F/FW).	-	-	-
35	Household food security	-	1. Non/ under utilisation of backyard space 2. Non availability of fresh vegetables round the year 3. Nutrient deficiency is prominent.	-	1.Development of nutritional garden	-	-	-	Seeds, seedlings and vermicompost
36	Storage loss minimization	-	Loss of foodgrains is maximum during storing	1. Assessment of safe storage of pulses.	-	1. Indigenous technology knowledge for stored grain pest mgt (F/FW). 2. Control of house rats(F/FW)	-	-	Mustard oil, Turmeric powder, Malathion.
37	Minimization of nutrient loss in processing	-	Nutrients are being lost while cooking	-	-	1. Method of reducing nutrient loss while cooking and processing(F/FW). 2. Use of solar cooker to overcome fuel scarcity (F/FW).	-	-	-
38	Nutritional deficiency	-	Nutrient deficiency is prominent among pre-school children	-	-	Supplementary diet for pre-school children(F/FW)	-	-	-

39	Meeting pulp wood requirement of paper industry by planting Eucalyptus clones.	Eucalyptus	Locally grown eucalyptus has slower growth rate and high lignin content and branchy nature	-	-	Growing eucalyptus for industrial use(F/FW)	-	-	-
40	Meeting requirement of fuel wood and timber	<i>Acacia mangium</i>	Risk and uncertainty in rainfed farming system & bunds remains unutilized	-	Growing of <i>Acacia mangium</i> in field bunds	Growing <i>Acacia mangium</i> for profit maximization(F/FW) Agro forestry system , its advantages (F/fW)	-	-	Seedlings, fertilizer
41	Natural resource management and Community forest management	Teak & Eucalyptus	Improper management of natural resources.Heavy pressure on natural forest for timber and fuel wood.	-	Plantation for community support		Natural resource management.	-	Teak stump, Eucalyptus seedlings
42	Production of quality planting material of bamboo	<i>Bambusa vulgaris</i>	Insufficient planting materials due to irregular seeding, slow growth of seedling	-	Raising of bamboo through culm cutting method.	Propagation of bamboo through culm cutting method(F/FW)	Bamboo plantation technology	Leaflet-1	Planting materials raised through culm cuttings, fertilizer
43	Meeting the requirement of fuel wood and fodder	<i>Acacia mangium</i> , <i>A. auriculformis</i> , Teak	Devastation of conserved forest for meeting home demand for timber fuel wood	-	Homestead forestry	Fuel wood security through homestead forestry (F/FW)	-	-	Seedlings
44	Raw materials for Pulp and ply wood	Eucalyptus, bamboo, mangium, Gamhar	Low production of pulp wood to meet the demand of paper & ply wood industry	-	-	Industrial plantation of eucalyptus, bamboo, mangium & gamhar(RY)	-	-	-
45	Watershed management	Watershed component	Lack of proper management of watershed component.			-	Concept of watershed and its management.	-	-
46	Production of quality propagation material	Teak, bamboo, acacia mangium, eucalyptus	Demand for good planting material and lack of technical know how.	-	-	Development and maintainance of forest nursery.Raising quality propagation material(RY)	-	-	-
47	Environmental pollution	Air and water pollution, Land degradation.	Continous rise in air, water pollution and land degradation causing global warming and ecological imbalances.	-	-	-	Environmental pollution , causes and its effect.	-	-

48	Soil moisture conservation	Teak	Low soil moisture content in uplands causes mortality and poor growth of teak plantation.	Assessment of Soil moisture conservation through mulching in teak plantation.	-	-	-	-	Teak stumps , Karaj dry leaves.
49	Capacity Building of Rural Youth.	-	Rural youth are not capable enough in agril. & allied activities.	-	-	1. Group dynamics in farmers organization RY). 2. Effective functioning of SHG for boosting rural economy (RY).	-	-	-
50	Upgrading knowledge of extension personnel	-	The working knowledge of extension personnel requires upgradation.	-	-	-	1. Technique of conducting Field Demonstration. 2. Agro-consultancy services for entrepreneurship development. 3. Community involvement in successful organic farming.	-	-

3.1.B. Conversion of OFT into FLDs during 2007-08

Thematic Area	Title of OFT	Year of execution
Integrated pest management	IPM for fruit and shoot borer in brinjal	2005-06
Hatchery management and culture of fresh water prawn	Fresh water prawn culture	2005-06
Mushroom cultivation	Oyster mushroom cultivation	2005-06
Integrated nutrient management	Fertiliser management in greengram	2005-06
Weed management	Weed control in groundnut	2006-07

3.1. C./D.

Details of each On Farm Trial to be furnished in the following format :

OFT- 1

1. Title of on-farm trials : **Assessment of pit method planting in sugarcane**
2. Problem diagnose : High density planting which increases the seed cost
3. Details of technologies selected for assessment/refinement : Putting 2 two buded sets in a pit of 1ft x 1ft size with 4ft x 2ft spacing.
4. Source of technology : IISR, Lucknow, 2002
5. Production system : Sugarcane based
6. Thematic area : Integrated crop mgt.
7. Micro-farming situations : Irrigated medium land.
8. Performance of the Technology with Performance indicators : Yield, economics.
9. Final recommendation for micro level situation : **Results awaited**
10. Constraints identified and feedback for research :
11. Process of farmers participation and their reaction : Farmers directly involved from training to execution

3.1.D. Results of On Farm Trials

Crop/ enterprise	Farming situation	Problem Diagnosed	Title of OFT	No. of trials*	Technology Assessed	Parameters of assessment
1	2	3	4	5	6	7
Sugarcane	Irrigated Medium land	High density planting which increases the seed cost	Method of planting in sugarcane	10	Putting 2 two buded sets in a pit of 1''ft x 1''ft size with 4ft x 2ft spacing.	1. No of tillers per pit. 2. Yield

Data on the parameter	Results of assessment	Feedback from the farmer	Any refinement done	Justification for refinement
8	9	10	11	12
	Results awaited	-	-	-

Technology Assessed / Refined	*Production per unit	Net Return (Profit) in Rs. / unit	BC Ratio
13	14	15	16
Farmer's practice** Normal trench method of planting.	-	-	-
Technology Assessed** Putting 2 two buded sets in a pit of 1'ft x 1'ft size with 4ft x 2ft spacing.	-	-	-
Technology refined**	-	-	-

OFT 2

1. Title of on-farm trials : **Assessment of herbicide in greengram.**
2. Problem diagnose : Severe weed infestation reduced seed yield & profitability
3. Details of technologies selected for assessment/refinement : Application of Quizalofop –Ethyle 5%EC @ 1lt/ ha at 30days of sowing
4. Source of technology : OUAT, 2003
5. Production system : Rice-Greengram
6. Thematic area : Weed management.
7. Micro-farming situation : Rainfed upland
8. Performance of the Technology with performance indicators : No of weeds/ m2, seed yield
9. Final recommendation for micro level situation : Application of Quizalofop –Ethyle 5%EC @ 1lt/ ha at 30 days of sowing.
10. Constraints identified and feedback for research : Moong seeds are randomly broadcasted therefore plant population is not maintained and lot of monocot and dicot weeds infested moong crop which ultimately affects the crop yield.
11. Process of farmers participation and their reaction : Farmers applied herbicides under direct supervision of Scientists and satisfied with the performance of herbicides ,however this herbicide is not available in local market.

Results

Crop/ enterprise	Farming situation	Problem Diagnosed	Title of OFT	No. of trials*	Technology Assessed	Parameters of assessment
1	2	3	4	5	6	7
Greengram	Rain fed upland	Severe weed infestation reduced seed yield & profitability	Weed management in greengram	5	Application of Quizalofop – Ethyle 5%ec @ 1lt/ ha at 30days of sowing.	Weed no/m ² Yield

Data on the parameter	Results of assessment	Feedback from the farmer	Any refinement done	Justification for refinement
8	9	10	11	12
F.P - 76 nos/m ²	F.P-3.83q/ha Demn.-4.95q/ha	Chemical weed control in greengram has been accepted by the farmers	-	-
Treatment- 18 nos/m ²				

Technology Assessed / Refined	*Production per unit	Net Return (Profit) in Rs. / unit	BC Ratio
13	14	15	
Farmers practice**	3.83q/ha	3074/-	1.53
T.A* Application of Quizalofop –Ethyle 5%EC @ 1lt/ ha at 30days of sowing	4.95q/ha	4375/-	1.55

OFT-3

1. Title of on-farm trials : **Assessment of herbicide in colocasia**
2. Problem diagnose : Heavy weed infestation in early growth stage of colocasia reduced the yield.
3. Details of technologies selected for assessment/refinement : Application of Quizalofop-Ethyle 5%EC @ 1lt/ ha at 30days of sowing.
4. Source of technology : OUAT, BBSR
5. Production system : Rice-based
6. Thematic area : Weed management
7. Micro-farming situation : Irrigated up/Medium land
8. Performance of the Technology with performance indicators : No of weeds/m²
9. Final recommendation for micro level situation : Application of Quizalofop –Ethyle 5%EC @ 1lt/ ha at 30 days of sowing.
10. Constraints identified and feedback for research : All weeds are not controlled , other herbicides/ Integrated weed management may be tried.
11. Process of farmers participation and their reaction : Farmers are trained before execution of experiment and directly involved in a group

Crop/ enterprise	Farming situation	Problem Diagnosed	Title of OFT	No. of trials*	Technology Assessed	Parameters of assessment
1	2	3	4	5	6	7
Colocasia	Irrigated up/Medium land	Heavy weed infestation in early growth stage of colocasia reduced the yield	Weed control in colocasia	10	Application of Quizalofop – Ethyle 5% ec @ 1lt/ ha at 30days of sowing.	Yield

Data on the parameter	Results of assessment	Feedback from the farmer	Any refinement done	Justification for refinement
8	9	10	11	12
F.P *	F.P. 113.12 q/ha	With application of the above technology all types of weeds are not controlled.	-	-
Treatment	T.A. 128.12 q/ha			

Technology Assessed / Refined	*Production per unit	Net Return (Profit) in Rs. / unit	BC Ratio
13	14	15	
Farmers practice** Manual weeding	113.12 q/ha	16560	1.41
T.A* Application of Quizalofop –Ethyle 5%EC @ 1lt/ ha at 30days of sowing	128.12 q/ha	23360	1.57

OFT-4

1. Title of on-farm trials : **Assessment of insecticides for termite and ESB control in sugarcane**
2. Problem diagnose : Termite and ESB attack in early stage causes significant yield lose in sugarcane
3. Details of technologies selected for assessment/refinement : Soil application of regent (Fipronil 0.3% granules)@ 20kg/ha at planting.
4. Source of technology : UPCSR,2005
5. Production system : Sugarcane based
6. Thematic area : Integrated pest mgt.
7. Micro-farming situation : Irrigated medium land
8. Performance of the Technology with performance indicators : **Results awaited**
9. Final recommendation for micro level situation :
10. Constraints identified and feedback for research :
11. Process of farmers participation and their reaction : Farmers applied pesticides under direct supervision of scientists.

Crop/enterprise	Farming situation	Problem Diagnosed	Title of OFT	No. of trials*	Technology Assessed	Parameters of assessment
1	2	3	4	5	6	7
Sugarcane	Irrigated Medium land	Termite and ESB attack in early stage causes significant yield loss in sugarcane	Management of termite and ESB in sugarcane	5	Soil application of regent (Fipronil 0.3% granules) @ 20kg/ha at planting.	Yield, No of dead hearts/m ² & economics

Data on the parameter	Results of assessment	Feedback from the farmer	Any refinement done	Justification for refinement
8	9	10	11	12
F.P *	Results awaited	-	-	-
Treatment				

Technology Assessed / Refined	*Production per unit	Net Return (Profit) in Rs. / unit	BC Ratio
13	14	15	
Farmers practice** No treatment	-	-	-
T.A* Soil application of regent (Fipronil 0.3% granules) @ 20kg/ha at planting.	-	-	-

OFT- 5

1. Title of on-farm trials : **Assessment of Safe storage of pulses**
2. Problem diagnose : High loss of pulses in storage condition
3. Details of technologies selected for assessment/refinement : Pulses treated with mustard oil (3ml/kg of seeds), turmeric powder (2gm/kg of seeds) and storing in malatheon treated bags (bags treated with malatheon 10ml/ltr of water).
4. Source of technology : OUAT, 2002
5. Production system : Greengram
6. Thematic area : Integrated pest mgt.
7. Micro-farming situations : Homestead
8. Performance of the Technology with performance indicators : **Result awaited**
9. Final recommendation for micro level situation :
10. Constraints identified and feedback for research :
11. Process of farmers participation and their reaction : Farmers applied pesticides under direct supervision of scientists.

Results

Crop/enterprise	Farming situation	Problem Diagnosed	Title of OFT	No. of trials*	Technology Assessed	Parameters of assessment
1	2	3	4	5	6	7
Greengram	Homestead	High loss of pulses in storage condition	Safe storage of pulses	10	T1- No treatment T2- Pulses treated with mustard oil (3ml/kg of seeds), turmeric powder (2gm/kg of seeds) and storing in malatheon treated bags (bags treated with malatheon 10ml/lit of water).	Percentage of loss Economics Farmers reaction Feedback

Data on the parameter	Results of assessment	Feedback from the farmer	Any refinement done	Justification for refinement
8	9	10	11	12
	Result awaited	-	-	-

Technology Assessed / Refined	*Production per unit	Net Return (Profit) in Rs. / unit	BC Ratio
13	14	15	16
Farmer's practice**	-	-	-
Technology assessed **	-	-	-
Technology refined**	-	-	-

OFT 6

1. Title of on-farm trials : **Assessment of Intercropping in cashew orchard**
2. Problem diagnose : Under utilized space in cashew orchards
3. Details of technologies selected for assessment/refinement : Interspaces in cashew orchard not utilised
4. Source of technology : CTCRI (Bhubaneswar center), 2003
5. Production system : Fruit orchard
6. Thematic area : Management of orchard
7. Micro-farming situations : Rainfed upland
8. Performance of the Technology with performance indicators : Yield , Economics
9. Final recommendation for micro level situation : Recommended for planting in cashew orchards
10. Constraints identified and feedback for research : Low marketing of cassava at local market.
11. Process of farmers participation and their reaction : Farmers directly involved from training to completion of the experiment under supervision of scientists. Alternate crops with demand in local market can be taken.

Results

Crop/ enterprise	Farming situation	Problem Diagnosed	Title of OFT	No. of trials*	Technology Assessed	Parameters of assessment
1	2	3	4	5	6	7
Cashew	Orchard based	Interspaces in cashew orchard not utilised	Intercropping in cashew orchard	10	T ₁ monocrop	Yield
					T ₂ Intercrop	Economics

Data on the parameter	Results of assessment	Feedback from the farmer	Any refinement done	Justification for refinement
8	9	10	11	12
200q/ha Rs 18400/ha	Intercropping with cassava under cashew orchard provides good yield.	The tribal farmers showed intrest for the production of cassava but improved farmers prefer high value crops.		

Technology Assessed / Refined	*Production per unit	Net Return (Profit) in Rs. / unit	BC Ratio
13	14	15	16
Farmer's practice**	None	Nil	-
Technology assessed**	200/qa	Rs.8800/ha	1.92
Technology refined**			

OFT 7

1. Title of on-farm trials : **Assessment of shade loving crop under mango orchard**
2. Problem diagnose : Under utilized mango orchards
3. Details of technologies selected for assessment/refinement : Cultivation of different shade tolerant cash crops.
4. Source of technology : CHES, Bhubaneswar, 2003
5. Production system : Fruit based productions
6. Thematic area : Management of orchard
7. Micro-farming situations : Rainfed upland
8. Performance of the Technology with performance indicators :
9. Final recommendation for micro level situation : **Results awaited**
10. Constraints identified and feedback for research :
11. Process of farmers participation and their reaction :

Results

Crop/enterprise	Farming situation	Problem Diagnosed	Title of OFT	No. of trials*	Technology Assessed	Parameters of assessment
1	2	3	4	5	6	7
Mango	Orchard based	Low land use efficiency	Performance of different crops under shade	10	T ₁ monocrop	Yield
					T ₂ Intercrop	Economics

Data on the parameter	Results of assessment	Feedback from the farmer	Any refinement done	Justification for refinement
8	9	10	11	12
	Results awaited			

Technology Assessed / Refined	*Production per unit	Net Return (Profit) in Rs. / unit	BC Ratio
13	14	15	16
Farmer's practice**			
Technology assessed**			
Technology refined**			

OFT 8

1. Title of on-farm trials : **Assessment of brinjal variety swarna shyamali against wilt complex**
2. Problem diagnose : Wilt susceptibility , low yielding local variety
3. Details of technologies selected for assessment/refinement : Use of wilt resistant high yielding variety **swarna syamali**
4. Source of technology : HARP, Ranchi, 2006
5. Production system : Vegetables based
6. Thematic area : Vegetables
Production and management technology
7. Micro-farming situations : Rainfed medium land
8. Performance of the Technology with performance indicators : Yield of the tested variety (212q/ha) increased by 28% more than the local variety
9. Final recommendation for micro level situation : Wilt resistant high yielding variety Swarna syamali can be cultivated in the farming situations.
10. Constraints identified and feedback for research : Wilt controlled significantly but not fully..
11. Process of farmers participation and their reaction : Farmers directly involved from training to completion of the experiment under supervision of scientists.

Results

Crop/enterprise	Farming situation	Problem Diagnosed	Title of OFT	No. of trials*	Technology Assessed	Parameters of assessment
1	2	3	4	5	6	7
Brinjal	Upland/medium land	Wilt susceptible to low yielding local variety	Performance of wilt resistant high yielding variety of brinjal.	10	T ₁ Control	Yield
					T ₂ Swarnna syamali	Economics

Data on the parameter	Results of assessment	Feedback from the farmer	Any refinement done	Justification for refinement
8	9	10	11	12
Increased yield by 28%	Brinjals are large size suited for the local pallet	Variety is very much wilt resistant.	-	-

Technology Assessed / Refined	*Production per unit	Net Return (Profit) in Rs. / unit	BC Ratio
13	14	15	16
Farmer's practice**	165q/ha	43,500	2.11
Technology assessed**	212q/ha	67,500	2.68
Technology refined**			

OFT 9

1. Title of on-farm trials : **Assessment of portray and synthetic growth media for raising papaya seedlings.**
2. Problem diagnose : High mortality in conventional nursery.
3. Details of technologies selected for assessment/refinement : Nursery raising of papaya seedlings in portray and synthetic growth media.
4. Source of technology : HARP, Ranchi, 2006
5. Production system : Nursery
6. Thematic area : Planting material production
7. Micro-farming situations : Rainfed medium land
8. Performance of the Technology with performance indicators : **Result awaited**
9. Final recommendation for micro level situation : -
10. Constraints identified and feedback for research : -
11. Process of farmers participation and their reaction : -

Results

Crop/enterprise	Farming situation	Problem Diagnosed	Title of OFT	No. of trials*	Technology Assessed	Parameters of assessment
1	2	3	4	5	6	7
Papaya seedlings	Nursery	Interspaces in cashew orchard not	Performance of portray and synthetic growth	5	T _{1-FP}	Germination and Survibility percentage

		utilised	media for raising papaya seedlings.		T ₂ – Growing papaya seedlings in potray and synthetic growth media	Growth parameters like height and collar diameter

Data on the parameter	Results of assessment	Feedback from the farmer	Any refinement done	Justification for refinement
8	9	10	11	12
	Results awaited			

Technology Assessed / Refined	*Production per unit	Net Return (Profit) in Rs. / unit	BC Ratio
13	14	15	16
Farmer's practice**			
Technology assessed**			
Technology refined**			

OFT 10

1. Title of on-farm trials : **Assessment of clones of Eucalyptus species.**
2. Problem diagnose : Locally raised Eucalyptus has longer rotation period high lignin contents & branching in nature
3. Details of technologies selected for assessment/refinement : Use of JK clones for plantation with proper management
4. Source of technology : JK Paper Mills, Raygada, 2001
5. Production system : Rainfed monocropping
6. Thematic area : Production technology
7. Micro-farming situations : Rainfed up/medium land
8. Performance of the Technology with performance indicators : Height – 123cm (1st year growth data)
dbh/collar diameter – 7.3cm (1st year growth data)
Number of branches – 5 (1st year growth data)
Coppicing habit - After 4th year
9. Final recommendation for micro level situation :
10. Constraints identified and feedback for research : In this 1st year of plantation termite attack is the major cause of mortality.
11. Process of farmers participation and their reaction : Farmers are trained before plantation programme and plantation work done by the active participation of farmers.

Results

Crop/ enterprise	Farming situation	Problem Diagnosed	Title of OFT	No. of trials*	Technology Assessed	Parameters of assessment
1	2	3	4	5	6	7
Eucalyptus	Rainfed upland & med land	Locally raised Eucalyptus has longer rotation period, high lignin content & branchy in nature	Studies on high yielding clones of eucalyptus	7	Fast growing, less branchy, less lignin content, eucalyptus clones are grown with proper management	(i) Height– Upto 4 th yr (ii) dbh/collar diameter–Upto 4 th yr (iii) No. of branches –Upto 4 th yr (iv) Coppicing habit - After 4 th year

* No. of farmers

Data on the parameter	Results of assessment	Feedback from the farmer	Any refinement done	Justification for refinement
8	9	10	11	12
For 1yr old plantation Clones height- 123cm. Clones collar diameter 7.3cm Potted seedlings ht.- 85cm Potted seedling collar diameter- 5.1cm	1yr old plantation shows faster growth of clones. Detail growth of clones will be assessed after harvesting i.e after 4 th year of plantation.	Clones are growing faster than conventional potted seedlings but requires regular irrigation from January onwards during the 1st year of plantation and the clones are more susceptible to termite attack than conventional seedlings.	-	-

Technology Assessed / Refined	*Production per unit	Net Return (Profit) in Rs. / unit	BC Ratio
13	14	15	16
Farmer's practice**	-	-	-
Technology assessed**	-	-	-
Technology refined**	-	-	-

OFT 11

- Title of on-farm trials : **Assessment of Soil moisture conservation through mulching in Teak plantation**
- Problem diagnose : Low content of soil moisture in upland causes mortality and poor growth of 1st year teak plantation.

3. Details of technologies selected for assessment/refinement : Soil conservation through mulching of Karanja leaves in 1st year teak plantation
4. Source of technology : CSWCRTI Koraput center 2004
5. Production system : Rice based
6. Thematic area : Agroforestry
7. Micro-farming situations : Rainfed up land
8. Performance of the Technology with Performance indicators : **Results awaited**
9. Final recommendation for micro level situation :
10. Constraints identified and feedback for research :
11. Process of farmers participation and their reaction : Farmers actively participated during teak plantation.

Results

Crop/enterprise	Farming situation	Problem Diagnosed	Title of OFT	No. of trials*	Technology Assessed	Parameters of assessment
1	2	3	4	5	6	7
Teak	Rainfed upland	Low content of soil moisture in upland causes mortality and poor growth of 1 st year teak plantation.	Soil moisture conservation through mulching in Teak plantation	10	Soil conservation through mulching of Karanja leaves in 1 st year teak plantation	(i) Height– 1 st year (ii) dbh/collar diameter–1 st yr (iii) Mortality percentage At the end of 1 st year

* No. of farmers

Data on the parameter	Results of assessment	Feedback from the farmer	Any refinement done	Justification for refinement
8	9	10	11	12
Results awaited	-	-	-	-

Technology Assessed / Refined	*Production per unit	Net Return (Profit) in Rs. / unit	BC Ratio
13	14	15	16
Farmer's practice**	-	-	-
Technology assessed**	-	-	-
Technology refined**	-	-	-

OFT 12

1. Title of on-farm trials : **Assessment of mixed fish culture practice**
2. Problem diagnose : Low income from traditional fish culture
3. Details of technologies selected for Assessment /refinement : Culture of fresh water prawn with Catla and Grass carp
4. Source of technology : CIFA, Bhubaneswar
5. Production system : Pond based
6. Thematic area : Composite fish culture
7. Micro-farming situations : Rainfed low land
8. Performance of the Technology with Performance indicators : **Results awaited**
9. Final recommendation for micro :
10. Constraints identified and feedback for research :
11. Process of farmers participation and their reaction :

Results

Crop/enterprise	Farming situation	Problem Diagnosed	Title of OFT	No. of trials*	Technology Assessed	Parameters of assessment
1	2	3	4	5	6	7
Fresh water prawn	Rainfed low land	Low income from traditional fish culture	Increasing pond productivity through mixed culture practice	4	Culture of fresh water prawn	Culture period, production, income

* No. of farmers

Data on the parameter	Results of assessment	Feedback from the farmer	Any refinement done	Justification for refinement
8	9	10	11	12
Result awaited	-	-	-	-

Technology Assessed / Refined	*Production per unit	Net Return (Profit) in Rs. / unit	BC Ratio
13	14	15	16
Farmer's practice**	-	-	-
Technology assessed**	-	-	-
Technology refined**	-	-	-

3.2 Achievements of Frontline Demonstrations

a. Follow-up for results of FLDs implemented during previous years

List of technologies demonstrated during previous year and popularized during 2006-07 and recommended for large scale adoption in the district

S. No	Thematic Area*	Technology demonstrated	Details of popularization methods suggested to the Extension system	Horizontal spread of technology		
				No. of villages	No. of farmers	Area in ha
1.	Integrated crop management	Green manuring in direct seeded kharif paddy	Training, leaf lets, exposure visit, video show, news paper	18	212	201
2.	Cropping system	Varietal substitution in paddy	Training, leaf lets, exposure visit, news paper	14	125	170
3.	Crop diversification	Pyara cropping of field pea	Training, leaf lets, exposure visit, news paper	10	107	145
4.	Fruits Cultivation of fruits	Cultivation of Tissue cultured banana	Training, Farm Visit, Exposure visit, Film show	29	67	24
5.	Fruits Cultivation of fruits	Cultivation of high yielding variety of papaya	Training, Farm Visit, Exposure visit, Film show	17	89	20
6.	Fruits Cultivation of fruits	Introduction of Hybrid Coconut	Training, Farm Visit, Exposure visit, Film show	5	40	4
7.	Tuber crops Production and management technology	Introduction of improved yam Var. Hatikhojia	Training, Farm Visit, Exposure visit, Film show	11	132	15
8.	Tuber crops Production and management technology	Crop substitution with arrowroot.	Training leaf lets, exposure visit,	24	160	63
9.	Spices Production and management technogy	Introduction of improved Turmeric var. roma, suroma, ranga, rashmi	Training, Farm Visit, Exposure visit, Film show	14	40	6
10.	Spices Production and management technogy	Introduction of improved Ginger Var. suprava	Training, Farm Visit, Exposure visit, Film show	6	35	4
11.	Integrated pest mgt.	Integrated pest management in rice	Training, leaf lets, exposure visit, video show, news paper	10	150	100
12.	Biocontrol of pest and diseases	Biological control of sugarcane borers	Training, leaf lets, exposure visit, video show, news paper	24	230	171
13.	Bee keeping	Bee keeping for rural youth	Training, leaf lets, exposure visit, video show, news paper	10	25	103 units
14.	Integrated pest management	Integrated pest management in brinjal	Training, leaf lets, exposure visit, video show, news paper	13	121	78
15.	Integrated pest management	Microbial control of tomato fruit and shoot borer	Training, leaf lets, exposure visit, video show, Kisan mela	10	61	35
16.	Freshwater prawn culture	Freshwater prawn culture	Trainings, exposure visit, kisan mela, video show	17	51	32

17	Breeding and culture of ornamental fishes	Ornamental fish culture	Trainings, exposure visit, kisan mela, video show	9	41	17 unit
18	Integrated fish farming	Pond based farming system	Trainings, exposure visit, kisan mela, video show	17	41	26
19	Backyard poultry management	Backyard poultry rearing	Trainings, exposure visit, kisan mela, video show	19	72	48 unit
20	Income generation activity for empowerment of rural women	Paddy straw mushroom cultivation	Leaf let, Poster, Training, Group discussion, TV talk, New paper coverage	19	63	-
21	Household food security by kitchen gardening and nutritional gardening	Nutritional gardening	Leaf let, Poster, Training, Group discussion, TV talk, New paper coverage	4	56	-
22	Medicinal and aromatic plants	Medicinal plants for home garden	Leaf let, Poster, Training, Group discussion, TV talk, New paper coverage	2	37	-
23	Income generation activity for empowerment of rural women	Oyster mushroom cultivation	Leaf let, Poster, Training, Group discussion, TV talk, New paper coverage	10	125	-
24	Tuber crops Production and management technology	Introduction of Elephant Foot Yam var. Gajendra	Training, Farm Visit, Exposure visit, Film show	25	180	11

b. **Details of FLDs implemented during 2007-08 (Rabi 2007 & kharif 2008)**(Information is to be furnished in the following three tables for each category i.e. cereals, horticultural crops, oilseeds, pulses, cotton and commercial crops.)

Sl. No.	Crop	Thematic area	Technology Demonstrated	Season and year	Area (ha)		No. of farmers/ demonstration			Reasons for shortfall in achievement
					Proposed	Actual	SC/ST	Others	Total	
1.	Paddy	Green manuring in direct seeded kharif paddy	Integrated crop mgt.	Kharif 2008	5ha	4.8ha	1	14	15	Inadequate planting material
2.	Moong	Fertilizer mgt. in moong	Integrated crop mgt.	Rabi2008	4ha	4ha	0	10	10	
3.	Sunflower	Micronutrient mgt. in sunflower	Weed mgt.	Rabi2008	4ha	4ha	2	8	10	
4.	Sugarcane	Weed mgt. in sugarcane	Weed mgt.	Rabi2008	4ha	4ha	0	8	10	
5.	Vermiculture	Enrichment of rural compost	Vermiculture	Rabi2008	10units	10 units	0	10	10	
6.	Paddy	IPM	IPM in rice	Kharif2008	2	2	2	8	10	
7.	Sugarcane	Biological control of pest and diseases	Bio control of pest and diseases	Kharif2008	8ha	8ha	5	15	20	
8	Paddy	Field loss minimization	Management of field rats	Rabi2008	0.4	0.4	0	4	4	
9	Brinjal	Integrated pest mgt.	Integrated pest mgt. for fruit and shoot borer and weed complex in brinjal.	Rabi2008	0.4	0.4	0	4	4	
10	Beekeeping	Beekeeping	Beekeeping	Rabi2008	10units	10 units	0	10	10	
11	Banana	Fruits Cultivation of fruits	Cultivation of Tissue cultured banana Bantala	Kharif 2008	0.40	0.45	0	8	8	
12	Papaya	Fruits Cultivation of fruits	Cultivation of hybrid papaya Red Lady	Kharif 2008	0.40	0.2	0	4	4	Unavailability of planting material
13	Elephant Foot Yam	Tuber crops Production and management technology	Introduction of Elephant foot yam var. Gajendra	Kharif 2008	0.02	0.01	10	-	10	Unavailability of planting material.
14	Turmeric	Spices Production and management technology	Introduction of improved turmeric Var. roma, suroma, ranga, rashmi	Kharif 2008	0.05	0.08	4	6	10	
15	Arrowroot	Production and mgt. technology.	Varietal substitution with arrowroot.	Summer 2008	0.5	0.5	25	-	25	
16	Prawn (Scampi)	Freshwater prawn culture	Freshwater prawn culture	Kharif2008	1ha	0.3ha	0	4	4	Fund
17	Ornamental	Breeding and culture of	Ornamental fish culture	Rabi	10nos	10nos	0	10	10	

	fish	ornamental fishes		2007-08						
18	Indian major Carps	Pond based integrated farming system	Pond based farming system	Kharif2008	2Ha	1.4ha	1	3	4	Fund
19	Poultry	Backyard poultry management	Backyard poultry rearing	Rabi 2007-08	20nos	20nos	14	6	20	-
20	Indian major Carps	Composite fish culture	Introduction of stunted finger ling and yearling for more production	Kharif 2008	1ha	0.8ha	0	4	4	Fund
21	Vegetables and fruits	Household food security by kitchen gardening and nutritional gardening	Development of nutritional garden	Kharif 2007	0.1	0.1	-	10	10	-
22	Oyster Mushroom	Mushroom production	Cultivation of oyster mushroom	Rabi 2007-08	20 Units	20 Units	-	20	20	-
23	Mango & lemon	Value addition	Preparation of preserved products from mango and lemon	Kharif 2008	10 units	10 units	1	9	10	-
24	Paddy straw mushroom	Mushroom production	Cultivation of paddy straw mushroom	Kharif 2008	20 units	20 units	1	19	20	-
25	Vegetables and fruits	Household food security by kitchen gardening and nutritional gardening	Development of nutritional garden	Kharif 2008	10 units	10 units	5	5	10	-
26	<i>Acacia Mangium</i>	Integrated farming system	Growing of fast growing tree sps Acacia mangium in the field bunds	Kharif 2007	3 ha	1.15 ha	-	4	4	Non availability of sufficient planting material
27	Teak	Production technology	Plantation of teak in the community waste land of the villages with people participation	Kharif 2007	1 ha	0.25 ha	35	165	200 (entire village)	Non availability of sufficient planting material
28	<i>A. mangium</i> , <i>A. auriculiformis</i> Teak	Integrated farming system	Raising of multipurpose tree species in back yard for meeting the demand for fuel wood, timber & fodder	Kharif 2007	0.25 ha	0.25 ha	12	18	30	
29	<i>Acacia Mangium</i>	Integrated farming system	Growing of fast growing tree sps Acacia mangium in the field	Kharif 2008	3 ha	3 ha	2	11	13	

			bunds							
30	Teak, Eucalyptus, Acacia, Mangium	Production technology	Plantation of teak in the community waste land of the villages with people participation	Kharif 2008	0.4 ha	0.4 ha			Entire village community	
31	<i>A. mangium</i> , <i>A. auriculiformis</i> Teak	Integrated farming system	Raising of multipurpose tree species in back yard for meeting the demand for fuel wood, timber & fodder	Kharif 2008	0.25 ha	0.25 ha	10	20	30	
32	<i>Bambusa vulgaris</i>	Production technology	Raising of Bamboo through culm cutting matter	Kharif 2008	1ha	0.4ha	1	3	4	Non availability of sufficient planting material.

Details of farming situation

Crop	Season	Farming situation (RF/Irrigated)	Soil type	Status of soil			Previous crop	Sowing date	Harvest date	Seasonal rainfall (mm)	No. of rainy days
				N	P	K					
Paddy	Kharif 2008	Rainfed	Sandy loam to clay	Low	Medium	High	Paddy	10-20.6.08	Not harvested		
Moong	Rabi 2008	Rainfed	Sandy loam	Low/medium	Low	medium	Paddy	2-5.01.08	10-14.3.08		
Sunflower	Rabi 2008	Rainfed	Sandy loam to clay	Low/medium	Low	medium	-	1-3.12.08	21-23.3.08		
Sugarcane	Rabi 2008	Irrigated	Sandy loam	Medium land	High	Upland	Paddy	3-8.2.08	Not harvested		
Vermiculture	Rabi 2008	Rainfed	Sandy loam to clay	-	-	-	-	20-28.3.08	10.06.08 & 20.08.08		

Paddy	Kharif 2008	Rainfed	Sandy loam	Low/medium	Low	medium	Colocasia	10-18.6.08	Not harvested		
Sugarcane	Kharif 2008	Irrigated	Sandy loam to clay	Low/medium	Low	medium	-	26-29.8.08	-	-	-
Paddy	Rabi 2008	Rainfed	Sandy loam	Low	Medium	High	Paddy	5-10.7.07	29.11.07 to 5.12.07		
Brinjal	Rabi 2008	Rainfed	Sandy loam to clay	Low	Medium	High	Vegetable	5-10.1.08	20.4.08		
Beekeeping	Rabi 2008	Rainfed	Sandy loam	-	-	-	-	15-30.3.08	Not harvested		
Banana	Kharif 2008	Irrigated medium land	Loamy to clay loam	Low/medium	Low	medium	Fodder	15.8.08 to 21.8.08	Not harvested		
Papaya	Kharif 2008	Irrigated medium land	Loamy	Low/medium	Low	medium	Vegetables	21.8.08 to 23.8.08	Not harvested		
Elephant foot Yam	Kharif 2008	Rainfed upland	Alluvial soil	Low/medium	Low	medium	Rabi greengram	13.7.08 to 3.8.08	Not harvested		
Turmeric	Kharif 2008	Rainfed sloppy upland	Loamy	Low/medium	Low	medium	Colocasia	3.07.08 to 15.07.08	Not harvested		
Arrowroot	Summer 2008	Local selection	Red laterite	Medium land	High	Upland	Paddy	30.1.08	Not harvested		
Prawn	Kharif 2008	Rainfed	Clay loam	-	-	-	IMC	Aug'08	Awaited		
Ornamental fish	Rabi 2007-08	Rainfed	Cemented tank	-	-	-	-	April'08	Aug'08 onwards		
Fish	Kharif 2008	Rainfed	Clay loam	-	-	-	IMC	July'08	Awaited		
Poultry	Rabi 2007-08	Rainfed med land	Backyard	-	-	-	Desi Bird	Feb 08	Awaited		
Fish	Kharif 2008	Rainfed low land	Clay loam	-	-	-	Fish fry	Sept'08	Awaited		
Vegetable and fruits	Kharif 2007	Rainfed	Loamy	Low	Medium	High	Fallow	17.08.07-22.9.07	2.9.07 onwards		
Oyster	Rabi	Rainfed	Sandy	-	-	-	Unused space	28.11.07 -	18.12.07-		

mushroom,	2007-08		loam to clay					30.11.07	12.1.08		
Mango & lemon	Kharif 2008	Rainfed	-	-	-	-	Fallow	5.06.08 onwards	Continuing		
Paddy straw mushroom	Kharif 2008	Rainfed	Sandy loam to clay	-	-	-	Fallow	25.07.08 onwards	Continuing		
Vegetables and fruits	Kharif 2008	Rainfed	Loamy	Low	Medium	High	Unused space	1.08.08 onwards	Continuing		
Acacia mangium	Kharif	Irrigated medium land	Sandy loam	Low/medium	Low	medium	Bunds remain fallow	29.08.07	After 5 th year of plantation.		
Teak	Kharif	Rainfed medium land	Sandy loam	Low/medium	Low	medium	Unutilised land	27.07.07	After 20years of plantation		
A. Mangium, A. auriculiformis Teak	Kharif	Irrigated backyard	Sandy loam	Low/medium	Low	medium	Vegetable growing boundary unutilized	10.08.07	5 th year of plantation onwards.		
Acacia mangium	Kharif	Irrigated medium land	Sandy loam	Low/medium	Low	medium	Bunds remain fallow	15-18.07.08	After 5 th year of plantation.		
Teak, Eucalyptus, Acacia, Mangium	Kharif	Rainfed medium land	Sandy loam	Low/medium	Low	medium	Unutilised land	20-22.08.08	After 20years of plantation		
A. Mangium, A. auriculiformis Teak	Kharif	Irrigated backyard	Sandy loam	Low/medium	Low	medium	Vegetable growing boundary unutilized	7-10.07.08	5 th year of plantation onwards.		
Bambusa vulgaris	Kharif	Rainfed up/medium land	Sandy loam	Low/medium	Low	medium	Unutilized upland	1-8.07.08	5 th year of plantation onwards.		

Performance of FLD

Sl. No	Crop	Technology Demonstrated	Variety	No. of Farmers	Area (ha.)	Demo. Yield Qtl/ha			Yield of local Check Qtl./ha	Increase in yield (%)	Data on parameter in relation to technology demonstrated	
						H	L	A			Demo	Local
1	2	3	4	5	6	7	8	9	10	11	12	13
1.	Paddy	Integrated crop mgt in paddy	Swarna masuri	15	5ha	-	-	-	-	-	-	-
2.	Moong	Integrated crop mgt.in moong	Tarm-1	10	4ha	6.20	5.58	5.78	3.98	45.22	5.78	3.98
3.	Sunflower	Micronutrient application in sunflower	Jwalamukhi	10	4ha	14.75	11.23	12.37	10.97	12.76	12.37	10.97
4.	Sugarcane	Weed mgt in sugarcane.	Co-6907	10	4ha	Results awaited	-	-	-	-	-	-
5.	Vermiculture	Vermiculture	Eosin foitida	10	10units	402kg/m ³	355kg/m ³	372kg/m ³	-	-	372kg/m ³	-
6.	Paddy	IPM in rice	Swarna masuri	10	2ha	Results awaited	-	-	-	-	-	-
7	Sugarcane	Bio control of pest and diseases	CO-6907	20	8ha	Results awaited	-	-	-	-	-	-
8	Paddy	Management of field rats	Pratikshya	10	-	45.35	40.18	42.53	38.89	9.35	42.53	38.89
9	Brinjal	Integrated pest mgt. for fruit and shoot borer and weed complex in brinjal.	Swarna syamali	4	10	272.86	250.54	263.46	180.13	46.26	263.46	180.13
10	Beekeeping	Beekeeping	Apis cerena indica	10	10	Results awaited						
11	Banana	Cultivation of Tissue cultured banana	Bantala	8	0.45ha	Results awaited						
12	Papaya	Cultivation of hybrid papaya	Red Lady	4	0.2ha	Result awaited						
13	Elephant foot	Introduction of	Gajendra	10	0.01	Result	-	-	-	-	-	-

	Yam	Elephant foot yam				awaited						
14	Turmeric	Introduction of improved turmeric	roma, suroma, ranga, rashmi	10	0.08	Result awaited	-	-	-	-	-	-
15	Arrowroot	Production in mgt. technology of Arrowroot	Local selection	25	0.4	Result awaited						
16	Prawn	Freshwater prawn culture	<i>M rosenbergii</i> (Scampi)	4	0.3	Result awaited	-	-	-	-	-	-
17	Ornamental fish	Ornamental fish culture	Live bearer(molly, guppy, swordtail, platy)	10	10units	200Pcs/ Month/ Unit	50Pcs/ Month/ Unit	100Pcs/ Month/ Unit	-	-	110Pcs/Month/Unit	-
18	Fish	Pond based integrated farming system	Indian major Carps, Poultry, Tissue culture banana	4	1.4	Result awaited	-	-	-	-	-	-
19	Poultry	Backyard poultry rearing	Vanaraja	20	20units	4.5kg/bird (6month h)	2.8kg/ bird(6 month)	3.1kg/bird (6 month)	1.3	138%	3.1Kg	1.3Kg
20	Fish	Introduction of stunted fingerling and yearling	stunted fingerling and yearling	4	0.8ha	Result awaited	-	-	-	-	-	-
21	Vegetable and fruits	Development of nutritional garden	High yielding	10	0.1	292kg	372kg	324kg	139kg	110	324kg	139kg
22	Oyster Mushroom	Introduction of oyster mushroom	Pleurotus sajarcaja	20	20 units	2.61 kg/bag	1.37kg /bag	1.56kg/ bag	-	-	1.56kg/bag	-
23	Mango & lemon	Preparation of preserved products from mango & lemon	Indigenous	10	10 units	Result awaited	-	-	-	-	-	-
24	Paddy straw mushroom	Cultivation of paddy straw mushroom	Volvariella volvacea	20	20 units	Result awaited	-	-	-	-	-	-
25	Vegetables & fruits	Development of nutritional garden	High yielding	10	0.1 ha	Result awaited	-	-	-	-	-	-
26	Acacia mangium	Growing of fast growing tree sps. Acacia mangium in	A. mangium	4	1.15	125cm ht	87cm ht	102 ht	-	-	102 ht	-

		field bunds										
27	Teak	Plantation of teak with proper management in the community waste land with people participation	Teak	All villager (200 Nos)	0.25	103cm ht	68cm ht	87cm ht	-	-	87cm ht	-
28	A. Mangium, A. auriculformis Teak	Raising of multi purpose tree species in backyard for meeting the demand for fuel wood, timber & fodder	A. mangium A. auriculformis Teak	30	0.25	120cm ht 115cm ht 107cm ht	83cm ht 76cm ht 64cm ht	110cm ht 104cm ht 93cm ht	-	-	110cm ht 104cm ht 93cm ht	-
29	<i>Acacia mangium</i>	Growing of fast growing tree sps. <i>Acacia mangium</i> in field bunds	A. mangium	13	3	Result awaited	-	-	-	-	-	-
30	Teak, Eucalyptus, Acacia, Mangium	Plantation of teak with proper management in the community waste land with people participation	Teak	Entire village	0.4	Result awaited	-	-	-	-	-	-
31	A. Mangium, A. auriculformis Teak	Raising of multi purpose tree species in backyard for meeting the demand for fuel wood, timber & fodder	A. mangium A. auriculformis Teak	30	0.25	Result awaited	-	-	-	-	-	-
32	<i>Bambusa vulgaris</i>	Raising of Bamboo through culm cutting method.		4	0.4	Result awaited	-	-	-	-	-	-

Economic Impact (continuation of previous table)

Sl. No.	Average Cost of cultivation (Rs./ha)		Average Gross Return (Rs./ha)		Average Net Return (Profit) (Rs./ha)		Benefit-Cost Ratio (Gross Return / Gross Cost)
	Demonstration	Local Check	Demonstration	Local Check	Demonstration	Local Check	
	14	15	16	17	18	19	20
1	Not harvested	-	-	-	-	-	-
2	5900	5250	10207	8350	4307	3100	1.73
3	6250	5600	11900	9850	5650	4250	1.90
4	Not harvested	-	-	-	-	-	-
5	810	-	1950	-	1140	-	2.4
6	Not harvested	-	-	-	-	-	-
7	Not harvested	-	-	-	-	-	-
8	8300	7300	18500	15650	10200	8350	2.22
9	43500	32600	98800	65300	55300	32700	2.27
10	Not harvested	-	-	-	-	-	-
11	Not harvested	-	-	-	-	-	-
12	Not harvested	-	-	-	-	-	-
13	Not harvested	-	-	-	-	-	-
14	Not harvested	-	-	-	-	-	-
15	Not completed	-	-	-	-	-	-
16	Not harvested	-	-	-	-	-	-
17	700	-	2420	-	1720	-	3.45
18	Not completed	-	-	-	-	-	-
19	1000	500	4800	1500	3800	1000	4.8 2.5
20	Not completed	-	-	-	-	-	-
21	Rs.450/- per unit	Rs.140/- per unit	Rs.1752/-	Rs.834/-	Rs.1302	Rs.694/-	3.89
22	Rs.18/-per bag	-	Rs.62.40	-	Rs.44.40	-	3.47
23	Not harvested	-	-	-	-	-	-
24	Not harvested	-	-	-	-	-	-
25	Not harvested	-	-	-	-	-	-
26	Rs. 1800/- (Borne by KVK)	-	After 5 th year of plantation.	-	Results awaited	-	Results awaited
27	Rs. 3100/- (Borne by KVK)	-	After 20years of plantation	-	Results awaited	-	Results awaited
28	Rs. 3000/- (Borne by KVK)	-	5 th year of plantation onwards.	-	Results awaited	-	Results awaited
29	Rs.,3000/- (Borne by KVK)	-	After 5 th year of plantation.	-	Results awaited	-	Results awaited

30	Rs.5000/- (Borne by KVK)	-	After 20years of plantation	-	Results awaited	-	Results awaited
31	Rs. 3000/- (Borne by KVK)	-	5 th year of plantation onwards.	-	Results awaited	-	Results awaited
32	Rs.1500/- (Borne by KVK)	-	5 th year of plantation onwards.	-	Results awaited	-	Results awaited

Analytical Review of component demonstrations (details of each component for rainfed / irrigated situations to be given separately for each season).

Crop	Season	Component	Farming situation	Average yield (q/ha)	Local check (q/ha)	Percentage increase in productivity over local check
Paddy	Kharif 2008	Dhanicha seeds	Rainfed	Not harvested	-	-
Moong	Rabi2008	PSB, Rizobium culture	Rainfed	5.78	3.98	45.22
Sunflower	Rabi2008	Boron	Rainfed	12.37	10.97	12.76
Sugarcane	Rabi2008	Herbicides	Irrigated	Not harvested	-	-
Vermiculture	Rabi2008	Polythene earthworm	Rainfed	372kg/m3	-	-
Paddy	Kharif2008	Neem oil, Biopesticide chemical	Rainfed	Not harvested	-	-
Sugarcane	Kharif2008	Tricocard (T. Chilonis)	Irrigated	Not harvested	-	-
Paddy	Rabi2008	Zinc phosphide	Rainfed	42.53	38.89	9.35
Brinjal	Rabi2008	Biopesticide, Neem cake, Neem oil, P.trap	Rainfed	263.46	180.13	46.26
Beekeeping	Rabi2008	Bee colony, smoker	Rainfed	Not harvested	-	-
Banana	Kharif 2008	Bantala(Tissue cultured)	Irrigated medium land	Not harvested	-	-
Papaya	Kharif 2008	Red Lady	Irrigated medium land	Not harvested	-	-
Elephant foot Yam	Kharif 2008	Gajendra	Rainfed upland	Not harvested	-	-
Turmeric	Kharif 2008	Roma, Suroma, Ranga, Rashmi	Rainfed sloppy upland	Not harvested	-	-
Arrowroot	Kharif 2008	Local	Rainfed upland	Not harvested	-	-
Prawn	Kharif 2008	Fresh water prawn SCAMPI seed (PL)	Rainfed low land	Result awaited	-	-
Ornamental fish	Rabi 2007-08	Livebearer ornamental fish	Irrigated medium land	110nos/PM/tank	-	-
Fish	Kharif 2008	Fish and horticultural seedling	Rainfed low land	Result awaited	-	-
Poultry	Rabi 2007-08	Backyard Vanaraja chicks	Rainfed upland	5.1	1.3kg	292.3
Fish	Kharif 2008	Stunted fish fingerling and yearling	Rainfed low land	Results awaited	-	-
Vegetables and fruits	Kharif 2007	Seeds, seedlings & vermicompost	Rainfed backyard	292 Kg	139Kg	110
Oyster mushroom	Rabi 2007-08	Oyster mushroom spawn and polythene bags		1.56Kg/bag	-	-
Mango & lemon	Kharif 2008	Preservatives and chemicals	In the home	Not harvested	-	-
Paddy straw mushroom	Kharif 2008	Paddy straw mushroom spawn and polythene sheets	Homestead	Not harvested	-	-

Vegetables & fruits	Kharif 2008	Seeds , seedlings and vermicompost	Rainfed backyard	Not harvested		
<i>Acacia mangium</i>	Kharif 2007	Seedling	Irrigated medium land	102cm	-	-
Teak, Eucalyptus, Acacia, Mangium	Kharif 2007	Seedling	Rainfed medium land	87cm	-	-
<i>A. Mangium,</i>	Kharif 2007	Combination of seedlings	Backyard	110cm	-	-
<i>A. auriculiformis</i>				104cm		
Teak, Eucalyptus, Acacia, Mangium				93cm		
<i>Acacia mangium</i>	Kharif 2008	Seedling	Irrigated medium land	Result awaited	-	-
Teak, Eucalyptus, Acacia, Mangium	Kharif 2008	Seedling	Rainfed medium land	Result awaited	-	-
<i>A. Mangium,</i>	Kharif 2008	Combination of seedlings	Backyard	Result awaited	-	-
<i>A. auriculiformis</i>						
Teak						
<i>Bambusa vulgaris</i>	Kharif 2008	Bamboo culm cuttings	Rainfed upland	Result awaited	-	-

Technical Feedback on the demonstrated technologies (Kharif 2007 and Rabi 2007-08)

Technology	Feed Back
Hybrid Papaya (Red Lady) Cultivation	The variety is best suited for table purpose and should not be sold in green stage
Cultivation of Improved Yam	Trailing gives best result
Cultivation of Turmeric/Ginger	Timely earthing-up is a must for better result
Cultivation of Ginger	Rotting problem can be overcome with rhizome treatment and application of neemcake
Performance of <i>Acacia mangium</i>	Farmer show keen interest to raise <i>Acacia mangium</i> in field bunds.
Development of community plantation	Active participation of the farmers of the village in managing the community plantation shows their keen interest for planting teak & maintaining it.
Multipurpose tree species for homesteads	Farmers are interested to plant multipurpose tree species in the backyard which will render them the timber, fuel wood and fodder requirement in the future.
Paddy straw mushroom	Paddy straw should be properly disinfected by hot water treatment.
Oyster mushroom	Oyster mushroom marketing needs more popularisation.
Biocontrol of pest & diseases of sugarcane	Sugarcane variety CO-86032 having high productivity suffers from more wilt and red rot in low lying areas.
Backward poultry rearing	Growth & survivability of Vanaraja poultry is good and will give a good engagement to the women farmer.
Fresh water prawn culture	Good scope for growth in the fresh water prawn culture in the district. The growth & survivability of prawn is good.
Pond based farming system	Farming system will enhance the economic condition of low and marginal farmers.
Safe storage of pulses	Pulses should be stored immediately after harvesting.
Bee keeping	Bee keeping has lot of scope as the district has good coverage of natural forest.
IPM for fruit and shoot borer & weed complex in brinjal	Timely application of pesticides & weedicides has good control over fruit & shoot borer & weed in brinjal.
Vermicompost	Vermicompost in tribal pockets of the district adjoining natural forest has a good future as abundant leaf & litters are available.
Green manuring in kharif paddy	Green manuring with dhanicha should be encouraged in the district.

Farmers' reactions on specific technologies (Kharif 2007 and Rabi 2007-08)

Technology	Feed Back
Biological control of sugarcane borers	Late control of sugarcane borers but giving good results
Biological control of paddy stem borer	Biological control should be incorporated with other control measures
IPM for fruit and shoot borer in brinjal	Very good control obtained
Biological control of groundnut wilt	Late control achieved
Weed control in groundnut	All weed flora not controlled by pendimethalene, other herbicide may be tried
Dhanicha as green manure	Dhanicha is a very good source of organic fertilisers
Introduction of Vanaraja backyard poultry	Interested for commercially culture of vanaraja poultry
Ornamental fish culture	Gold fish breeding interested
Integrated farming system	Interested for poultry in farming system
Fresh water prawn culture	Interested for prawn culture (Scampi) in large scale
Oyster mushroom cultivation	The taste of oyster mushroom is inferior to paddy straw mushroom.
Safe storage of pulses	This storage method should be tested in subsequent years.
Paddy straw mushroom cultivation	Spawn should be adequately available in the locality.
Development of nutritional garden	There should be water facility for the nutritional garden.
Development of medicinal plants	Medicinal garden is helpful to our families
Tissue culture banana Cultivation	Dwarf Cavendish suited for the district as it is less prone to wind damage
Hybrid papaya cultivation	Marketing is a problem for ripe papaya varieties
Cultivation of improved yam	It is well suited for bund planting
Cultivation of Elephant foot yam	Taste is good and can replace potato and yam
Intercropping in orchards	Should be promoted under cashew /mango plantations
Cultivation of Ginger	Rhizome rot resistant varieties should be developed

Extension and Training activities under FLD

Sl. No.	Activity	No. of activities organised	Date	Number of participants	Remarks
Crop Production					
1	Field days				
2	Farmers Training	5	04.12.07 12-13.12.07 15-19.01.08 06-07.02.08 18-19.02.08	20 25 20 20 25	
3	Media coverage	4			ETV Annadata Doordarshan

4	Training for extension functionaries	3	10-11.12.07 11-13.03.08 24.03.08	20 20 20	
Horticulture					
1	Field days				
2	Farmers Training	5	19-22.11.07 24-25.03.08 26-27.03.08 27-28.05.08 29.5.08	20 25 25 25 25	
3	Media coverage	3			ETV Annadata ETV Annadata ETV Annadata
4	Training for extension functionaries	2	23.11.07 19.03.08- 20.03.08	25 20	
Plant protection					
1	Field days	1	30.12.07	50	
2	Farmers Training	6	28-29.01.08 25.02.08 28-29.02.08 03-04.03.08 19-20.03.08 12-13.06.08	25 25 20 25 25 25	
3	Media coverage	3	15.10.07 12.12.07		ETV Annadata ETV Annadata ETV Annadata
4	Training for extension functionaries	1	22-23.11.07	20	
Fisheries					
1	Field days				
2	Farmers Training	11	4-6.10.07 16-17.10.07 14-15.02.08 18-19.2.08 17-18.3.08 25-26.3.08 27-28.5.08 11-12.06.08	20 20 25 25 25 20 25 25	
3	Media coverage	4			ETV Annadata ETV Annadata ETV Annadata ETV Annadata
4	Training for extension functionaries				
Home science					
1	Field days	-	-	-	-
2	Farmers Training	3	12-13.11.07 18-19.11.07 18.03.08	20 20 25	Demonstrations followed by training programmes
3	Media coverage	2		-	E TV Annadata
Forestry					
1	Field days	-	-	-	-
2	Farmers Training	5	12.03.08- 15.03.08 22.04.08-	20 25	

			23.04.08 14.05.08- 15.05.08 18.07.08- 19.07.08 17.08.08- 18.08.08	25 25 25	
3	Media coverage				
4	Training for extension functionaries	2	30.11.07 18.12.07	20 20	

c. Details of FLD on Enterprises

(i) Farm Implements

Name of the implement	crop	No. of farmers	Area (ha)	Performance parameters / indicators	* Data on parameter in relation to technology demonstrated		% change in the parameter	Remarks
					Demon.	Local check		

* *Field efficiency, labour saving etc.*

(ii) Livestock Enterprises

Enterprise	Breed	No. of farmers	No. of animals, poultry birds etc.	Performance parameters / indicators	* Data on parameter in relation to technology demonstrated		% change in the parameter	Remarks
					Demon.	Local check		
Backyard poultry	Vanaraja	20	15	Growth	5.1kg/bird(6month)	1.3kg	292%	

* **Milk production, meat production, egg production, reduction in disease incidence etc.**

(iii) Other Enterprises

Enterprise	Variety/ breed/Species/ others	No. of farmers	No. of Units	Performance parameters / indicators	Data on parameter in relation to technology demonstrated		% change in the parameter	Remarks
					Demon.	Local check		
Mushroom	P. Sajarcaju	20	20	Yield	1.56 kg/bag	-	100	Taste of oyster mushroom is less acceptable than P.S. mushroom
Apiary								
Sericulture								
Vermi compost								

3.3 Achievements on Training (Including the sponsored and FLD training programmes):

A) ON Campus

Thematic Area	No. of Courses	Duration (days)	No. of Participants						Grand Total
			Others			SC/ST			
			Male	Female	Total	Male	Female	Total	
(A) Farmers & Farm Women									
I Crop Production									
Resource Conservation Technologies	1	2	25	-	25	-	-	-	25
Production and use of organic inputs									
Integrated crop management	1	3	25	-	25	-	-	-	25
Productivity enhancement in field crops	1	2	25	-	25	-	-	-	25
II Horticulture									
a) Vegetable Crops									
Production of low volume and high value crop	1	2	25	-	25	-	-	-	25
b) Fruits									
Rejuvenation of old orchards									
Cultivation of fruits	1	2	25	-	25	-	-	-	25
Management of young plant orchard	2	4	40	-	40	10	-	10	50
c) Ornamental Plants									
d) Plantation crops									
e) Tuber crops									
f) Spices									
Production and Management technology	1	1	25	0	25	0	0	0	25
g) Medicinal and Aromatic Plants									
III Soil Health and Fertility Management									
IV Livestock Production and Management									
V Home Science/Women empowerment									
Household food security by kitchen gardening and nutrition gardening									
Design and development of low/minimum cost diet									
Designing and development for high nutrient efficiency diet									
Minimization of nutrient loss in processing									
Gender main streaming through SHGs									
Storage loss minimization techniques									
Value addition									
Income generation activities for empowerment of rural women									
Location specific drudgery reduction technologies									
Rural crafts									
Women and child care									
VI Agril. Engineering									
VII Plant Protection									
Integrated Pest Management	2	4	50	-	50	-	-	-	50
VIII Fisheries									
Composite fish culture	2	4	50	0	50	0	0	0	50
Hatchery management and culture of freshwater prawn	1	2	25	0	25	0	0	0	25

Thematic Area	No. of Courses	Duration (days)	No. of Participants						Grand Total
			Others			SC/ST			
			Male	Female	Total	Male	Female	Total	
IX Production of Inputs at site									
X Capacity Building and Group Dynamics									
XI Agro-forestry									
Integrated Farming Systems	3	6	40	12	52	18	5	23	75
Production technology	1	2	8	5	13	5	7	12	25
TOTAL	17	34	363	17	380	33	12	45	425
(B) RURAL YOUTH									
Production of organic inputs	2	4	34	-	34	1	5	6	40
Mushroom Production									
Value addition	1	2	-	5	05	-	15	15	20
Integrated pest management	1	2	12	2	14	1	5	6	20
Bee keeping	1	5	17	-	17	3	-	3	20
Ornamental fish culture	1	2	20	0	20	0	0	0	20
Fish seed production	1	2	13	0	13	3	4	7	20
Feeding mgt. in fish pond	1	2	15	0	15	1	4	5	20
Industrial plantation	1	4	19	0	19	1	0	1	20
Planting material production	1	4	20	0	20	0	0	0	20
TOTAL	10	27	150	7	157	10	33	43	200
© Extension Personnel									
Bamboo production technology	1	2	18	0	18	2	0	2	20
Cropping systems									
TOTAL	1	2	18	0	18	2	0	2	20

B) OFF Campus

Thematic Area	No. of Courses	Duration (days)	No. of Participants						Grand Total
			Others			SC/ST			
			Male	Female	Total	Male	Female	Total	
(A) Farmers & Farm Women									
I Crop Production									
Weed Management	1	2	23	0	23	2	0	2	25
Integrated Farming	1	1	25	0	25	0	0	0	25
Seed production	1	1	25	0	25	0	0	0	25
Productivity enhancement in field crops									
Production and use of organic inputs									
Integrated crop management	1	2	25	0	25	0	0	0	25
Resource conservation technology	1	1	24	0	24	1	0	1	25
II Horticulture									
a) Vegetable Crops									
Intercropping									
Off-season vegetables	1	2	0	0	0	25	0	25	25
b) Fruits									
Management of young plant/orchards									
Rejuvenation of old orchards	1	2	25	0	25	0	0	0	25
c) Ornamental Plants									
d) Plantation crops									
e) Tuber crops									
f) Spices									
Processing and value addition	1	2	25	0	25	0	0	0	25
g) Medicinal and Aromatic Plants									
Production and management technology									
III Soil Health and Fertility Management									
IV Livestock Production and Management									
Backyard poultry	1	2	0	0	0	0	25	25	25
V Home Science/Women empowerment									
Household food security by kitchen gardening and nutrition gardening									
Design and development of low/minimum cost diet									
Designing and development for high nutrient efficiency diet	1	1	0	0	0	0	25	25	25
Minimization of nutrient loss in processing	1	1	0	0	0	0	25	25	25
Gender main streaming through SHGs									
Storage loss minimization techniques	2	2	0	24	24	0	26	26	50
Value addition									
Income generation activities for empowerment of rural women									
Location specific drudgery reduction technologies	3	3	0	57	57	0	18	18	75
Rural crafts									
Women and child care									
VI Agril. Engineering									
VII Plant Protection									
Integrated Pest Management	4	8	36	9	45	44	11	55	100
Integrated Disease Management	1	1	25	-	25	-	-	-	25
(others) Control of house and field rats	1	1	15	8	23	1	1	2	25
Biocontrol of pest and diseases	1	1	24	-	24	1	-	1	25
VIII Fisheries									
Carp fry and fingerling rearing	1	2	0	0	0	25	0	25	25
Carp breeding and hatchery management	1	2	22	0	22	3	0	3	25
Composite fish culture	1	2	0	0	0	25	0	25	25

Thematic Area	No. of Courses	Duration (days)	No. of Participants						Grand Total
			Others			SC/ST			
			Male	Female	Total	Male	Female	Total	
IX Production of Inputs at site									
X Capacity Building and Group Dynamics									
XI Agro-forestry									
Production technologies	2	4	25	5	30	13	7	20	50
XII Others (Pl. Specify)									
TOTAL	28	43	319	103	422	140	138	278	700
(B) RURAL YOUTH									
Mushroom Production	5	10	19	74	93	1	6	7	100
Vermi-culture									
Soil and water testing	1	2	19	-	19	1	-	1	20
Value addition	3	6	-	59	59	-	1	1	60
Leadership development and SHG formation	1	2	16	0	16	4	0	4	20
Group dynamics	1	2	17	0	17	3	0	3	20
TOTAL	11	22	71	133	204	9	7	16	220
© Extension Personnel									
Resource conservation technologies									
Integrated pest mgt.	1	2	15	5	20	0	0	0	20
Integrated crop management									
Integrated Nutrient management	2	3	34	3	37	0	3	3	40
Integrated pest management	1	2	15	5	20	0	0	0	20
Rejuvenation of old orchards	1	2	18	2	20	0	0	0	20
Protected cultivation technology	1	1	20	5	25	0	0	0	25
Commercial floriculture									
Group Dynamics and farmers organization	1	2	18	0	18	2	0	2	20
Extension methods	1	2	17	0	17	3	0	3	20
Enterprunership development	1	2	16	0	16	4	0	4	20
Reservoir fisheries management									
Natural resource management	1	1	18	0	18	2	0	2	20
Watershed management	1	1	20	0	20	0	0	0	20
Environmental pollution	1	1	19	0	19	1	0	1	20
TOTAL	12	19	210	20	230	12	3	15	245

C) Consolidated table (On and Off Campus)

Thematic Area	No. of Courses	Duration (days)	No. of Participants						Grand Total
			Others			SC/ST			
			Male	Female	Total	Male	Female	Total	
(A) Farmers & Farm Women									
I Crop Production									
Weed Management	1	2	23	-	23	2	-	2	25
Integrated Farming	1	1	25	-	25	-	-	-	25
Seed production	1	1	25	-	25	-	-	-	25
Integrated crop management	2	5	50	-	50	-	-	-	50
Resource conservation technology	2	3	49	-	49	1	-	1	50
Productivity enhancement in field crops	1	2	25	-	25	-	-	-	25
II Horticulture									
a) Vegetable Crops									
Off-season vegetables	1	2	-	-	-	25	-	25	25
Production of low volume and high value crop	1	2	25	-	25	-	-	-	25
b) Fruits									
Rejuvenation of old orchards	1	2	25	-	25	-	-	-	25
Cultivation of fruits	1	2	25	-	25	-	-	-	25
Management of young plant orchard	2	4	40	-	40	10	-	10	50
f) Spices									
Production and Management technology	1	1	25	-	25	-	-	-	25
Processing and value addition	1	2	25	-	25	-	-	-	25
III Soil Health and Fertility Management									

Thematic Area	No. of Courses	Duration (days)	No. of Participants							Grand Total
			Others			SC/ST				
			Male	Female	Total	Male	Female	Total		
c) Ornamental Plants										
d) Plantation crops										
e) Tuber crops										
f) Spices										
g) Medicinal and Aromatic Plants										
Production and management technology										
III Soil Health and Fertility Management										
IV Livestock Production and Management										
Backyard poultry	1	2	0	0	0	0	25	25	25	
V Home Science/Women empowerment										
Designing and development for high nutrient efficiency diet	01	01	-	-	-	-	25	25	25	
Minimization of nutrient loss in processing	01	01	-	-	-	-	25	25	25	
Storage loss minimization techniques	02	02	-	24	24	-	26	26	50	
Location specific drudgery reduction technologies	03	03	-	57	57	-	18	18	75	
VI Agril. Engineering										
VII Plant Protection										
Integrated Pest Management	6	12	86	9	95	44	11	55	150	
Integrated Disease Management	1	1	25	-	25	-	-	-	25	
(others) Control of house and field rats	1	1	15	8	23	1	1	2	25	
Biocontrol of pest and diseases	1	1	24	-	24	1	-	1	25	
VIII Fisheries										
Composite fish culture	3	6	50	0	50	25	0	25	75	
Hatchery management and culture of freshwater prawn	1	2	25	0	25	0	0	0	25	
Carp fry and fingerling rearing	1	2	0	0	0	25	0	25	25	
Carp breeding and hatchery management	1	2	22	0	22	3	0	3	25	
IX Production of Inputs at site										
X Capacity Building and Group Dynamics										
XI Agro-forestry										
Production technologies	3	6	33	10	43	18	14	32	75	
Integrated Farming Systems	3	6	40	12	52	18	5	23	75	
TOTAL	45	77	680	120	800	175	150	325	1125	
(B) RURAL YOUTH										
Production of organic inputs	2	4	34	-	34	1	5	6	40	
Planting material production	1	4	20	-	20	-	-	-	20	
Mushroom Production	5	10	19	74	93	1	6	7	100	
Value addition	4	8	-	64	64	-	16	16	80	
Ornamental fish culture	1	2	20	0	20	0	0	0	20	
Fish seed production	1	2	13	0	13	3	4	7	20	
Feeding mgt. in fish pond	1	2	15	0	15	1	4	5	20	
Integrated pest management	1	2	12	2	14	1	5	6	20	
Bee keeping	1	5	17	-	17	3	-	3	20	
Industrial plantation	1	4	19	0	19	1	0	1	20	
Soil and water testing	1	2	19	-	19	1	-	1	20	
Leadership development and SHG formation	1	2	16	0	16	4	0	4	20	
Group dynamics	1	2	17	0	17	3	0	3	20	
TOTAL	21	49	221	140	361	19	40	59	420	
(C) Extension Personnel										
Integrated pest management	2	4	30	10	40	0	0	0	40	
Integrated Nutrient management	2	3	34	3	37	0	3	3	40	
Rejuvenation of old orchards	1	2	18	2	20	0	0	0	20	

Thematic Area	No. of Courses	Duration (days)	No. of Participants						Grand Total
			Others			SC/ST			
			Male	Female	Total	Male	Female	Total	
Protected cultivation technology	1	1	20	5	25	0	0	0	25
Group Dynamics and farmers organization	1	2	18	0	18	2	0	2	20
Extension methods	1	2	17	0	17	3	0	3	20
Enterprunership development	1	2	16	0	16	4	0	4	20
Natural resource management	1	1	18	0	18	2	0	2	20
Watershed management	1	1	20	0	20	0	0	0	20
Environmental pollution	1	1	19	0	19	1	0	1	20
Bamboo production technology	1	2	18	0	18	2	0	2	20
TOTAL	13	21	228	20	248	14	3	17	265

Date	Clientele	Title of the training programme	Duration in days	Venue (Off / On Campus)	Number of participants Other			Number of SC/ST		
					Male	Female	Total	Male	Female	Total
4.12.07	farmer	Use of bioinoculant in pulses	1	Off	19	-	19	1	-	1
10-11.12.07	Inservice	Nutrient management in organic farming	2	Off	20	-	20	-	-	-
12-13.12.07	farmers	Planting technique in sugarcane	2	On	25	-	25	-	-	-
06-07.2.08	farmer	Integrated weed mgmt. in spring planted sugarcane.	2	Off	17	-	17	3	-	3
18-19.2.08	Farmer	Nitrogen mgmt. in spring planted sugarcane	2	Off	25	-	25	-	-	-
28.02.08-01.03.08	Rural youth	Production and marketing of Azolla and BGA	3	On	20	-	20	-	-	-
11-13.03.08	Inservice	Farming system adopted in organic farming	3	On	20	-	20	-	-	-
24.03.08	Inservice	Management of acid soil	1	Off	16	-	4	4	-	4
29.03.08	Farmer	Hand pollination to increase seed setting in sunflower.	1	Off	25	-	25	-	-	-
22-23.04.08	Farmers and farm woman	Inter cropping system in risk prone rainfed upland	2	Off	-	-	-	25	-	25
28-29.05.08	Rural Youth	Method of soil sample collection for quality analysis	2	Off	19	-	19	1	-	1
11& 15-16.07.08	Farmers and Farm Women	INM in rice	3	On	25	-	25	-	-	-
20-21.08.08	Farmers and Farm Women	Use of bioinoculant in non legume crops	2	On	25	-	25	-	-	-
22-23.11.07	Inservice	Use of bio pesticides and botanicals for pest management in organic farming	2	Off	15	5	20	-	-	-
10-11.12.07	Farmer	Pest mgmt in cole crop	2	On	25	-	25	-	-	-
28-29.01.08	farmer	Pest mgmt in sugarcane	2	On	25	-	25	-	-	-
25.02.08	farmer	Rodent mgmt in agriculture	1	Off	15	8	23	1	1	2
28-29.02.08	Rural youth	IPM in sugarcane	2	On	12	2	14	1	5	6
03-04.03.08	farmer	IPM in pulses	2	Off	-	-	-	20	5	25
19-20.03.08	Farmer	IPM in brinjal	2	Off	-	-	-	20	5	25
18.04.08	Farmers and Farm Women	Biological control of sugarcane borers.	1	Off	24	-	24	1	-	1
27-28.05.08	Farmers and Farm Women	Pest mgmt. in cucurbits	1	Off	11	9	20	4	1	5
12-13.06.08	Farmers and Farm Women	IPM in rice	2	Off	25	-	25	-	-	-
22.07.08	Farmers and Farm Women	Wilt mgmt. in groundnut	1	Off	25	-	25	-	-	-
28-29.08.08	Inservice	IPM Srtategies for crop pest management	2	Off	15	5	20	-	-	-
23-24.07.08	Rural youth	Mushroom production for rural employment	2	Off	19	-	19	1	-	1
12-13.11.07	Rural youth	Commercial cultivation of	2	Off	-	20	20	--	-	-

		oyster mushroom								
18-19.12.07	Rural youth	Commercial cultivation of oyster mushroom	2	Off	-	15	15	-	5	5
30-31.1.08	Rural youth	Value addition to vegetables (Tomato)	2	On	-	5	5	-	15	15
13-14.2.08	Rural youth	Value addition to vegetables(Tomato)	2	Off	-	20	20	-	-	-
16.2.08	Farmers and Farm Women	Use of manual winnower	1	Off	-	25	25	-	-	-
25.2.08	Farmers and Farm Women	Control of house rats	1	Off	-	24	24	-	1	1
18.3.08	Farmers and Farm Women	ITK of store grain pests	1	Off	-	-	-	-	25	25
19.3.08	Farmers and Farm Women	Supplementary diet for pre-school children	1	Off	-	-	-	-	25	25
28.3.08	Farmers and Farm Women	Use of solar cooker to overcome fuel scarcity	1	Off	-	21	21	-	4	4
29.3.08	Farmers and Farm Women	Use of paddle operated paddy thresher	1	Off	-	11	11	-	14	14
18.04.08	Farmers and Farm Women	Method of reducing nutrient loss while cooking	1	Off	-	-	-	-	25	25
16-17.05.08	Rural Youth	Value addition to mango	1	Off	-	19	19	-	1	1
29-30.05.08	Rural Youth	Value addition to mango	2	Off	-	20	20	-	-	-
16-17.07.08	Rural Youth	Commercial cultivation of paddy straw mushroom	2	Off	-	20	20	-	-	-
22-23.07.08	Rural Youth	Commercial cultivation of paddy straw mushroom	2	Off	-	19	19	-	1	1
16.10.07	farmer	Feeding management in fish pond	2	on	15	0	15	1	4	5
17-18.3.08	farmers	Aquatic weed control	2	on	25	0	25	0	0	0
4.10.07	Rural youth	Fish seed production	3	on	13	-	13	3	4	7
14.2.08	Farmers	Backyard poultry	2	off	0	0	0	0	25	25
18.2.08	Farmers	Control of EUS	2	Off	0	0	0	25	0	25
25-26.03.08	Rural Youth	Ornamental fish culture	2	On	20	0	20	0	0	0
27-28.5.08	Farmer	Fish seed production nursery mgt.	2	Off	22	3	25	0	0	0
11-12.6.08	Farmer	Predatory & weed fish mgt.	2	Off	0	0	0	25	0	25
1-2.09.08	Farmer	Multiple stocking and harvesting in fish culture	2	On	25	0	25	0	0	0
5-6.09.08	Farmer	Fresh water prawn culture	2	On	25	0	25	0	0	0
23.11.07	Inservice	Protected cultivation of high value season crop	1	off	21	04	25	0	0	0
19.11.07-22.11.07	Rural youth	Propagation technique for raising improved fruit sapling	4	Off	20	0	20	0	0	0
19.03.08-20.03.08	Inservice	Orchard mgmt. with reference to rejuvenation for old mango orchards	2	Off	18	2	20	0	0	0
24.03.08-25.03.08	Farmer	Care and maintenance of existing cashew orchard	2	Off	20	0	20	0	0	0
26.03.08-27.03.08	Farmer	Value addition to turmeric through curing	2	Off	21	0	21	4	0	4
27-28.5.08	Farmer	Raising of kharif onion	2	Off	25	0	25	0	0	0
29.5.08	Farmer	Raised bed planting of ginger & turmeric	1	On	25	0	25	0	0	0
25-26.08.08	Farmer	Raising cauliflower, cabbage as catch crop	2	On	25	0	25	0	0	0
29-30.08.08	Farmer	Rejuvenation of old and senile mango orchard	2	On	20	0	20	5	0	5
1-2.09.08	Farmer	Management of fruit in coconut and mango	2	On	20	0	20	5	0	5
5-6.09.08	Farmer	Development of high yielding tissue cultured banana	2	On	25	0	25	0	0	0
15.10.07	Inservice	Environmental pollution	1	Off	19	0	19	1	0	1
30.11.07	Inservice	Watershed management	1	Off	20	0	20	0	0	0
18.12.07	Inservice	Natural resource management	1	Off	18	0	18	2	0	2
17.03.08 & 18.03.08	Inservice	Bamboo plantation technology	2	On	18	0	18	2	0	2

19.03.08& 20.03.08	Farmer	Propagation of bamboo through culm cutting method	2	On	8	5	13	5	7	12
12.03.08& 15.03.08	Rural youth	Industrial plantation of eucalyptus, bamboo, mangium and gamhar	4	On	19	0	19	1	0	1
22-23.04.08	Farmers	Growing acacia mangium for profit maximization	2	Off	12	3	15	6	4	10
14-15.05.08	Farmers	Growing eucalyptus for industrial use	2	Off	13	2	15	7	3	10
29-30.07.08	Farmers	Agroforestry system for rainfed as well as irrigated agro ecosystem	2	On	20	0	20	5	0	5
1-2.09.09	Farmers	MPT and their production practices	2	On	10	6	16	6	3	9
5-6.09.08	Farmers	Fuel wood security through home stead forestry	2	On	10	6	16	7	2	9
9.11.07& 30.11.07	Inservice	Community involvement in successful organic farming.	2	Off	18	0	18	2	0	2
13.02.08& 14.02.08	Inservice	Technique of conducting Field Demonstration	2	Off	17	0	17	3	0	3
19.02.08& 20.02.08	Inservice	Agro-consultancy services for entrepreneurship development.	2	Off	16	0	16	4	0	4
28.02.08& 29.02.08	Rural youth	Group dynamics in farmer organization	2	Off	17	0	17	3	0	3
01.03.08& 02.03.08	Rural youth	Importance of formation and mgmt of SHG	2	Off	16	0	16	4	0	4

(D) Vocational training programmes for Rural Youth (1.10.07 to 30.09.08)

Crop / Enterprise	Identified Thrust Area	Training title*	Duration (days)	No. of Participants			Self employed after training			Number of persons employed elsewhere
				Male	Female	Total	Type of units	Number of units	Number of persons employed	
1. Bee keeping.	Abundant forest flora for Apiculture.	Bee keeping for self-employment	10 (5days *2 trgs)	40	-	40	Homestead	30	6	-
2. Vermicompost	Unutilised straws and other bio degradable products	Vermicompost production	5	20	0	20	Homestead	13	2	-
3. Forest nursery	Income generation activity for Rural Youth and production of quality propagation material.	Development and maintenance of forest nursery & raising of quality propagation material.	5	20	-	20	-	1	1	7
4. Organic waste recycling	Unutilised bio degradable products	. Organic waste recycling production of enriched compost	5	20	-	20	-	-	20	-
5 fishery	Stocking material production	Fish seed production	5	20	-	20	-	-	20	-

6. Production of quality planting material	Production of quality planting material	Production of quality planting material under partially controlled environment	5	20	-	20	-	-	20	-
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(E) Sponsored Training Programmes

Sl. No	Title	Thematic area	Month	Duration (days)	Client PF/RV/ EF	No. of courses	No. of Participants						Sponsoring Agency	
							Male		Female		Total			
							Others	SC/ST	Others	SC/ST	Others	SC/ST		Total
	Plasticulture Precision and precision farming		Dec.	2	Farmer	1	26	0	0	0	26	0	26	Dept. of horticulture

3.4. Extension Activities (including activities of FLD programmes)

Nature of Extension Activity	No. of activities	Farmers			Extension Officials			Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Field Day	2	35	65	100	-	-	-	35	65	100
Kisan Mela	1	85	-	85	15	-	15	100	-	100
Kisan Ghosthi	2	20	10	30	10	5	15	30	15	45
Exhibition	1	120	80	200	-	-	-	120	80	200
Film Show	30	650	50	700	50	-	50	700	50	750
Method Demonstrations										
Farmers Seminar	1	300	50	350	10	5	15	310	55	365
Workshop										
Group meetings	62	352	105	457	13	1	14	365	106	471
Lectures delivered as resource persons	32	-	-	-	-	-	-	-	-	-
Newspaper coverage	28	-	-	-	-	-	-	-	-	-
Radio talks										
TV talks	18	-	-	-	-	-	-	-	-	-
Popular articles	10									
Extension Literature	4									
Advisory Services	220	350	150	500	26	20	46	376	170	546
Scientific visit to farmers field	349	260	60	320	19	20	39	279	80	349
Farmers visit to KVK	237	150	30	180	45	12	57	195	42	237
Diagnostic visits	175	125	15	140	22	13	35	147	28	175
Exposure visits	4	40	-	40	-	-	-	40	-	40
Ex-trainees Sammelan										
Soil health Camp										
Animal Health Camp	1	166	-	166	7	-	7	173	-	173
Agri mobile clinic										
Soil test campaigns										
Farm Science Club Conveners meet	4	80	-	80	-	-	-	80	-	80
Self Help Group Conveners meetings	3	-	75	75	-	-	-	-	75	75
Mahila Mandals Conveners meetings	1	-	25	25	-	-	-	-	25	25
Celebration of important days (specify)	3	140	10	150	-	-	-	140	10	150
One stop aqua shop(OSA)	1	1	-	1						1
Total	1189	2874	725	3599	217	76	293	3091	801	3892

3.5 Production and supply of Technological products

SEED MATERIALS

Category	Crop	Variety	Quantity (qtl.)	Value (Rs.)	Provided to No. of Farmers
CEREALS					
OILSEEDS					

PULSES					
VEGETABLES					
FLOWER CROPS					
OTHERS (Specify)					

SUMMARY

Sl. No.	Crop	Quantity (qtl.)	Value (Rs.)	Provided to No. of Farmers
1	CEREALS			
2	OILSEEDS			
3	PULSES			
4	VEGETABLES			
5	FLOWER CROPS			
6	OTHERS(Paddy and Dhanicha)			
TOTAL				

PLANTING MATERIALS

Sl. No.	Crop	Variety	Quantity (Nos.)	Value (Rs.)	Provided to No. of Farmers
FRUITS	Pineapple sucker	Queen	50	125	5
	Papaya seedlings	Red lady FS-1	34 245	340 1225	9
	Lemon		1	11	1
	Mango graft	Amrapalli	28	518	5
	Jackfruit	-	20	100	1
	SPICES	Black Pepper	Panniyur 1 Panniyur 2 Kariamunda	10	50
Dalchini			25	125.00	1
VEGETABLES					
	Brinjal seedlings	Utkal Anushree	2,300	690.00	6
	Tomato seedlings	Aravinda	10,500	3150.00	8
FOREST SPECIES					
	Teak	-	1879	9395	40
	<i>Acacia mangium</i>	-	844	4220	42
	<i>A.ariculiformis</i>	-	150	750	30
	Bamboo		150	1500	4
	Eucalyptus		235	1175	1
ORNAMENTAL CROPS					
	Rose		160	1920.00	5
PLANTATION CROPS					
	-	-	-	-	-
Others (specify)					
	Mushroom	Paddy straw mushroom	6.00kg	300.00	3

SUMMARY

Sl. No.	Crop	Quantity (Nos.)	Value (Rs.)	Provided to No. of Farmers
1	FRUITS	378	1219	21
2	VEGETABLES	12800	3840	14
3	SPICES	35	175	5
4	FOREST SPECIES	3258	17060	117
5	ORNAMENTAL CROPS	160	1920	5
6	PLANTATION CROPS			

7	OTHERS		300	3
	TOTAL	16631	24514	165

BIOPRODUCTS						
Sl. No.	Product Name	Species	Quantity		Value (Rs.)	Provided to No. of Farmers
			No	(kg)		
BIOAGENTS	Earthworm	Eoesina foetida	2000		2000.00	1
BIOFERTILIZERS	Vermicompost	-	-	229.6kg	1722.00	7
BIO PESTICIDES						

SUMMARY

Sl. No.	Product Name	Species	Quantity		Value (Rs.)	Provided to No. of Farmers
			No	(kg)		
1	BIOAGENTS	Eoesina foetida	2000		2000.00	1
2	BIO FERTILIZERS	vermicompost		229.6kg	1722.00	7
3	BIO PESTICIDE					
	TOTAL		200.00	229.6kg	3722.00	8

LIVESTOCK

Sl. No.	Type	Breed	Quantity		Value (Rs.)	Provided to No. of Farmers
			(Nos)	Kgs		
Cattle						
Sheep and Goat						
Poultry	Backyard dual purpose	Vanaraja	879		26370.00	25
Fisheries		Gold fish	20		100.00	1
Others (Specify)						

SUMMARY

Sl. No.	Type	Breed	Quantity		Value (Rs.)	Provided to No. of Farmers
			Nos	Kgs		
1	CATTLE					
2	SHEEP & GOAT					
3	POULTRY	Vanaraja	879		26370.00	25
4	FISHERIES	Gold fish	20		100.00	1
5	OTHERS					
	TOTAL		899		26470.00	26

3.6. Literature Developed/Published (with full title, author & reference)

(A) KVK News Letter (Date of start, Periodicity, number of copies distributed etc.)

(B) Literature developed/published

Item	Title	Authors name	Number
Research papers	1. Stability of spilanthol in flowers of <i>spilanthus acmella</i> in different storage condition.	S. Nayak	1
	2. Sustainable aquaculture for farming system research.	A. K. Swain, G. Das, P. J. Mishra	1
	3. Utilisation of sugarcane baggage as an alternate substrate for economic mushroom production in Nayagarh district.	G. Subudhi, P. K. Prusty, P. J. Mishra	1
	4. Vegetable and human health.	G. Das & P. J. Mishra	1
	5. Concept paper on crop substitution : Growing of arrowroot in elephant damage prone up and medium land rice area of Nayagarh district.	G. Das , P. J. Mishra & A. K. Swain	1
Technical bulletins(Booklet)	Byabasayika bhiti chata chasa.	G Subudhi & P.J.Mishra	500
	Labhajanaka tissue culture kadali chasa.	G Das & P. J. Mishra.	500
	Madhura jala chingudi chasa.	A.K.Swain & P.J. Mishra	500
	Byabasayika Mahumachi palana.	P.K.Prusti & P.J.Mishra	500
Extension literature	Akhu phasalare jala parichalana.	P.J.Mishra , P.K. Banarjee & R.K. Bhol	500
	Jia khata prastuti pranali.	P.K.Prusti , G Das & P.J Mishra	500
	Labhajanaka Baunsa chasa.	S.Nayak, B Parmanik & P.J Mishra	500
	Swayam sahayaka gosthi parichalana.	P.K.Banarjee, G Subudhi & P.J.Mishra	500

(C) Details of Electronic Media Produced

S. No.	Type of media (CD / VCD / DVD / Audio-Cassette)	Title of the programme	Number
1	Documentation of ETV Annadata and doordarshan coverage of KVK activities	1. Scientific production of mushroom	1
		2. T. C Banana and Hybrid papaya cultivation	1
		3. Integrated management for paddy stem borer	1
		4. Scientific production of Yam and Elepahant foot yam.	1
		5. Backyard poultry “ Banaraja” farming.	1
		6. Rearing technique of khaki campbell ducks	1
		7. Technique of Ornamental live bearer fish production.	1
		8. Integrated disease management in groundnut.	1
		9.Fish Hatchery management technology	1
		10. Management of sugarcane crop in rainy season	1
		11. Micro nutrient management in maize	1
		12. Biological control of parthenium grasss	1
		13. Fresh water prawn culture	1
		14. Integrated farming system	1
		15. Integrated farming system for food security.	1
		16. Weed management in upland direct seeded paddy.	1
		17. Water management in sugarcane	1
		18. Management of sugar cane for quality juice.	1

3.7.Success stories/Case studies, if any (two or three pages write-up on each case with suitable action photographs)

ONE STOP AQUA SHOP

1. Name of the Enterprise/Practice/Technology : Ornamental fish breeding selling unit

2. Name and address of the farmer: Sri Bijaya Kumar Parida
S/o Sri Antaryami Parida
Vill: Nuagaon, Block: Nayagarh
Dist: Nayagarh

3. Initial Status: Mr. Bijaya Kumar Parida aged about 34 year is a young man has stopped his education after matriculation. Seven year back he has opened a fiber wielding shop at Nayagarh with bank finance. Within two year of opening of shop due to insufficient business he has closed the shop. He was unable to pay the bank dues and shop rent. He was managing the family somehow. Last year from his friend circle he came to know about the ornamental fish breeding & culture training at Krishi Vigyan Kendra, Nayagarh.

4. KVK intervention (Mandatory activities OFT, FLD, Training): Keeping his interest and background he was trained in ornamental fish breeding and culture practice along with preparation of different types of aquarium for selling. He has been taken for field visit to farmers field in FLD of ornamental fishes. He was taken for exposure visit to CIFA and other private farmers field as well as aqua shops for better knowledge. He was technically trained for selling different aqua products. Booklet on ornamental fish culture was given to him for better knowledge.

5. Innovative extension approach: i) For setting up the business he was attached to the farmers of adopted villages to procure the colour fishes from their respective unit. ii) He has started his own colour fish breeding unit from a deformed sump pit attached to his house. iii) He was trained to prepare ornamental glass boxes as per keeping position of the aquarium in the peoples house. The shape may be triangle, circular, half circular etc.

6. Details of the Technology:

i) Training related to preparation of aquarium like measurement and glass cutting and fixing the glass with the silicon gel and use of paste gun and maximum utilization of one paste tube for more aquarium.

ii) Preparation of different types of fiber hoods for the aquarium for more aquarium of the customer.

iii) Preparation of low cost tanks for breeding of live bearer ornamental fishes and gold fishes.

iv) In gold fish breeding he was advised to feed more proteinous feed to the brood fishes during the breeding season and they were kept in one tank with aquatic plant od hydrilla and plastic thread bunches. Before putting those plants and plastic threads they were treated with $KMnO_4$ solution. After breeding the young ones were fed with proteinous feed.

v) The AQUA SHOP was equipped with all types of feed, fertilizer, medicines, equipment necessary for aquaculture practices.

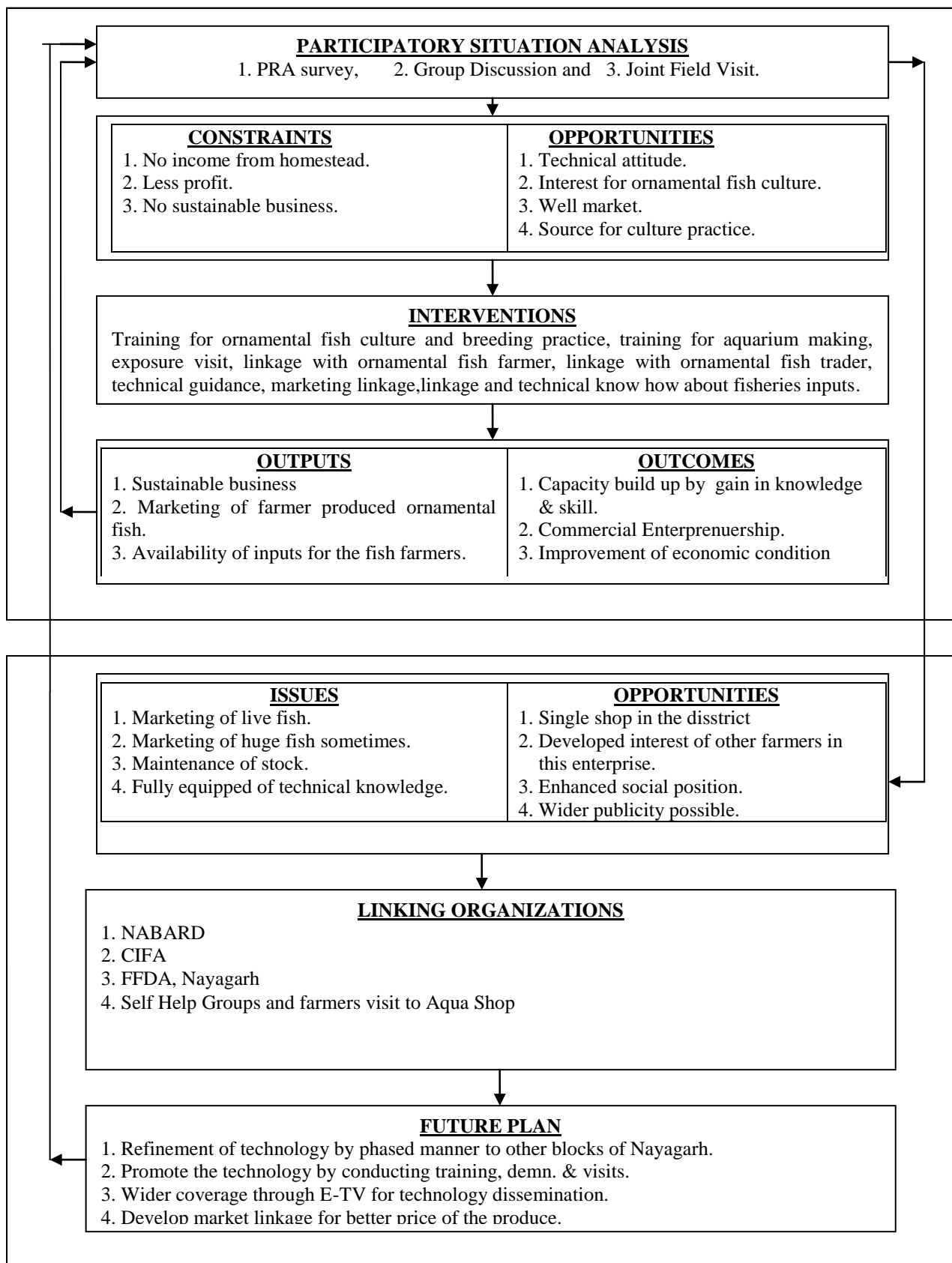
7. Adoption of Technology and benefit to the farmers : With the opening of the aqua shop the ornamental fish farmers can sell their ornamental fishes to the aqua shop and getting money from Sri Bijaya Kumar Parida. Mr. Parida selling those fishes in the nayagarh market as well as bhubaneswar market. The fish farmers of nayagarh district also getting the fish feed for their culture pactice. With this the ornamental fish culture practice also growing well in the district. Now a days he is collecting all the information related to fish for other fish farmers of the district. With this per month he is earning Rs. 7000/- to Rs. 8500/- per month.

8. Farmers reaction and feed back: Mr. Parida is happy with this, he is now managing his family well. Interested to start a big scale ornamental fish unit and feed manufacturing unit with other rural young farmers of the district.

9. Extent of diffusion effect of newly adopted technology: It is new and only aqua shop to the nayagarh district. The aqua shop it is also acts as a visiting place for the people of nayagarh district. It is also act as a disseminating unit in fisheries development of the nayagarh district.

10. Follow up action by KVK: KVK is monitoring his activities in selling the quality fish and fish culture related items and documenting his activities in economic point of view.

8. Model of technology dissemination:



Paddy Straw Mushroom Cultivation

1. **Name of the enterprise/practice/technology:** **Cultivation of paddy straw mushroom**

2. **Name and address of the farmer:** Sri Jagannath Chotu Chasi Sangathana, Machipada, Nayagarh (20 members of Khuntubandha, Machipada, Dhusma, Kaluchupalli, Similissahi, Kumbharia, Kalika Prasad, Badhiasahi and Nadiali).
President: Panu Charan Pradan, Badhiasahi
Secretary: Dhaneswar mantra, Khuntubandha

3. **Initial Status:** Nayagarh District covers 3,94,110 hectares of geographical area out of which major portion is covered with forest, hilly terrains and high lands. Out of the total cultivated area of 1,36,841 ha paddy alone covers 98,000 ha. Therefore a very large quantity of paddy straw is produced which are used mainly as cattle feed and roofing material for thatched houses. Now a day gradually both the number of cattle and thatched houses are decreasing. Hence sufficient quantities of paddy straw are remaining underutilized.

Paddy straw mushroom comes up naturally in heaps of rotten paddy straw particularly during rainy season. It is considered as a delicacy in many parts of the country and fetches a premium price in the market. The cultivation practice of the crop has been standardized now and it can be cultivated round the year. Due to ignorance of this practice it was not cultivated in Nayagarh District. Mr. Panu Charan Pradhan o Badhiasahi village came to know about mushroom demonstration unit of our campus from officers of DAO office Nayagarh and visited our demonstration unit. We encourage him and guide him to start the mushroom production. Badhiasahi is a village situated at a distance of 8 kms. From the district headquarter. Nadiali, Khuntabanda, Machipada, Dhusra, Kalikaprasad are the nearby villages of Badhiasahi. Most of the villages are farm families. We focus our mushroom activities all along these villages.

4. **KVK intervention (mandatory activities OFT, FLD, Training etc. undertaken) :**
Assessing the possibility of production of paddy straw mushroom and its market demand it was mushroom “volvariella volvacea” during kharif season of 2007. Accordingly, training programme on “Commercial cultivation of paddy straw mushroom” was organized in village Nadiali during August 2007 by our KVK. Subsequently tow SHGs namely ‘Sagarika SHG’ and Banani SHG’ of Nadiali produced paddy straw mushroom profitably. Time to time field visits were conducted to surrounding villages and the interested farmers are advised and guided for mushroom cultivation. Interested farmers visited the KVK demonstration unit in different groups and individually.

5. **Innovative extension approach :** After being trained and exposed to the demonstration unit of Krishi vigyan Kendra, Nayagarh Mr. Panu Charan Pradhan and other farmers of nearby villages were very much convinced and show keen interest for paddy straw mushroom cultivation. We advised them to organize fellow farmers to make a group for more mushroom production and better marketing. Mr. Pradhan alongwith Mr. Mantri. Mr. Ullash Sahoo took the initiative to form a group namely “ Sri Jagannath Chhatu Chashi Sangathan with twenty farmers of nearby villages. Feasibility survey of their backyard land was done; availability of spawn and paddy straw was assessed, necessary technical literature were provided and linkage was facilitated with the Center for Tropical Mushroom Research and Training, Bhubaneswar for getting quality spawn. Plan was prepared for construction of mushroom shade, racks in the mushroom shed, soaking tank and so on. After production started one of the group member took the responsibility of spawn supply another member took the marketing responsibility. It was decided by the group to handover the mushroom to Mr. Ullash Sahoo at Machipada for marketing.

6. Details of Technology :

i. Infrastructure : A well ventilated thatched roof construction over pillars with diffused sunlight were constructed. Soaking tank constructed with bricks and cement for soaking of 2 ft x 2 ft sized straw. Two stored bamboo racks were constructed inside the house with 1.5 ft width and required length. Height of 1st and 2nd layers of rack are 1ft and 4 ft respectively. Distance between two racks is 1.5 ft.

ii. Machineries : Straw cutter, water sprinkler, Emersion heater.

iii. Materials : Matured paddy straw mushroom spawn of good quality paddy straw of indigenous variety, transparent polythene, coarsely grinded whole grain flour.

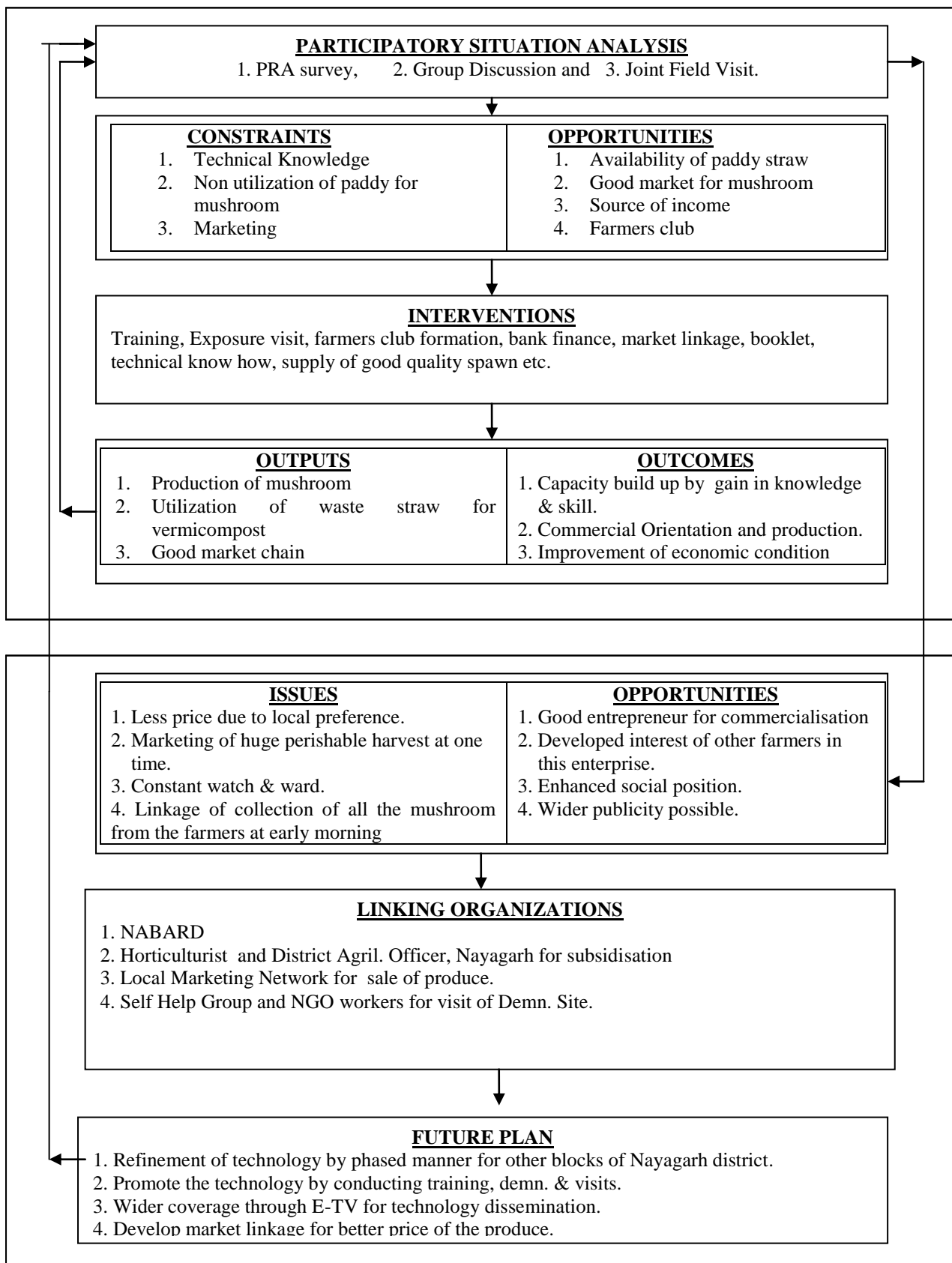
b. Preparation of bed : Two ft. long white paddy straw were soaked for 12-14 hours in clean water, sterilized with hot water/ steam for 1 hour, excess water decanted by slanting position, spawn were broken into thumb sized pieces are divided into 4 parts, gram powder was divided into 4 parts. Then spreaded the straw in 2 ft x 2 ft x 6 -7 inch height in either North-South direction or east-west direction. Applied the spawn only in boarders leaving 3-4 inch from the extreme boarders. Distance between two pieces is 4 inch approximately, one fourth gram powder was applied exactly over the spawn powder was applied exactly over the spawn piece. In the 2nd layer except the reverse direction of spreading of straw other process are similar to the first layer. In the third layer the direction of spreading of straw is reverse to the 2nd layer and over it 2 parts of spawn and 2 parts of grain powder were spread keeping 4" distance between them.

c. Maintenance, after care and plucking covered for 8 days with transparent polythene and then removed and applied clean sprinkled water on the dried portion of the bed. Plucked from the base of mushroom at its egg or bond stage on 11th, 12th, 13th day.

d. Precautions : Disinfestations of mushroom shade with formalin and bleaching powder were made used calcium carbonate in soaking water to reduce acidity of straw. Covered the beds with transparent polythene plucked at bud stage from bottom.

7. **Adoption of the technology and benefit to the farmer :** Approximately 3.5' quintals to 4 quintals of mushroom are now being produced which were collected and marketed at Nayagarh and nearby markets. The members of the farmers club get a fixed price of Rs. 55/kg of mushroom at their door step by selling to the club.
8. **Farmers reaction and feedback :** During April and May the temperature goes above 40⁰C which has an adverse effect on the production by reducing it drastically. This was somewhat controlled by maintaining humidity around the production site by hanging wet gunny bags and intermittent spraying of water.
9. **Extent of diffusion effect of the newly adopted technology :** The motivation provided by the success of paddy straw mushroom cultivation by the farmers club have led farmers particularly ladies and unemployed youth of the surrounding area like Dengaragodi, Rajpatna, Lathipada, Hariharpur etc., to take up the enterprise in a commercial scale by taking advice and help from the farmers club.
10. **Follow up action by KVK :** KVK, Nayagarh has documented this successful intervention and developed a plan to propagate this technology by a training, demonstration, orientation and field visits to other farmers of the district. A programme on the success of this cultivation was also telecasted on E TV Annadata for wider dissemination. Linkages with other marketing and spawn production agencies was done by KVK to bring down the cost of production and increase profit. Paddy straw the by product of mushroom cultivation which is accumulated in a large quantity is being promoted by the KVK to be used as the raw material for vermicomposting. This will go a long way in giving additional return to the farmers. KVK is also refining the cultivation practices through on farm testing.

8. Model of technology dissemination:



3.8 Give details of innovative methodology or innovative technology of Transfer of Technology developed and used during the year

- i) Use of net in one corner of pond to act as nursery unit upto juvenile stages for freshwater prawn culture
- ii) Use of flower pot as fertilization substrate and base for growth of hydrilla plant in ornamental fish tank.
- iii.) Stocking of grass carp in prawn culture for pond fertilization.
- iv) Innovative carrying box for live fish transport.

3.9 Give details of indigenous technology practiced by the farmers in the KVK operational area which can be considered for technology development (in detail with suitable photographs)

S. No.	Crop / Enterprise	ITK Practiced	Purpose of ITK
1	Ginger	Spraying of goat urine	Control rhizome rot
2	Brinjal	Root pruning	Control little leaf
3	Brinjal	Wood Ash Dusting	Control aphids
4	Paddy	Sparying with cowdung water	Control initial blast

3.10 Indicate the specific training need analysis tools/methodology followed for

- Identification of courses for farmers/farm women: Group discussion, diagnostic survey, secondary source
- Rural Youth: PRA survey, Group discussion, farm and home visit, suggestions of line department officials
- Inservice personnel: suggestions of line department officials and NGO personnel, Group discussion, secondary sources

3.11 Field activities

- i. Number of villages adopted: 6
- ii. No. of farm families selected : 74
- iii. No. of survey/PRA conducted : 3

3.12. Activities of Soil and Water Testing Laboratory

Status of establishment of Lab : laboratory not yet established in the KVK.

4.0 IMPACT

4.1. Impact of KVK activities (Not to be restricted for reporting period).

Name of specific technology/skill transferred	No. of participants	% of adoption	Change in income (Rs.)	
			Before (Rs./Unit)	After (Rs./Unit)
Freshwater prawn culture	20	50	0	30,000
Ornamental fish culture	42	60	0	5000
Back yard poultry(vanaraja)	20	45	11000	18500
Tissue cultured banana plantation	30	80	10000	17500

4.2. Cases of large scale adoption

- Freshwater prawn culture area after KVK's intervention has been increased from 0Ha to 25Ha within a span of 3 years
- Ornamental fish culture very popularly adopted in rural youth sector for that one aqua shop for first time in the district developed
- Tissue cultures banana plantation has become popular in the area
- Mushroom cultivation has become popular with SHGs in the district.
- Biological control of sugarcane borers.
- Control of DBM through IPM.

(Please furnish detailed information for each case)

4.3 Details of impact analysis of KVK activities carried out during the reporting period

5.0 LINKAGES

5.1 Functional linkage with different organizations

Name of organization	Nature of linkage
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. Collector & 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.
8.FFDA, Nayagarah	Supply of Fish seed & training support
9.CDVO, Nayagarah	Training and consultancy services for poultry and duckery
10.DFO, Nayagarh	Training and consultancy.
11. ATMA, Nayagarh	SREP, training.
12. ICAR organizations (CIFA, CTCRI, CHES, CARI, NRCWA.	Supply of inputs and technical know how.
13. MPEDA, BBSR	Awareness camp.
14. NISWARTHA, SHRAVANI, CYDA (NGOs)	Training and consultancy
15. Rotary club	Seminar
16. NSCL	Technical guidance
17. DRDA, Nayagarh	Training programme

5.2 List special programmes undertaken by the KVK, which have been financed by State Govt./Other Agencies

Name of the scheme	Date/ Month of initiation	Funding agency	Amount (Rs.)
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5.3 Details of linkage with ATMA: ATMA has been registered during September 2007

a) Is ATMA implemented in your district: Yes

S. No.	Programme	Nature of linkage	Remarks
1.		Programme coordinator as governing body member	-
2.		SMS as Deputy Project Director, ATMA.	-
3.		SMS as SREP member	-

5.4 Give details of programmes implemented under National Horticultural Mission

S. No.	Programme	Nature of linkage	Constraints if any
1.	The National Horticultural Mission Programme is being implemented by the Horticulturist in entire district.	KVK is a member in the District Co-ordination committee for technical support.	-

5.5 Nature of linkage with National Fisheries Development Board

S. No.	Programme	Nature of linkage	Remarks
1.	Training programme	Financial support	Proposal has been submitted
2.	Demonstration unit	-do-	-do-

6. PERFORMANCE OF INFRASTRUCTURE IN KVK

6.1 Performance of demonstration units (other than instructional farm)

Sl. No.	Demo Unit	Year of estt.	Area	Details of production			Amount (Rs.)		Remarks
				Variety	Produce	Qty.	Cost of inputs	Gross income	
1.	Ornamental Fish Hatchery.	2006	4tanks	Live bearers	20	20	340	100	-
2.	Honey beehives.	2006	10 colonies	<i>A. cerana indica</i>	-	-	-	-	-
3.	Vermicompost unit	2006	4pits	<i>E. foetida</i>	-	229.6 kg	500	1722	-
4.	Azolla tank	2006	6 nos.	<i>A. caroliniana</i>	-	-	-	-	-
5.	Nusery for Forest specis	2007	0.04ha	A.mangium A.ariculofermis Teak	-	3258 nos	6500	17060/-	-
6.	Green house renovated	2006	1	Seedlings, saplings of Mango, papaya, blackpepper etc. are raised.	-	-	-	-	-

6.2 Performance of instructional farm (Crops) including seed production

Sl. No	Crop	Area Covered (ha)	Variety	Date of sowing	Date of harvesting	Total production (please specify the unit of yield)/Nos	Cost of inputs (Rs)	Gross income (Rs)	Remarks
1.	Drumstick	0.03	PKM-1	9.7.06	-		200/-		-
2.	Mushroom	-	Paddy Straw & Oyster	25.7.07 To 8.12.07	15.8.07 To 19.12.07	10bed/bag	150/-	400..00	-
3.	Banana	0.06	Dwarf cavendish	13.8.06	12.5.08- 23.7.08	160 dozen	8/-	1280.00	-
4.	Nursery	0.04	A.mangium A.ariculiformis Teak	3.05.08 To 23.5.08	1.07.08- tilldate	3258	6500/-	17060.00	-

6.3 Performance of production Units (bio-agents / bio pesticides/ bio fertilizers etc.,)

Sl. No.	Name of the Product	Qty	Amount (Rs.)		Remarks
			Cost of inputs	Gross income	
	Vermicompost Earthworm	229.6kg 2000	600 500	1722 2000	

6.4 Performance of instructional farm (livestock and fisheries production)

Sl. No	Name of the animal / bird / aquatics	Details of production			Amount (Rs.)		Remarks
		Breed	Type of Produce	Qty.	Cost of inputs	Gross income	
1	backyard poultry	Banaraja	rearing	879	15,000/-	26,370/-	

6.5 Utilization of hostel facilities

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

7. FINANCIAL PERFORMANCE

7.1 Details of KVK Bank accounts

Bank account	Name of the bank	Location	Account Number
With Host Institute	State Bank of India	OUAT branch	
With KVK	State Bank of India	Nayagarh	11383056681

7.2 Utilization of funds under FLD on Oilseed (Rs.)

Item	Released by ICAR		Expenditure		Unspent balance as on 1 st April 2008
	Kharif 2007	Rabi 2007 -08(Rs)	Kharif 2007	Rabi 2007-08	
Inputs	12,250/-	8,750/-	12,250/-	8,736/-	14/-
Extension activities	1575/-	1250/-	1575/-	1250/-	Nil
TA/DA/POL etc.	1750/-	1075/-	1640/-	1075/-	110/-
TOTAL	15,575/-	11,075/-	15,465/-	11,061/-	124/-

7.3 Utilization of funds under FLD on Pulses (Rs.)

Item	Released by ICAR		Expenditure		Unspent balance as on 1 st April 2008
	Kharif 2007	Rabi 2007 -08	Kharif 2007	Rabi 2007-08	
Inputs	-	9190/-	-	9100/-	90/-
Extension activities	-	1315/-	-	1315/-	-
TA/DA/POL etc.	-	1615/-	-	1615/-	-
TOTAL	NIL	12120/-	NIL	12030/-	90/-

7.4 Utilization of funds under FLD on Cotton (Rs.) Not Applicable

Item	Released by ICAR		Expenditure		Unspent balance as on 1 st April 2008
	Kharif 2007	Rabi 2007 -08	Kharif 2007	Rabi 2007-08	
Inputs					
Extension activities					
TA/DA/POL etc.					
TOTAL	NIL	NIL	NIL	NIL	NIL

7.5 Utilization of KVK funds during the year (2006-07)

S. No.	Particulars	Sanctioned (Rs)	Released	Expenditure
A. Recurring Contingencies				
1	Pay & Allowances	20,00,000	20,00,000	20,57,255
2	Traveling allowances	75,000	75,000	75,000
3	Contingencies	2,25,000	2,25,000	2,25,000

A	Stationery, telephone, postage and other expenditure on office running, publication of Newsletter and library maintenance (Purchase of News Paper & Magazines)			
B	POL, repair of vehicles, tractor and equipments			
C	Meals/refreshment for trainees (ceiling upto Rs.40/day/trainee be maintained)			
D	Training material (posters, charts, demonstration material including chemicals etc. required for conducting the training)			
E	Frontline demonstration except oilseeds and pulses (minimum of 30 demonstration in a year)			
F	On farm testing (on need based, location specific and newly generated information in the major production systems of the area)			
G	Training of extension functionaries			
H	Maintenance of buildings			
I	Establishment of Soil, Plant & Water Testing Laboratory			
J	Library			
k	Audit and monitoring			
l	furniture			
TOTAL (A)		23,00,000	23,00,000	23,57,255
B. Non-Recurring Contingencies				
1	Works	49,72,000	49,72,000	33,10,531
2	Equipments including SWTL	1,00,000	1,00,000	99,642
	furniture	50,000	50,000	49,814
3	Vehicle (Four wheeler/Two wheeler, please specify)			
4	Library (Purchase of assets like books & journals)	10,000	10,000	10,000
TOTAL (B)		51,32,000	51,32,000	58,27,242
C. REVOLVING FUND				
GRAND TOTAL (A+B+C)		74,32,000	74,32,000	58,27,242

(2007 – 08)

S. No.	Particulars	Sanctioned (Rs)	Released	Expenditure
A. Recurring Contingencies				
1	Pay & Allowances	30,00,000	30,00,000	29,98,839
2	Traveling allowances	1,00,000	1,00,000	1,00,000
3	Contingencies	6,00,000	6,00,000	6,00,000
A	Stationery, telephone, postage and other expenditure on office running, publication of Newsletter and library maintenance (Purchase of News Paper & Magazines)			85,017
B	POL, repair of vehicles, tractor and equipments			102368
C	Meals/refreshment for trainees (ceiling upto Rs.40/day/trainee be maintained)			156640
D	Training material (posters, charts, demonstration material including chemicals etc. required for conducting the training)			110733
E	Frontline demonstration except oilseeds and pulses (minimum of 30 demonstration in a year)			90589
F	On farm testing (on need based, location specific and newly generated information in the major production systems of the area)			27638
G	Training of extension functionaries			14400
H	Maintenance of buildings			
I	Establishment of Soil, Plant & Water Testing Laboratory			
J	Library			
k	Audit and monitoring			12615
TOTAL (A)		37,00,000	37,00,000	36,98,839
B. Non-Recurring Contingencies				
1	Works	23,95,000	23,95,000	23,27,319
2	Equipments including SWTL & Furniture	95,000	95,000	84,389
3	Vehicle (Four wheeler/Two wheeler, please specify)			

4	Library (Purchase of assets like books & journals)	-	-	-
TOTAL (B)		24,90,000	24,90,000	24,11,708
C. REVOLVING FUND		-	-	48,227
GRAND TOTAL (A+B+C)		61,90,000	61,90,000	61,58,774

(April 2008-upto Aug 25, 2008)

S. No.	Particulars	Sanctioned (Rs)	Released	Expenditure
A. Recurring Contingencies				
1	Pay & Allowances	30,00,000		9,60,499
2	Traveling allowances	1,00,000		25,000
3	Contingencies	6,25,000		1,50,000
A	Stationery, telephone, postage and other expenditure on office running, publication of Newsletter and library maintenance (Purchase of News Paper & Magazines)			
B	POL, repair of vehicles, tractor and equipments			
C	Meals/refreshment for trainees (ceiling upto Rs.40/day/trainee be maintained)			
D	Training material (posters, charts, demonstration material including chemicals etc. required for conducting the training)			
E	Frontline demonstration except oilseeds and pulses (minimum of 30 demonstration in a year)			
F	On farm testing (on need based, location specific and newly generated information in the major production systems of the area)			
G	Training of extension functionaries			
H	Maintenance of buildings			
I	Establishment of Soil, Plant & Water Testing Laboratory			
J	Library			
k	Audit and monitoring			
TOTAL (A)		37,25,000		11,35,499
B. Non-Recurring Contingencies				
1	Works			
2	Equipments including SWTL & Furniture			
3	Vehicle (Four wheeler/Two wheeler, please specify)			
4	Library (Purchase of assets like books & journals)			
TOTAL (B)				
C. REVOLVING FUND				
GRAND TOTAL (A+B+C)				

7.5 Status of revolving fund (Rs. in lakhs) for the three years

Year	Opening balance as on 1 st April	Income during the year	Expenditure during the year	Net balance in hand as on 1 st April of each year
April 2005 to March 2006	1.0	0.17120	0.06901	1.10219
April 2006 to March 2007	1.10219	0.21728	0.16500	1.15447
April 2007 to March 2008	1.15447	0.63950	0.48227	1.31170

8.0 Please include information which has not been reflected above (write in detail).

8.1 Constraints

- a. Administrative: - Adequate land with irrigation needed for seed production programme. Sanction of addl. Post for soil testing and bio control lab e.g. Soil Chemist, Lab Assistant, Lab Attendant.

- b. Technical: - Lack of demonstration units in the campus, establishment of soil testing and bio control lab, Audio-visual like, TV and CD player could improve the efficiency of trainings.

- c. Financial: - Provision for Motor cycle, establishment of demonstration units, training hall, laboratory etc., needed for utilization of manpower and serving the farmer community in a better way.

(Signature of Programme Coordinator)

Other Activities



Field day at Kantabania



Farmers Fair in the Campus



NABARD CGM's Visit



Ist SAC Meeting

Other Activities



Our Farmer being Felicitated By the H'ble VC



Paper presentation at IIT, Kharagpur



KVK Participating in Krushak Sampark Mela

Other Activities



KVK at Nayagarh Mahotav



Release of Beetle for Biological control of Parthenium



Support to SHG's



Field Day at Kantabania

Other Activities



ZC IN Farmers field



Training of Insevice



Director Horticulture addressing farmers



Dean DEE with Nayagarh farmers

Crop Production



Line sowing of Pratikshya Rice



TV talk on ratoon crop management



Training on problematic Acid soil management

Crop Production



Demonstration on Hybrid Sunflower



IWM in Rice



Demonstration in High yielding Groundnut

Plant Protection



Vermicompost Unit in the Instructional Farm



Distribution of Critical Inputs



Biological Control of Sugarcane Borers



Training on Apiculture

Plant Protection



Crop survey in progress



Discussion at farmers field



Training on Mushroom cultivation



Training on Apiculture



Demonstration on pesticide application on oilseeds



Video show on IPM in progress



Training on IPM on Paddy at Biridihi



Vocational Training on Bee Keeping

Home Science



Paddy straw mushroom in Instructional farm



Dhingiri Mushroom under orchard shade



Mushroom demonstration by SHG group



Farmers mushroom unit

Horticulture



Exposure visit to CHES, Bhubaneswar



Demonstration on Tissue cultured banana



Horticulture farmers interacting with Dean



Training on mango grafting

Horticulture



Performance of high yielding wilt resistant brinjal Utkal Anushree



Performance of Hybrid Papaya Red Lady



Crop planning with tribal farmers at Lingribari



Video show on hi-tech horticulture at Janisahi

Horticulture



Training on Nursery management



Performance of high yielding Turmeric Var. Suroma



Performance of high yielding *Curcuma amada*



Performance of hybrid *Capsicum*

Forestry



Planting of Fast growing forest species



Performance of Improved Teak



Distribution of Improved saplings

Forestry



Raising of High quality timber plants



Training on Bamboo propagation



Culm cutting of Bamboo



Teak saplings in Instructional farm

Fishery



Aquaculture Survey of NABARD in progress



Farmers club pisciculture practice



Banaraja Chicks in the in Instructional Farm



Ornamental Fish production in farmer's field

Fishery



Fish Hatchery in Farmers field



Banaraja in farmers backyard



Entrepreneurship development for OSA



Exposure visit of farmers to CIFA

Fishery



Demonstration of Farming system



Backyard Vanaraja unit at Janisahi



Fish seed stocking for demonstration



Pisci-Horti system in farmers field

Fishery



Construction of pond for prawn culture



Animal health camp by KVK



Fish cum duck culture



Prawn culture in Nayagarh

ବାଇଗଣ ଫସଲର କାଳେଡ଼ିଆ ପୋକ ନିୟନ୍ତ୍ରଣ

ଆମ ରାଜ୍ୟରେ ବାଣୀଭାଗମାନେ ଯେତେ ପ୍ରକାରର ପତ୍ରପତ୍ତିକା ଫସଲ ଚାଷ କରିଥାନ୍ତି, ସେଗୁଡ଼ିକ ମଧ୍ୟରେ ବାଇଗଣ ଏକ ମୁଖ୍ୟ ଫସଲ । ବାଇଗଣ ଫସଲକୁ ମୁଖ୍ୟତଃ କାଣ୍ଡ ଓ ଫଳବିକା ପୋକ, ପତ୍ରମୋଡ଼ା ପୋକ, ଉଡୁଣିଆ ପୋକ, କାଳେଡ଼ିଆପୋକ, ନାଲି ଅଣ୍ଟପତ୍ତି, ଧରା ମାଛି ପ୍ରଭୃତି ଆକ୍ରାନ୍ତ କରି ଫସଲରେ ବହୁତ କ୍ଷତି ସୃଷ୍ଟିକରାନ୍ତି । ପୋକଙ୍କ ମଧ୍ୟରେ କାଳେଡ଼ିଆ, ଏକ ବଡ଼ କ୍ଷତିକାରକ ପୋକ ଭାବରେ ବେଶ୍ ଜଣାଶୁଣା । ଉଭୟ ଶୁଦ୍ଧ ଏବଂ ପୂର୍ଣ୍ଣାଙ୍ଗ ପୋକମାନେ ପତ୍ରର ଉଭୟ ପାର୍ଶ୍ଵରୁ ସବୁ ବର୍ଷ ଖୋର୍ଦ୍ଧା କରାନ୍ତି । ଫଳରେ ପତ୍ର, କାଳିକାଳିଆ ହୋଇଯାଏ । ଶେଷରେ ପତ୍ରରେ କେବଳ ଶିରା ରହିଯାଏ । ଆକ୍ରାନ୍ତ ପତ୍ରଗୁଡ଼ିକ ଶୁଖି ରହିବାରୁ ଖେତରୁ ଉତ୍ପାଦନ ହେଉ ନାହିଁ । ପୂର୍ଣ୍ଣାଙ୍ଗ ପୋକ ଦେଖିବାକୁ ଅଣାକୃତି, ପିଠିରେ କବାକାଳ ଏବଂ ସର୍ଦ୍ଦା ଶୁଦ୍ଧ ସହ ଦେଖିବାକୁ ମିଳେ । ଏହାର ଉଚ୍ଚ ଉତ୍ପାଦନ । ଏହି ପୋକର ଶୁଦ୍ଧ ହାଲୁକା ହଳଦିଆ ରଙ୍ଗର ଏବଂ ଏହାର ପିଠିରେ କଣ୍ଠା ଥାଏ । ସ୍ତ୍ରୀ ପୋକଟି ସାଧାରଣତଃ ପତ୍ରର ଚକ୍ରାଗରେ ଅଣା ଦେଇଥାଏ । ଏହି ପୋକର ଜୀବନକାଳ ୧୫-୨୦ ଦିନ ମଧ୍ୟରେ ସରିଥାଏ ।

ସମ୍ପୂର୍ଣ୍ଣ ନିୟନ୍ତ୍ରଣ ପଦ୍ଧତି

- ଶେତରୁ ଅନାକଳା ଘାସ ଓ ବିକଳ ପୋଷକ ଗଛରୁ ସଂଗ୍ରହ କରି ନଷ୍ଟ କରିଦିଅନ୍ତୁ ।
- ଫସଲ ଅମଳ ଶେଷ ପରେ ଫସଲରୁ ମୂଳ ଓ ଅବଶିଷ୍ଟା ଉତ୍ପାଦି ସଂଗ୍ରହ କରି ପୋଡ଼ିଦିଅନ୍ତୁ ।
- ଜିଆରିରେ ଉପକାରୀ କୀଟକ ସଂରକ୍ଷଣ ଉପରେ ଗୁରୁତ୍ଵ ଦିଅନ୍ତୁ ।
- ପ୍ରାଥମିକ ଅବସ୍ଥାରେ ଜିଆରିରୁ କାଳେଡ଼ିଆ ପୋକର ଅଣା, ଶୁଦ୍ଧ ବୋଷା ଏବଂ ପୂର୍ଣ୍ଣାଙ୍ଗ ପୋକକୁ ସଂଗ୍ରହ କରି ନାଶିଦିଅନ୍ତୁ ।

- ନିମ୍ନ ଆଧାରିତ କୀଟନାଶକର ପ୍ରୟୋଗ ।
- ବନାରେ ମିମ୍ବୁକା ମର୍ଦ୍ଦିମ ନାମକ କୀଟନାଶକକୁ ଲିଟର ପିଛା ପାଣିରେ ୩ରୁ ୫ ମିଲି ମିଶାଇ, ୨-୧୦ ଦିନ ଅବଧିରେ ୨ରୁ ୩ ଥର ସିଞ୍ଚନ କରନ୍ତୁ ।
- ଶେଷ ଓଡ଼ିଆ ଚାଷ ସମୟରେ ହେକ୍ଟର ପିଛା ୨ ଟୁନସ୍ପ୍ରେୟ, ନିମ୍ନ ପିଡ଼ିଆ ପ୍ରୟୋଗ କରିଥିଲେ ବାଇଗଣ ଫସଲରେ ପୋକଙ୍କ ପ୍ରାକୃତ ବହୁତ ପରିମାଣରେ କମିଯାଇଥାଏ ।
- ଘରେ ନିମ୍ନରୁ ପ୍ରସ୍ତୁତ ଔଷଧ ତିଆରି କରିବାକୁ ହେଲେ ୧୦ଲିଟର ପାଣିରେ ୫ ଲିଟ୍ରା ନିମ୍ନମର୍ଦ୍ଦିକ ଅଳ୍ପ ହେର୍ଡି ୧୨-୨୪ ଘଣ୍ଟା ଭିତାଇ ରଖନ୍ତୁ । ତା'ପରେ ଏହାକୁ ସରୁ କାଲିଥିବା ଜମାରେ ଉଲଟାକରେ

- ସାବୁନ ଗୁଣ୍ଡ ମିଶାଇ ସିଞ୍ଚନ କରନ୍ତୁ ।
- ୫ଲିଟର ପାଣିରେ ୧କେଟି ନିମ୍ନପତ୍ରରୁ ୧୨ଘଣ୍ଟା ବହୁତ ଉଚ୍ଚତା ପରେ ଏହାକୁ ଛାଣି ପ୍ରତି ଲିଟରରେ ୧ଗ୍ରାମ ନୁରାସପା ସାବୁନ ଗୁଣ୍ଡ ମିଶାଇ ସିଞ୍ଚନ କରନ୍ତୁ । ନିମ୍ନରୁ କୀଟ ଔଷଧକୁ ଫସଲରେ ସିଞ୍ଚନ କରିବାକୁ ହେଲେ ସୂର୍ଯ୍ୟାସ୍ତ ପରେ ଔଷଧ ସିଞ୍ଚନ କରନ୍ତୁ ।
- ଜିଆରିରେ ଯଦି ଅତ୍ୟଧିକ ସଂଖ୍ୟାରେ କାଳେଡ଼ିଆ ପୋକ ଦେଖାଯାନ୍ତି, ତା'ହେଲେ କାର୍ବୋରିଲ (ସେଲିକ୍) ୪ ଗ୍ରାମ ନିମ୍ନ ଡିମିକାଟି (କୁଲାର) ୧ ମିଲି କିମ୍ବା ମନୋକ୍ସୋନୋପ୍ରୋପ ୧.୫ ମିଲି ପ୍ରତି ଲିଟର ପାଣିରେ ମିଶାଇ ସିଞ୍ଚନ କରନ୍ତୁ ।



ଛାଣି ଆଉ ୯୦ ଲିଟର ପାଣି ମିଶାଇ ଏହାକୁ ୧୦୦ ଲିଟର କରନ୍ତୁ । ପ୍ରତି ଲିଟର ପାଣିରେ ୧ଗ୍ରାମ ନୁରା ସପା

-ପ୍ରମୋଦ କୁମାର ପୁଷ୍ପି, ଜ୍ୟେଷ୍ଠ ପ୍ରସିଦ୍ଧିକର୍ତ୍ତା ମିଶ୍ର କୃଷିବିଜ୍ଞାନ କେନ୍ଦ୍ର, ନୟାଗଡ଼