



ANNUAL PROGRESS REPORT

(2007-08)

**KRISHI VIGYAN KENDRA, DIST: PURI
KAKATPUR – 752 108**

**ORISSA UNIVERSITY OF AGRICULTURE AND TECHNOLOGY
BHUBANESWAR - 3**

ANNUAL REPORT OF KVK, PURI

(01-04-2007 to 31-03-2008)

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	
PURI	Krishi Vigyan Kendra, Puri At: Block Colony, Kakatpur Dist: Puri, Pin: 752 108	09437633770			purikvk@yahoo.co.in

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 and Technology (OUAT)	Orissa University of Agriculture and Technology (OUAT), Bhubaneswar, Pin: 751 003, Orissa	0674 2392677		067423917 80	vcouat@indiatimes.com

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

Name	Telephone / Contact		
	Residence	Mobile	Email
Dr. Rabinarayan Mishra		094376 33770	purikvk@yahoo.co.in

1.4. Year of sanction: 2006

1.5. Staff Position (as on 30th September 2007)

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. R. Mishra	Programme Coordinator	Fishery	12000-18300 (14940)	01.07.07	Permanent	GEN
2	Subject Matter Specialist	Sri H. K. Sahoo	Subject Matter Specialist	Agronomy	10000-15200 (10650)	08.08.06	Permanent	GEN
3	Subject Matter Specialist	Dr. B. P. Mishra	Subject Matter Specialist	Extension	10000-15200 (10650)	01.11.06	Permanent	GEN
4	Subject Matter Specialist	Sri P. K. Nanda	Subject Matter Specialist	Plant Protection	8000-13500 (8000)	25.08.06	Contractual	GEN
5	Subject Matter Specialist	Mrs. B. Mishra	Subject Matter Specialist	Horticulture	8000-13500 (8000)	30.06.07	Contractual	GEN
6	Subject Matter Specialist	Dr.(Mrs) D. Jena	Subject Matter Specialist	Home Science	8000-13500 (8550)	01.07.07	Contractual	GEN
7	Subject Matter Specialist							
8	Programme Assistant	Sri J. Sahoo	Programme Assistant	Fishery	5500-9000 (5675)	01.07.07	Contractual	OBC
9	Computer Programmer	Sri S. R. Rout	Computer Programmer	Comp. Sc.	5500-9000 (5675)	08.01.07	Contractual	OBC
10	Farm Manager	Sri N. Sasmal	Farm Manager	Soil Science	5500-9000 (5500)	01.07.07	Contractual	GEN
11	Accountant / Superintendent	Sri B. Swain	Accountant / Superintendent		5900-9700 (7300)	12.08.06	Permanent	GEN
12	Stenographer	Sri K. C. Das	Stenographer		4000-6000 (4000)	03.07.07	Contractual	GEN
13	Driver	Sri P.K.Lenka	Driver		3050-4590 (3050)	24.07.07	Contractual	GEN
14	Driver	Sri N.Sahoo	Driver		3050-4590 (3050)	25.07.07	Contractual	GEN
15	Supporting staff							
16	Supporting staff							

1.6. Total land with KVK (in ha) :

S. No.	Item	Area (ha)
1	Under Buildings	Yet to be constructed
2.	Under Demonstration Units	-do-

S. No.	Item	Area (ha)
3.	Under Crops	-
4.	Orchard/Agro-forestry	-
5.	Others	-

1.7. Infrastructural Development:

A) Buildings: Nil

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)
1.	Admin. Building						
2.	Farmers Hostel						
3.	Staff Quarters (6)						
4.	Demo. Units (2)						
5.	Fencing						
6.	Rain Water harvesting system						
7.	Threshing floor						
8.	Farm godown						

B) Vehicles

Type of vehicle	Year of purchase	Cost (Rs.)	Total kms. Run	Present status
TATA Sumo	2007	4.5 lakh	22384	Running

C) Equipments & AV aids

Name of the equipment	Year of purchase	Cost (Rs.)	Present status
Tractor with accessories	2007	5.0 lakh	Working condition

1.8. A). Details SAC meeting* conducted in the year :

Sl. No.	Date	Number of Participants	Salient Recommendations	Action taken
1.	27.10.2007	22	Extending the technical know how on disease management, processing and marketing avenues of betelvine by KVK	The technical know-how on disease management in betelvine is being disseminated in adopted villages through FLD and training programmes. This will be extended to more farmers in future through FIGs.
				The processing (curing) will be taken in collaboration with Dept. of PHT, CAET, OUAT .
			Establishment of Biological Control Laboratory at KVK	Marketing avenues will be developed by line departments.
			Popularisation of colocasia with local elite and high yielding varieties.	It was suggested to procure the bio-control agents from OUAT, BBSR which are available in a nominal price.
			Farmers should be encouraged for potato cultivation in large scale.	FLD and training programs are being conducted by KVK taking HYV like Panisaru-2. Such programmes will be extended to other villages.
			Technical know-how should be provided by KVK to the farmers when required.	KVK is providing technical know-how in adopted villages. For large scale production, special package needs to be initiated by State Govt.
			Popularisation of good variety papaya which will give more number of female plants.	KVK is providing the technical know-how to any farmers when they asked for.
			Implementation of KVK programs in other villages of different blocks in addition to the adopted village.	KVK is initiating to popularize such good varieties released by research stations.
			Popularisation of vermicomposting and mushroom production technologies among farm women.	KVK is organizing training programs on major problems of the crop and fishery enterprises in other villages in addition to adopted villages.
			Pests and disease management in coconut	Training and demonstration programs are being conducted as suggested.
			Training of women SHGs on vegetable cultivation and value addition of milk.	Scientific recommendations are being disseminated to the farmers in this aspect in different villages as per the query of the farmers.

* Attach a copy of SAC proceedings along with list of participants

2. DETAILS OF DISTRICT (2006-07)

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

S. No	Farming system/enterprise
Rice based farming system with following cropping system	
1	Rice-rice (Irrigated)
2	Rice-Groundnut (Rainfed)
3	Rice-Veg. -Veg. (Irrigated)
4	Rice – potato – Sesame / Greengram (Irrigated)
5	Rice – Black gram / Sunflower (Irrigated)
Enterprise	
1.	Dairy
2	Fishery
3	Betelvine
4	Coconut
5	Poultry
6	Goatery / Sheep rearing

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

S. No	Agro-climatic Zone	Characteristics
1	East and South East Coastal Plain Zone	<ol style="list-style-type: none"> Location: $18^{\circ} 46'$ and $20^{\circ} 95'$ N Lat. & $83^{\circ} 48'$ and $87^{\circ} 46'$ E Long. Eastern part of India along the coast of Bay of Bengal It covers 7 revenue districts with 68 revenue blocks Geographical area : 16.84 lakh ha It has a no. of deltas mainly formed by the rivers of Mahanadi, Brahmani, Baitarini and Rushikulya. The Chilka lake lies in the SE part covering an area of approx. 632 sq. km. It has 5 broad soil groups namely Coastal saline and sandy soil, Lateritic soil, Alluvial, Black soil and Red & Lateritic soil Soils are medium in available N, P and K. Climate : Sub-tropical, hot & humid with mean max. temp. of 39.0°C and mean min. temp. of 11.5°C. Av. Annual rainfall is 1360 mm of which 75% is received during monsoon (July-Oct.). Of the 16.84 lakh ha geographical area 2.34 lakh ha is under cultivation and 0.54 lakh ha under forest. Irrigation facility is available to 38.9% of cultivated area. Approx. 30% of cultivated area is High, 35% medium and 35% low lands. Gross cropped area is 19.32 lakh ha with a cropping intensity of 173%. Major crops of the zone are paddy, pulses(B.gram, G.gram & Kulthi), oilseeds(G.nut, til, mustard), sugarcane, vegetable. The popular cropping sequences are paddy-pulses, paddy-G.nut, Paddy-vegetables and sugarcane-ratooning. Total population of the zone is 7.12 mill of which SC and ST communities account for 15% and 17% respectively. About 84.8% of the total land holding are owned by the marginal (4.0 lakh holding) and small farmers (4 lakh holding) having less than 2 ha. There are 10,200 villages in the zone. The agricultural workers constitute 29.33% of the total population.

Agro ecological situation	Characteristics
<ol style="list-style-type: none"> Coastal Alluvial Command Coastal Alluvial Non-command Coastal Alluvial Saline Rainfed Laterite Rainfed Red and Laterite Rainfed brown forest 	

2.3 Soil type/s

S. No	Soil type	Characteristics	Area in ha	
1	Lateritic soil	Loamy sand to sandy loam	The soil is rich in hydrated oxide of Fe, Al, Mn. Soils are sandy loam to loamy on the surface with hard clay pan in sub-surface. The soils are poor in organic matter, N & P but K level is medium. P fixation is high due to presence of Fe & Al oxides.	
2	Coastal alluvial soil	<ul style="list-style-type: none"> Sandy loam to sandy clay loam Loamy sand to sandy clay loam Loamy sand to sandy loam 	The soil is course sand to clay and poor to highly fertile. Light textured soils are low in water holding capacity, base saturation, fertility and weakly acidic. Heavy textured soils are neutral to alkaline. Drainage is poor due to low permeability. The soils are deficient in N, P, S and medium in K.	
3	Coastal saline soil	Sandy loam to clayee	The salinity is max. in May and decreases with onset of monsoon. It is generally lowest during Sept. Soils are rich in soluble salts of chloride & sulphate with Na and Mg. Soils are mostly clay to clay loam in texture. pH varies from 6 – 8 with EC of 10-40 ds/m at 25°C . Ex- Na varies between 10 to 27, low in N & K but maximum in P, sufficient in sulphate, B, Mo & Cl.	

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

S. No	Crop	Area (ha)	Production ('000 MT)	Productivity (Qtl /ha)
1	Rice	189.06	288.08	22.74
2	Maize	0.94	0.17	7.08
3	Green gram	16.31	4.03	2.47
4	Black gram	36.88	9.74	2.64
5	Kulthi	3.70	1.85	2.42
6	Groundnut	11.05	27.05	24.28
7	Sesamum	1.46	0.33	2.26
8	Sunflower	0.51	0.24	4.69
9	Mustard	1.39	0.27	1.95
10	Linseed	0.91	0.15	1.62
11	Potato	0.80	7.90	98.75
12	Onion	0.29	1.92	66.24
13	Vegetables	17.90	472.29	263.85
14	Chilli	0.33	0.28	8.48
15	Coriander	0.41	0.20	4.88
16	Garlic	0.16	0.50	31.25
17	Sugarcane	0.48	32.44	675.8

2.5. Weather data

Month	Rainfall (mm) No. of rainy days in bracket	Temperature ° C		Relative Humidity (%)
		Maximum	Minimum	
April 2007	-			
May 2007	73.3			
June 2007	255.2			
July 2007	152.6			
August 2007	559.0			
September 2007	485.0 (21)			
October, 2007	114 (8)			
November 2007	2(1)			
December 2007	-			
January 2008	43 (3)			
February 2008	35(3)			
March 2008	5 (2)			

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

Category	Population	Production ('000MT)	Productivity
Cattle			
<i>Crossbred</i>	85417	92 (Milk)	
<i>Indigenous</i>	367575		
Buffalo	16649		
Sheep			
<i>Crossbred</i>	307		
<i>Indigenous</i>	74734	1775 (Meat)	
Goats	120128		
Pigs			
<i>Crossbred</i>	4		
<i>Indigenous</i>	2055		
Rabbits	Nil		
Poultry			
<i>Hens</i>		13 mill. Eggs	
<i>Desi</i>	140376		
<i>Improved</i>	125698		
<i>Ducks</i>			
<i>Turkey and others</i>			
<i>Fish</i>		306.95	
<i>Marine</i>		116.88	
<i>Inland</i>		190.07	
<i>Prawn</i>			
<i>Scampi</i>			
<i>Shrimp</i>		24447	

2.7 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	Kakatpur	Kakatpur	Suara	Paddy, G.gram, B.gram, potato, cucumber, colocasia, betelvine, coconut, Dairy, poultry, goatery, Fishery		
2	Kakatpur	Kakatpur	Gokulapur	Paddy, G.gram, B.gram, Brinjal, Tomato, Cabbage, Cauliflower, Pumpkin, Cucumber betelvine, coconut, Dairy, poultry, goatery, Fishery	1. Low yield of crops 2. Low return from betelvine 3. Low milk yield 4. Kid mortality of goats 5. Mortality of poultry birds 6. Fish pond management 7. Poor knowledge 8. Malnutrition of family members 9. Underemployment of RY	1. HY disease resistant varieties 2. Balance nutrition 3. Weed management 4. IPM, INM, IDM 5. Cultivation of fodder 6. Vaccination/ Deworming 7. Fish pond mgt. 8. Capacity building
3	Astaranga	Astaranga	Nandipur	Paddy, G.nut, potato, Vegetables, betelvine, coconut, Dairy, poultry, goatery, Fishery		
4	Astaranga	Astaranga	Sundara	Paddy, Vegetables, betelvine, coconut, colocasia, Dairy, Fishery		

2.8 Priority thrust areas

Sl.No.	Thrust area
1	High yielding rice varieties for medium and low land situation and for saline areas.
2	High yielding groundnut and hybrid sunflower cultivation.
3	High yielding black gram and green gram cultivation.
4	Commercial cultivation of coconut, banana, papaya, betel vine and vegetables.
5	Mushroom cultivation.
6	Integrated pest and disease management.
7	Integrated fish farming and fish health management.
8	Artificial insemination, poultry, duckery and disease control of domestic animals.
9	Profitable dairy and goatery.
10	Profitable floriculture.
11	Organic farming.
12	Value addition to fruits, vegetables and low cost marine fish and prawn.

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	HY rice var. for medium & low land situations and for saline soils	Paddy	Low yield due to salinity	Performance of saline tolerant rice Var. Lunishree		INM			
			Severe weed causes crop loss	Weed mgt. in rice		IWM			
			Low yield of Swarna var. due to high pest & disease incidence	IPM for stem borer in rice	Dem. Of rice var. Pratikshya in medium lands	IPM	Use of ITK for pest control of paddy	Field day	Seed, fertilizer, pesticide
			Low yield of local low land rice var.		Dem. Of low land rice var. Sarala	INM		Field day	Seed, fertilizer, pesticide
2	Cultivation of oilseed	Sunflower	Low yield due to improper cultivation practice of local variety		Introduction of KBSH-1	Package of practices		Field day	Seed, fertilizer, pesticide
3	Cultivation of pulses	Pulse	Low yield of green gram		Introduction of PDM - 139	INM	INM in pulses	Field day	Seed, fertilizer, pesticide
4	Mechanisation in crop cultivation	Paddy	High cost of prodn. Due to high cost of labor in threshing & winnowing and High cost of labor			<ul style="list-style-type: none"> • Use of self propelled transplanter • Use of seed drill for sowing 			
5	Organic farming	Vermicomposting	Low quality composting technology			Vermicomposting	Vermicomposting		
6	Commercial cultivation of veg., coconut, banana, betelvine	Brinjal	Low yield due to traditional practice & pest & disease attack	Yield potential of HYV brinjal (Utkal Keshari)		Package of practices of brinjal cultivation	Safe & judicious use of pesticides	Field day	
		Tomato	Low yield due to wilting	Yield potential of wilt resistant tomato var. Utkal Kumari				Field day	

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	
and IPM & IDM		Pumpkin	Low yield & low market cost		Organic cultivation of HYV Guamala	Package of practices		Field day	Seed, fertilizer,pesticide
		cucumber	Low market cost		FLD on organic cucumber Var Bharatmata and Baisakhi	Package of practices		Field day	Seed, fertilizer,pesticide
		Okra	Low yield due to traditional var.		Cultivation of HY YMV resistant Okra (Selection-10)	Package of practices of okra cultivation		Field day	Seed, fertilizer,pesticide
		Banana	Low profit due to high incidence of pest & disease					Field day	
		Cabbage	Low profit due to high incidence of pest & disease			Package of practices Nursery management			
		coconut	Low profit due to high incidence of pest & disease	Biological control of blackheaded caterpillar		IPM for coconut	Intercropping in coconut orchard	Field day	
		betelvine	Low profit due to high incidence of pest & disease		IDM in betelvine	INM, IPM		Field day	Neem cake, <i>T. viridae</i> , Neem oil, Bordeaux mixture
7	Commercial cultivation of tubercrops	Colocasia	Low yield due to traditional practice		FLD on colocasia var. Panisaru-2	Cultivation practices		Field day	Cormel, fertilizer,pesticide
		Diascoria	Low yield due to traditional practice		Dem. Of Diascoria var. Local elite	Cultivation practices		Field day	Tubers, fertiliser
8	Home management	-	Malnutrition of family members			Kitchen gardening			
			Poor knowledge on safe storage of food grains			Safe storage of pulses			

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.
9	Drudgery reduction	-	Drudgery in parboiling unit			Rice parboiling unit			
10	Mushroom cultivation	Mushroom	Underutilisation of maize stick & sugarcane bagasse, Malnutrition			Oyster & Paddy straw Mushroom cultivation		Field day	
11	Profitable animal husbandry	Dairy	High cost of feed due to non-availability of fodder		Dem of fodder crop (Hyb. Napier) NB-21	Fodder cultivation		Field day	Seed, fertiliser
		Poultry	Low return from local poultry birds			Rearing of Banaraja			
12	Profitable fish farming	Fishery	Low yield due to want of fertilizer			Composite fish farming, Fertiliser application in fish pond	Use of nonconventional manures to substitute RCD		
			Improper pre-&post stocking management			Pre- & post stocking management of fish pond	<ul style="list-style-type: none"> • Fish disease mgt. in ponds • Organic fish farming 	Field day	
			waterbodies remaining Unused along the coast			BW prawn culture		Field day	
			Low yield from backyard ponds			Integrated fish farming Duck-cum-fish & Fish cum Horticulture		Field day	

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.
13	Entrepreneurship development	-	Group conflict, low motivation, lack of entrepreneurship & poor access to information			<ul style="list-style-type: none"> • Conflict management • Leadership development • Agro-entrepreneurship development • Formation of farm science clubs 	<ul style="list-style-type: none"> • Formation of SHGs • Participatory appraisal & analytical tools • Market-led extension • Mgt of Ext information • Motivation skills 		
14	Underemployment of Rural youth	-	Rural youth under employed			<ul style="list-style-type: none"> • Floriculture • VA to fruits, veg, & fish • Seed prod. Of rice & veg. • Integrated fish farming • Poultry & Dairy 	• Floriculture		

3.1. B. Details of each On Farm Testing (OFT)

1.

1	Title of on-farm testing	Assessment of IPM for stem borer in rice
2	Problem diagnose	Low yield of rice due to high incidence of stem borer, 189 th ha area under rice cultivation with yield of 22.74q/ha and 45% area is affected to stem borer
3	Details of technologies selected for assessment	<i>Trichogamma japonicum</i> (50 000/ ha, 5-6 times at 10 days intervals) + Neem oil cake 250kg/ha + Pheromone trap (20/ha)
4	Source of technology	OUAT, Bhubaneswar, 1995
5	Production system and thematic area	Rice-vegetable Integrated pest management
6	Performance of the Technology with performance indicators	Increase in yield by 20% and decrease of stem borer infection by 87.6% over control
7	Final recommendation for micro level situation	Technology selected is recommended for micro level situation but Instead of neem oil cake @250 kg/ha, multineem oil @5 ml/L + Teepol @ 1ml/L needs to be tried
8	Constraints identified and feedback for research	Difficult in availability of Neem oil cake Instead of neem oil cake @250 kg/ha, multineem oil @5 ml/L + Teepol @ 1ml/L needs to be tried
9	Process of farmers participation and their reaction	Farmers participated in each and every stage of operation of technology. Technology is working satisfactorily with 20% increase in yield and decrease of infestation by 87.6%. Hence, needs popularization.

3.1.C. Results of On Farm Testing

Crop/ enterprise	Farming situation	Problem Diagnosed	Title of OFT	No. of trials*	Technology Assessed	Parameters of assessment
1	2	3	4	5	6	7
Rice	Irrigated medium	Low yield of rice due to high incidence of stem borer	IPM for stem borer in rice 'Lalat'	5	<i>Trichogamma japonicum</i> (50 000/ ha, 5-6 times at 10 days intervals) + Neem oil cake 250kg/ha + Pheromone trap (20/ha)	% infestation Yield

* 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
2.0% 48q/ha	Increase in yield by 20% and decrease of stem borer infection by 87.6% over control	Technology is working satisfactorily with 20% increase in yield and decrease of infestation by 87.6%. Hence, needs popularization.	No	NA

Technology Assessed / Refined	*Production per unit	Net Return (Profit) in Rs. / ha	BC Ratio
13	14	15	16
Farmer's practice** Chloropyriphos spray	40q/ha	10250	1.74:1
Technology assessed** <i>Trichogamma japonicum</i> (50 000/ ha, 5-6 times at 10 days intervals) + Neem oil cake 250kg/ha + Pheromone trap (20/ha)	48q/ha	13800	1.92:1
Technology refined**			

*Field crops – kg/ha, * for horticultural crops – kg or t / ha, * milk and meat – litres or kg/animal, * for mushroom and vermi compost kg/unit area.

2.

1	Title of on-farm testing	Bio-Intensive IPM for control of Tobacco Caterpillar in cabbage
2	Problem diagnose	Low profit and yield and cabbage due to high incidence of tobacco caterpillar
3	Details of technologies selected for assessment/refinement	S-NPV (500 LE/ ha, at 15 days intervals)+ Neem oil cake @ 2.5 q/ha + pheromone trap 20/ha, Intercropping mustard @16:1, Provision of bird's perch and Removal of upper leaves
4	Source of technology	OUAT, 1999
5	Production system and thematic area	Rice-vegetable Integrated pest management
6	Performance of the Technology with performance indicators	No. of larvae/plant was observed to be 4 in FP as against Nil in Demonstration. There was 40.5% increase in yield over FP.
7	Final recommendation for micro level situation	The bio-intensive IPM is very effective against tobacco caterpillar in cabbage
8	Constraints identified and feedback for research	Nil
9	Process of farmers participation and their reaction	Farmers participated in each and every stage of operation of technology. Technology is working well but the components like SNPV, Ph. Trap is not available nearby.

3.1.C. Results of On Farm Testing

Crop/ enterprise	Farming situation	Problem Diagnosed	Title of OFT	No. of trials*	Technology Assessed	Parameters of assessment
1	2	3	4	5	6	7
Cabbage	Irrigated	Low profit and yield and cabbage due to high incidence of tobacco caterpillar	Bio-Intensive IPM for control of Tobacco Caterpillar in cabbage	5	S-NPV (500 LE/ ha, at 15 days intervals)+ Neem oil cake @ 2.5 q/ha + pheromone trap 20/ha, Intercropping mustard @16:1, Provision of bird's perch and Removal of upper leaves	Crop stand No. of larvae/pl Disease & pest incidence Yield

* 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
4 no/sq.m	No. of larvae/plant was observed to be 4 in FP as against Nil in Demonstration. There was 40.5% increase in yield over FP.	Technology is working well but the components like SNPV, Ph. Trap is not available nearby.	Nil	Nil
Nil				
Nil				
29500 kg/ha				

Technology Assessed / Refined	*Production per unit	Net Return (Profit) in Rs. / plant / year	BC Ratio
13	14	15	16
Farmer's practice** Malathion spray	21000 kg/ha	18862	3.8:1
Technology assessed** S-NPV (500 LE/ ha, at 15 days intervals)+ Neem oil cake @ 2.5 q/ha + pheromone trap 20/ha, Intercropping mustard @16:1, Provision of bird's perch and Removal of upper leaves	29500 kg/ha	26766	4.1:1
Technology refined**			

*Field crops – kg/ha, * for horticultural crops – kg or t / ha, * milk and meat – litres or kg/animal, * for mushroom and vermi compost kg/unit area.

** Give details of the technology assessed or refined and farmer's practice

3.

1	Title of on-farm testing		Assessment of saline tolerant rice varieties				
2	Problem diagnose		Low yield of prevailing rice varieties due to salinity, 15% of paddy area is affected by salinity				
3	Details of technologies selected for assessment/refinement		Introduction of saline tolerant rice var. 'Lunishree'				
4	Source of technology		OUAT, 2001				
5	Production system and thematic area		Rice-fallow Integrated crop management				
6	Performance of the Technology with performance indicators		Standing crop However, the crop stand is observed to be 50-55 pl/m ² over the control of local var. 35-40 pl/m ²				
7	Final recommendation for micro level situation		Lunishree var. can be grown well in saline areas of coastal districts				
8	Constraints identified and feedback for research		Nil				
9	Process of farmers participation and their reaction		Farmers participated in each and every stage of operation of technology. There is 31% yield increase over Farmers practice. The technology is working well. Hence, needs popularization.				

3.1.C. Results of On Farm Testing

Crop/ enterprise	Farming situation	Problem Diagnosed	Title of OFT	No. of trials*	Technology Assessed	Parameters of assessment	
						1	2
Rice	Rainfed low land	Low yield of prevailing rice varieties due to salinity	Performance of saline tolerant rice varieties	5	HYV Lunishree	Crop stand, No. of grains/panicle, Disease & pest incidence, 1000 seed wt. Yield/ha	

* 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
Crop stand : 50/m ² No. of grains/panicle: 94 Major pest: stemborer 1000 seed wt: 23.3g Yield/ha: 3275 kg/ha	the crop stand is observed to be 50/m ² over the control of local var. 36/m ² . There is 31% yield increase over Farmers practice.	There is 31% yield increase over Farmers practice. The technology is working well. Hence, needs popularization.	Nil	Nil

Technology Assessed / Refined	*Production per unit	Net Return (Profit) in Rs. / unit	BC Ratio
13	14	15	16
Farmer's practice** Local var. Bhandi	2500 kg/ha	1155/q	1.08:1
Technology assessed** HYV Lunishree	3275 kg/ha	4495/q	1.27:1
Technology refined**			

*Field crops – kg/ha, * for horticultural crops – kg or t / ha, * milk and meat – litres or kg/animal, * for mushroom and vermi compost kg/unit area.

** Give details of the technology assessed or refined and farmer's practice

4.

1	Title of on-farm testing	Weed management in rice
2	Problem diagnose	High weed infestation causes crop loss
3	Details of technologies selected for assessment/refinement	Pertilachlor 0.5kg a.i./ha + 1 hand weeding at 50 DAT
4	Source of technology	OUAT, 1996
5	Production system and thematic area	Rice-vegetable Weed management
6	Performance of the Technology with performance indicators	As of now, weed mass/m ² was observed to be 3 against 14 weed mass/m ² in control after 90 days
7	Final recommendation for micro level situation	In medium land transplanted rice, the herbicide is performing well by reducing weed infestation.
8	Constraints identified and feedback for research	Nil
9	Process of farmers participation and their reaction	Farmers participated in each and every stage of operation of technology. Technology is working well but not available in the local market.

3.1.C. Results of On Farm Testing

Crop/enterprise	Farming situation	Problem Diagnosed	Title of OFT	No. of trials*	Technology Assessed	Parameters of assessment
1	2	3	4	5	6	7
Rice (Var. Swarna)	Irrigated medium land Transplanted condition	High weed infestation causes crop loss	Weed management in rice 'Swarna'	5	Pertilachlor 0.5kg a.i./ha + 1 hand weeding at 50 DAT	weed mass/m ² Yield/ha

* 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
3 after harvest	weed mass/m ² was observed to be 3 against 14 weed mass/m ² in control at harvest.	Technology is working well but not available in the local market.	Nil	Nil
4460 kg	There was 13.8% increase in yield over F.P.			

Technology Assessed / Refined	*Production per unit	Net Return (Profit) in Rs. / unit	BC Ratio
13	14	15	16
Farmer's practice** 2 hand weeding at 25 & 50 days after transplanting	3920 kg/ha	6736	1.42:1
Technology assessed** Pertilachlor 0.5kg a.i./ha + 1 hand weeding at 50 DAT	4460 kg/ha	8868	1.52:1
Technology refined**			

*Field crops – kg/ha, *for horticultural crops – kg or t / ha, * milk and meat – litres or kg/animal, *for mushroom and vermi compost kg/unit area.

** Give details of the technology assessed or refined and farmer's practice

5.

1	Title of on-farm testing	Assessment of Yield performance of HYV brinjal			
2	Problem diagnose	Low yield of brinjal due to use of traditional varieties, 7500 ha area with brinjal cultivation			
3	Details of technologies selected for assessment/refinement	Introduction of HYV Utkal Keshari			
4	Source of technology	OUAT,1997			
5	Production system and thematic area	Rice-vegetable Vegetable production			
6	Performance of the Technology with performance indicators	No. of fruits increased from 20 to 35 per plant and yield increased by 20.3% over local variety			
7	Final recommendation for micro level situation	Recommended for micro level situation			
8	Constraints identified and feedback for research	Nil			
9	Process of farmers participation and their reaction	Farmers participated in seedling stage of operation of technology Quality of brinjal is preferred with good market demand			

3.1.C. Results of On Farm Testing

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	Irrigated medium land	Low yield of brinjal due to use of traditional varieties	Yield performance of HYV brinjal	5	T2: HYV Utkal Keshari	Crop stand Disease & pest incidence No. of fruits/plant, Yield/ha

* 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
4/m ²				
Fruit & shoot borer – 5%	No. of fruits increased from 20 to 35 per plant and yield increased by 20.3% over local variety	Variety is good with respect to yield. Quality of brinjal is preferred with good market demand	Nil	Nil
30				
26.25t/ha				

Technology Assessed / Refined	*Production per unit	Net Return (Profit) in Rs. / unit	BC Ratio
13	14	15	16
Farmer's practice** Local Var. with severe wilt (Hazari-10)	20.5t/ha	61,000	3.44:1
Technology assessed** HYV Utkal Keshari	26.25 t/ha	78,000	3.88:1
Technology refined**			

*Field crops – kg/ha, * for horticultural crops -= kg or t / ha, * milk and meat – litres or kg/animal, * for mushroom and vermi compost kg/unit area.

** Give details of the technology assessed or refined and farmer's practice

6.

1	Title of on-farm testing	Assessment of wilt resistant tomato varieties
2	Problem diagnose	Low yield of tomato due to high incidence of wilt, 9500 ha area cultivated with tomato
3	Details of technologies selected for assessment/refinement	Introduction of wilt resistant HYV Utkal Kumari
4	Source of technology	OUAT, 1998
5	Production system and thematic area	Rice-vegetable Vegetable production
6	Performance of the Technology with performance indicators	Wilting reduced by 76% and yield increased by 37.5% over local variety
7	Final recommendation for micro level situation	wilt resistant HYV Utkal Kumari is recommended
8	Constraints identified and feedback for research	Though it is highly wilt resistant and high yielder, it is less preferred by the farmers due to its sourness and low keeping quality.
9	Process of farmers participation and their reaction	Farmers participated in seedling stage of operation of technology And got bumper harvest

3.1.C. Results of On Farm Testing

Crop/ enterprise	Farming situation	Problem Diagnosed	Title of OFT	No. of trials*	Technology Assessed	Parameters of assessment
1	2	3	4	5	6	7
Tomato	Irrigated medium land	Low yield of tomato due to high incidence of wilt	Performance of wilt resistant tomato varieties	5	HYV Utkal Kumari	Crop stand
						Disease & pest incidence
						wilting%
						yield/ha

* 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
3/sq.m	Wilting reduced by 76% and yield increased by 37.5% over local variety	More sour and low keeping quality	Nil	Nil
Fruit borer ~ 5%				
6				
27.5 t/ha				

Technology Assessed / Refined	*Production per unit	Net Return (Profit) in Rs. / unit	BC Ratio
13	14	15	16
Farmer's practice** Local Var. with severe wilt	22.5 t/ha	42500	2.7:1
Technology assessed** HYV Utkal Kumari	27.5 t/ha	59500	3.58:1
Technology refined**			

*Field crops – kg/ha, * for horticultural crops -= kg or t / ha, * milk and meat – litres or kg/animal, * for mushroom and vermi compost kg/unit area.

** Give details of the technology assessed or refined and farmer's practice

7.

1	Title of on-farm testing	Integrated nutrient management in Groundnut
2	Problem diagnose	Low yield due to improper nutrient management
3	Details of technologies selected for assessment	Soil test based chemical & bio-fertiliser Soil Status (Low : medium: Low :: NPK) Rec. Dose : 20:40:40 kg NPK/ha, Applied Dose : 25:40:50 kg/ha, Seed treatment with Rhizobium culture @ 20g/kg kernel, Soil application of PSB @5kg/ ha and Basal application of Gypsum @2.5q/ha
4	Source of technology	OUAT (1984-85 by RRTTS)
5	Production system and thematic area	Rice-groundnut Integrated crop management
6	Performance of the Technology with performance indicators	Result awaited
7	Final recommendation for micro level situation	Recommendation will be made after obtaining final result
8	Constraints identified and feedback for research	Nil
9	Process of farmers participation and their reaction	Farmers participated in each and every stage of operation of technology

3.1.C. Results of On Farm Testing

Crop/ enterprise	Farming situation	Problem Diagnosed	Title of OFT	No. of trials*	Technology Assessed	Parameters of assessment
1	2	3	4	5	6	7
Groundnut (Var. Smruti)	Irrigated Medium	Low yield due to improper nutrient management	Integrated nutrient management in Groundnut	5	Soil test based chemical and bio-fertilizer	Crop stand No. of pods/ plant Disease & pest incidence Soil test after harvest Oil recovery% 100 seed wt Yield

* 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
43/sq. m				
Result awaited	Result awaited	Result awaited	Nil	Nil

Technology Assessed / Refined	*Production per unit	Net Return (Profit) in Rs. / plant / year	BC Ratio
13	14	15	16
Farmer's practice** (TMV-2, No testing of soil, Imbalance use of fert. 10 kg N/ha)	Result awaited		
Technology assessed** Soil test based chemical and bio-fertilizer	Result awaited		
Technology refined**			

*Field crops – kg/ha, * for horticultural crops -= kg or t / ha, * milk and meat – litres or kg/animal, * for mushroom and vermi compost kg/unit area.

** Give details of the technology assessed or refined and farmer's practice

8.

1	Title of on-farm testing	Preventive measures for fish health management
2	Problem diagnose	Low fish yield due to occurrence of disease
3	Details of technologies selected for assessment/refinement	Lime : Turmeric (10:1) @ 200kg/ha two times one during Nov. and another during Jan.
4	Source of technology	College of Fisheries, OUAT, 2003
5	Production system and thematic area	Fish farm Integrated disease management
6	Performance of the Technology with performance indicators	Disease incidence is Nil. Yield/ha result is awaited
7	Final recommendation for micro level situation	Final recommendation can be made after getting the final result .
8	Constraints identified and feedback for research	Result awaited
9	Process of farmers participation and their reaction	Farmers participated in each and every stage of operation of technology.

3.1.C. Results of On Farm Testing

Crop/ enterprise	Farming situation	Problem Diagnosed	Title of OFT	No. of trials*	Technology Assessed	Parameters of assessment
1	2	3	4	5	6	7
Fish culture	Fish farm	Low fish yield due to occurrence of disease	Preventive measures for fish health management	5	Lime : Turmeric (10:1) @ 200kg/ha two times one during Nov. and another during Jan.	Incidence of Disease yield/ha

* 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
Nil	Results awaited	After obtaining final result		
Results awaited				

Technology Assessed / Refined	*Production per unit	Net Return (Profit) in Rs. / plant / year	BC Ratio
13	14	15	16
Farmer's practice** No measure	Results awaited		
Technology assessed** Lime : Turmeric (10:1) @ 200kg/ha two times one during Nov. and another during Jan.	Results awaited		
Technology refined**			

*Field crops – kg/ha, * for horticultural crops – kg or t / ha, * milk and meat – litres or kg/animal, * for mushroom and vermi compost kg/unit area.

** Give details of the technology assessed or refined and farmer's practice

9.

1	Title of on-farm testing	Assessment of power operated paddy thresher
2	Problem diagnose	In Pedal operated thresher, threshing involves more labour and it is time consuming and having low efficiency
3	Details of technologies selected for assessment/refinement	Use of power operated paddy thresher, Hold on type, 1hp single phase electric motor , Threshing efficiency 1.5q/ha
4	Source of technology	OUAT, 1995
5	Production system and thematic area	Management of farm equipments
6	Performance of the Technology with performance indicators	69% more threshing capacity and 2.6% more threshing efficiency over FP
7	Final recommendation for micro level situation	Power operated thresher can replace pedal thresher.
8	Constraints identified and feedback for research	Nil
9	Process of farmers participation and their reaction	Farmers participated in each and every stage of operation of technology Technology working satisfactorily but locally not available

3.1.C. Results of On Farm Testing

Crop/ enterprise	Farming situation	Problem Diagnosed	Title of OFT	No. of trials*	Technology Assessed	Parameters of assessment
1	2	3	4	5	6	7
Farm mechanization (Paddy thresher)	House hold	In Pedal operated thresher, threshing involves more labour and it is time consuming and having low efficiency	Assessment of power operated paddy thresher	5	Use of power operated paddy thresher	Capacity q/ha Threshing efficiency %

* 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
1.5 q/ha	69% more threshing capacity and 2.6% more threshing efficiency over FP	Technology working satisfactorily but locally not available	Nil	Nil
98.5%				

Technology Assessed / Refined	*Production per unit	Net Return (Profit) in Rs. / plant / year	BC Ratio
13	14	15	16
Farmer's practice** Use of pedal operated paddy thresher	45 kg/hr	Total cost involved : Rs972/ha	-
Technology assessed** Use of power operated paddy thresher	145 kg/hr	Rs302/ha	Net Profit: 670/ha
Technology refined**			

*Field crops – kg/ha, * for horticultural crops -= kg or t / ha, * milk and meat – litres or kg/animal, * for mushroom and vermi compost kg/unit area.

** Give details of the technology assessed or refined and farmer's practice

10.

1	Title of on-farm testing	Assessment of egg production of poultry in backyard
2	Problem diagnose	Low egg production from desi birds
3	Details of technologies selected for assessment/refinement	Rearing of Kalinga Brown layers in backyard
4	Source of technology	OUAT, BBSR, 2000
5	Production system and thematic area	Management of farm animals
6	Performance of the Technology with performance indicators	KB birds were reared w.e.f. Feb. 2008. Results awaited
7	Final recommendation for micro level situation	Results awaited
8	Constraints identified and feedback for research	Results awaited
9	Process of farmers participation and their reaction	Farmers participated in each and every stage of operation of technology

3.1.C. Results of On Farm Testing

Crop/ enterprise	Farming situation	Problem Diagnosed	Title of OFT	No. of trials*	Technology Assessed	Parameters of assessment
1	2	3	4	5	6	7
	Landless farmer	Low egg production from desi birds	Assessment of egg production of poultry in backyard	10	Rearing of Kalinga Brown layers in backyard	Egg production/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	Results awaited	Nil	Nil

Technology Assessed / Refined	*Production per unit	Net Return (Profit) in Rs. / plant / year	BC Ratio
13	14	15	16
Farmer's practice** Rearing of Desi bird	Results awaited		
Technology assessed** Rearing of Kalinga Brown layers in backyard	Results awaited		
Technology refined**			

*Field crops – kg/ha, * for horticultural crops – kg or t / ha, * milk and meat – litres or kg/animal, * for mushroom and vermi compost kg/unit area.

** Give details of the technology assessed or refined and farmer's practice

11.

1	Title of on-farm testing	Assessment of inorganic fertilizer on fish yield
2	Problem diagnose	Low fish yield due to nonuse of inorganic fertiliser
3	Details of technologies selected for assessment/refinement	Urea 80kg + SSP 40 kg /ha/yr
4	Source of technology	College of Fisheries, OUAT, BBSR, 1996
5	Production system and thematic area	Fish culture Composite fish culture
6	Performance of the Technology with performance indicators	Results awaited
7	Final recommendation for micro level situation	Final recommendation can be made after getting the final result .
8	Constraints identified and feedback for research	Results awaited
9	Process of farmers participation and their reaction	Farmers participated in each and every stage of operation of technology

3.1.C. Results of On Farm Testing

Crop/ enterprise	Farming situation	Problem Diagnosed	Title of OFT	No. of trials*	Technology Assessed	Parameters of assessment
1	2	3	4	5	6	7
Fish culture	Fish pond	Low fish yield due to nonuse of inorganic fertiliser	Assessment of inorganic fertilizer on fish yield	5	Urea 80kg + SSP 40 kg /ha/yr	Disease incidence
						Water quality
						Plankton concentration
						Fish yield

* 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
Nil	Results awaited	Results awaited	Nil	Nil
pH:7.8, Turbidity:30cm				
2.2ml/100L				
Results awaited				

Technology Assessed / Refined	*Production per unit	Net Return (Profit) in Rs. / plant / year	BC Ratio
13	14	15	16
Farmer's practice** No fertilizer	Results awaited		
Technology assessed** Urea 80kg + SSP 40 kg /ha/yr	Results awaited		
Technology refined**			

*Field crops – kg/ha, * for horticultural crops – kg or t / ha, * milk and meat – litres or kg/animal, * for mushroom and vermi compost kg/unit area.

** Give details of the technology assessed or refined and farmer's practice

3.2 Achievements of Frontline Demonstrations

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

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	Cropping system and integrated farming (Sunflower)	HYV KBSH-1 with full package of practice	Participation of farmers in each critical stages of cultivation.	2	50	10
2	Integrated crop management (Green gram)	HYV PDM-139 with full package of practices	Participation of farmers in each critical stages of cultivation.	3	40	8

* Thematic areas as given in Table 3.1 (A1 and A2)

b. Details of FLDs implemented during 2006-07 (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	Rice	Integrated crop management	Introduction of HYV Pratiksha in irrigated medium land situation	Kharif 07	4	4	2	8	10	-
2	Rice	Integrated crop management	Introduction of HYV Sarala in rainfed low land situation	Kharif 07	4	4	1	9	10	-
3	Colocasia	Prod. & management technology of tubercrops	Introduction of HYV Panisaru -2 in rainfed low land situation	Kharif 07	1	1	-	5	5	-
4	Diascoria	Prod. & management technology of tubercrops	Introduction of Orissa elite in rainfed medium land situation	Kharif 07	1	1	1	4	5	-
5	Betelvine	Integrated disease management	Use of Neem cake, <i>Trichoderma viridae</i> , neem oil, Bordeaux mixture	Kharif 07	2	2	1	9	10	-
6	Fodder	Fodder production	Introduction of var. NB-21 with full package of practices	Kharif 07	1	1	-	10	10	-
7	Banana	Cultivation of fruits	Tissue culture plant let with full Package of practices	Kharif 08	1	To be conducted during Kharif 2008				
8	Chilli	Production & Management technology	Introduction of new variety with full Package of practices	Rabi07	1	1	-	10	10	
9	Okra	Production & Management technology	Introduction of new variety with full Package of practices	Rabi07	1	1	-	10	10	
10	Brinjal	IPM	Neem cake application, Pheromone trap, foliar application of bio-pesticide	Rabi07	1	0.8	-	6	6	Unavailability of land
11	Coconut	Biological pest management	Biological means by Bracon hebetor@ 20/plant 3-4 times at 15 days interval	Kharif 08	1	To be conducted during Kharif 2008			10	
12	Ground nut	Cropping system and Integrated farming	HYV TMV-2 with full package of practice	Rabi 2007	5	5	-	15	15	-

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					
Rice	Kharif 07	Irrigated	Alluvial	Low	Low	Medium	Rice	24.7.07	14.12.07	1451.8	66
Rice	Kharif 07	Rainfed	Alluvial	Low	Low	Medium	Rice	2.6.07	8.11.07	1451.8	66
Colocasia	Kharif 07	Rainfed	Alluvial	Low	Low	Medium	Pulse	17.7.07	24.1.08	1451.8	66
Diascoria	Kharif 07	Rainfed	Alluvial	Low	Low	Medium	Pulse	12.7.07	27.3.08	1451.8	66
Betelvine	Kharif 07	Baraja	Alluvial	Low	Low	Medium	Betelvine	-	Fortnightly	1451.8	66
Fodder	Kharif 07	Rainfed	Alluvial	Low	Low	Medium	Fallow	13.8.07	30.9.07 onwards at 1.5 months interval	1451.8	66
Banana	Kharif 08	To be conducted									
Chilli	Rabi 07	Irrigated	Alluvial	Low	Med.	Low	Rice	22.12.07	Standing crop	83.0	8
Okra	Summer 08	Irrigated	Alluvial	Low	Med.	Low	Veg	17.3.08	Standing crop	83.0	8
Brinjal	Rabi 07	Irrigated	Alluvial	Low	Low	Medium	Veg	21.1.08	Standing crop	83.0	8
Coconut	Kharif 08	To be conducted during Kharif 2008									
Groundnut	Rabi 07	Irrigated	Sandy loam	Low	Low	Medium	Rice	30.11.07	28.3.08	85.0	9

Performance of FLD

Sl. No	Crop	Technology Demonstrated	Variety	No. of Farmers	Area (ha.)	Demo. Yield q/ha			Yield of local Check Qtl./ha	Increase in yield (%)	Data on parameter in relation to technology demonstrated Yield (q/ha)	
						H	L	A			Demo	Local
1	2	3	4	5	6	7	8	9	10	11	12	13
1	Rice	Introduction of var. in irrigated medium land situation	HYV Pratikshya	10	2	53.3	40.6	46.6	42.1	10.7	46.6	42.1
2	Rice	Introduction of var. in rainfed low land situation	HYV Sarala	10	2	48.7	41.4	45.2	32.6	38.6	45.2	32.6
3	Colocasia	Introduction of var. in rainfed low land situation	HYV Panisaru -2	5	1	147.3	128.07	130.59	92.6	29.09	130.59	92.6
4	Diascoria	Introduction of var. in rainfed medium land situation	Orissa elite	5	1	247.3	212.6	221.96	182.46	21.64	221.96	182.46
5	Betelvine	Use of Neem cake, <i>Trichoderma viridae</i> , neem oil, Bordeaux mixture	-	10	2	2.08 lakh leaves /ha /month	1.58 lakh leaves /ha /month	1.85 lakh leaves /ha /month	1.33 lakh leaves /ha /month	39	1.85 lakh leaves /ha /month	1.33 lakh leaves /ha /month
6	Fodder	Full package of practice	NB-21	10	1	870	680	750	200	275	750	200
7	Banana	Tissue culture plant let with full Package of practices	Patakapura	5	1	To be conducted						
8	Chilli	Introduction of new variety with full Package of practices	Utkal Rashmi	10	1	Standing crop						

Sl. No	Crop	Technology Demonstrated	Variety	No. of Farmers	Area (ha.)	Demo. Yield q/ha			Yield of local Check Qtl./ha	Increase in yield (%)	Data on parameter in relation to technology demonstrated Yield (q/ha)	
						H	L	A			Demo	Local
9	Okra	Introduction of new variety with full Package of practices	Utkal Gaurav (BO-2)	10	1	Standing crop						
10	Brinjal	IPM for control of fruit & shoot borer Neem cake application, Pheromone trap, foliar application of bio-pesticide	Utkal Madhuri	6	0.8	Standing crop						
11	Coconut	Biological means by Bracon hebetor@ 20/plant 3-4 times at 15 days interval	Local existing (Sakhigopal)	10	1	To be conducted during Kharif-08						
12	Groundnut	HYV TMV-2 with full package of practice	TMV-2	15	5	24.0	16.6	21.3	12.77	66.79	21.3	12.77

NB: Attach few good action photographs with title at the back with pencil

Economic Impact (continuation of previous table)

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		
14	15	16	17	18	19	20	
Pratikhyा	18500	17600	27028	24418	8528	6818	1.46:1
Sarala	18400	15200	26216	18908	7816	3708	1.42:1
Colocasia	20625	21700	71775	50930	51150	29230	3.48:1
Diascoria	58625	61325	177568	145968	118943	84643	3.02:1
Betelvine	222560	212000	750000	540000	527440	328000	3.36:1
Fodder	5600	1250	75000	20000	69400	18750	13.39:1
Groundnut	11442	10208	50055	30009	38613	19801	4.37:1

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

Crop	Season	Component	Farming situation	Average yield (q/ha)	Local check (q/ha)	Percentage increase in productivity over local check
		1. Seed/Variety				
		2. Bio-fertilizer				
		3. Fertilizer management				
		4. Plant Protection				
		5. Combination of components (Please specify)				

Technical Feedback on the demonstrated technologies

Sl.No.	Crop	Feed Back
1	Rice	Variety is giving 10.7% higher yield over var. Swarna and tolerant to stem borer, blast, BLB, sheath blast and also tolerant to water logging
2	Rice	Variety having long slender grain can withstand water logging for 2 to 3 days
3	Colocasia	Yield is good, field tolerance to colocasia blight, tolerant to waterlogging condition
4	Diascoria	Yield is good, field tolerant to yam virus, cercospora leaf spot, field tolerant to scale insect and mealy bug.
5	Betelvine	<ul style="list-style-type: none"> Development of betelvine variety with good keeping quality for long distance transportation and good taste. Development of betelvine variety resistant specifically to fungal diseases.
6	Fodder	If harvested at later stage, it becomes difficult for cattle to eat. In that case it needs to be chopped before feeding to cattle.
7	Groundnut	<ul style="list-style-type: none"> ★ Seed dormancy to check damage of pods carried due to cyclonic weather during harvesting. ★ Over mature during dry period develops aflatoxin infestation

Farmers' reactions on specific technologies

S. No	Feed Back
1 Pratikshya	Farmers are convinced about high yielding potential of the variety and tolerant to major diseases and pests.
2 Sarala	Variety has high market value for its long slender grain quality. Variety is a high yielder which can be grown in low lying areas of coastal districts during Kharif.
3 Colocasia	Cooking quality is good, good yield, tolerant to waterlogging condition, appreciated for its cultivation in low land water logging condition
4 Diascoria	Appreciated for its soft nonsticky cooking quality. It gives bumper yield, tolerant to virus and cercospora leaf spot, field tolerant to scale insect and mealy bug
5 Betelvine	Applivation of neem cake, <i>Trichoderma viridae</i> , gave good yield in respect of size of leaves, and its lusture,. Moreover it reduces the pest and disease attack.
6 Fodder	Farmers appreciated the variety and got the fodder through out the year as a result overcome the problem of fodder scarcity.
7 Groundnut	<ul style="list-style-type: none"> Farmers are convinced about the benefits of seed treatment, rhizobium culture treatment, use of gypsum on yield Application of balanced dose of fertilizer and proper plant protection measures increased the yield.

Extension and Training activities under FLD

Sl. No.	Activity	No. of activities organised	Date	Number of participants	Remarks
1	Field days	18	6.8.07, 9.8.07, 15.9.07, 20.9.07, 17.10.07, 23.10.07, 2.11.07, 8.11.07, 14.12.07, 25.1.08, 25.1.08, 21.2.08, 20.3.08, 29.12.07, 19.1.08, 24.3.08, 27.3.08, 29.3.08,	541	-
2	Farmers Training	15	24.5.07, 1.6.07, 15.7.07, 4.8.07, 13/10/07, 15/11/07, 28.12.07, 29/12/07, 19.1.08, 25/1/08, 7.2.08, 7/2/08, 4.3.08, 5.3.08, 26/3/08	317	-
3	Media coverage	2			
4	Training for extension functionaries				-

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		
Power paddy thresher cum-winnower	Rice	10	-	Capacity (q/hr)	Threshing 1.4	0.15	833	
					Winnowing 2.75	0.30	817	
				Labour requirement (manhr/q)	0.7	5	86	
				Threshing efficiency (%)	96	98	- 2.04	
Self propelled power reaper	Rice	10	-	Time saving	4.3 hr	-	-	
				Capacity (q/hr)	0.4	0.008	49	
				Labour requirement (manhr/q)	0.3	15.6	98	
				Fuel consumption (L/hr)	1.0	0	-	
Rice parboiling unit	Paddy	5	-	Time/cost saving	Rs 121/ ac	Rs 1050 / ac	88	Procured on 23.3.08

* 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		
Poultry	Banaraja	10	100	No of eggs	Results awaited		Results awaited	Day old chicks were distributed on 19.2.08
				Egg wt,				
				Body wt				
				Income generated				
Duckery	Khaki Campbell	5	150	No of eggs	Results awaited		Results awaited	Day old Ducklings were distributed on 17.1.08
				Egg wt,				
				Body wt				
				Income generated				
BW prawn culture	Penaeus monodon	3	50,000 seed/1 ha	Yield (kg/ha)	1155	450	156	
				Income generated (Lakh Rs)	1.5404	0.38	305	
Composite fish culture	IMC	8	30,000 fingerling /2.5 ha	Yield	Results awaited		Results awaited	Started during Sep. 07
				Income generated				

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

(iii) Other Enterprises

Enterprise	Variety/breed/Species/other s	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	Paddy straw	10	50	Yield/bed	2.1 kg/bed	-	-	
	Oyster	12	60	Yield/bed	2.5 kg/bed	-	-	
Apiary								
Sericulture								
Vermi compost	<i>Eisinea foetida</i>	10	10	Conversion ratio	68	-	-	
				Rate of multiplication	Double in 3 months	-	-	-
Kitchen gardening Kharif 2007	Brinjal (Hazari 1)	10 (200 sq m. of each unit)	10 (200 sq m. of each unit)	Total production/unit area	30.7 kg	76.0	116.4	
	Chilli(Utkal Rashmi)				10.5			
	Pumpkin (Guamala)				45.5			
	Cow pea (Utkal manika)				12.5			
	Ridge gourd (Pusa nasdar)				25.0			
	Cucumber (Supriya)				15.3			
	Greens (Amaranthus)				25.0			
Kitchen gardening Rabi 2007	Brinjal (Hazari 1)	10 (200 sq m. of each unit)	10 (200 sq m. of each unit)	Total production/unit area	31.5	110.0	86.3	
	Chilli(Utkal Rashmi)				6.5			
	Cauliflower (Hemalata)				62.0			
	Tomato (BT-10)				47.3			
	Coriander (All green)				5.0			
	Greens (Kosala)				26.0			
	Radish (Pusa chetaki)				17.2			
	Beans (Arka kamal)				15.5			

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					
			Others			SC/ST		Grand Total
			Male	Female	Total	Male	Female	
(A) Farmers & Farm Women								
I Crop Production								
Weed Management								
Resource Conservation Technologies								
Cropping Systems								
Crop Diversification								
Integrated Farming								
Water management								
Seed production								
Nursery management								
Integrated Crop Management								
Fodder production								
Production of organic inputs								
II Horticulture								
a) Vegetable Crops								
Production of low volume and high value crops								
Off-season vegetables								
Nursery raising								
Exotic vegetables like Broccoli								
Export potential vegetables								
Grading and standardization								
Protective cultivation (Green Houses, Shade Net etc.)								
Vegetable production								
b) Fruits								
Training and Pruning								
Layout and Management of Orchards								
Cultivation of Fruit								
Management of young plants/orchards								
Rejuvenation of old orchards								
Export potential fruits								
Micro irrigation systems of orchards								
Plant propagation techniques								
c) Ornamental Plants								
Nursery Management								
Management of potted plants								
Export potential of ornamental plants								
Propagation techniques of Ornamental Plants								
d) Plantation crops								
Production and Management technology								
Processing and value addition								
e) Tuber crops								
Production and Management technology	1	2	21	0	21	2	0	23
Processing and value addition								
f) Spices								
Production and Management technology								
Processing and value addition								
g) Medicinal and Aromatic Plants								
Nursery management								
Production and management technology								
Post harvest technology and value addition								
III Soil Health and Fertility Management								
Soil fertility management								

Thematic Area	No. of Courses	Duration (days)	No. of Participants						Grand Total	
			Others			SC/ST				
			Male	Female	Total	Male	Female	Total		
Soil and Water Conservation										
Integrated Nutrient Management										
Production and use of organic inputs										
Management of Problematic soils										
Micro nutrient deficiency in crops										
Nutrient Use Efficiency										
Soil and Water Testing										
IV Livestock Production and Management										
Dairy Management										
Poultry Management										
Piggery Management										
Rabbit Management										
Disease Management										
Feed management										
Production of quality animal products										
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 mainstreaming through SHGs										
Storage loss minimization techniques	1	1	0	15	15	0	0	0	15	
Value addition	1	2	0	20	20	0	0	0	20	
Income generation activities for empowerment of rural Women										
Location specific drudgery reduction technologies										
Rural Crafts										
Women and child care										
VI Agril. Engineering										
Installation and maintenance of micro irrigation systems										
Use of Plastics in farming practices										
Production of small tools and implements										
Repair and maintenance of farm machinery and implements										
Small scale processing and value addition										
Post Harvest Technology										
VII Plant Protection										
Integrated Pest Management	1	2	13	0	13	7	0	7	20	
Integrated Disease Management	1	2	14	0	14	6	0	6	20	
Bio-control of pests and diseases										
Production of bio control agents and bio pesticides										
VIII Fisheries										
Integrated fish farming										
Carp breeding and hatchery management										
Carp fry and fingerling rearing										
Composite fish culture										
Hatchery management and culture of freshwater prawn										
Breeding and culture of ornamental fishes										
Portable plastic carp hatchery										
Pen culture of fish and prawn										
Shrimp farming										

Thematic Area	No. of Courses	Duration (days)	No. of Participants						Grand Total	
			Others			SC/ST				
			Male	Female	Total	Male	Female	Total		
Edible oyster farming										
Pearl culture										
Fish processing and value addition										
IX Production of Inputs at site										
Seed Production										
Planting material production										
Bio-agents production										
Bio-pesticides production										
Bio-fertilizer production										
Vermi-compost production	1	2	17	0	17	3	0	3	20	
Organic manures production										
Production of fry and fingerlings										
Production of Bee-colonies and wax sheets										
Small tools and implements										
Production of livestock feed and fodder										
Production of Fish feed										
X Capacity Building and Group Dynamics										
Leadership development										
Group dynamics	1	1	0	30	30	0	0	0	30	
Formation and Management of SHGs										
Mobilization of social capital										
Entrepreneurial development of farmers/youths										
WTO and IPR issues										
XI Agro-forestry										
Production technologies										
Nursery management										
Integrated Farming Systems										
XII Others (Pl. Specify)										
Mushroom cultivation										
TOTAL	7	12	65	65	130	18	0	18	148	
(B) RURAL YOUTH										
Mushroom Production										
Bee-keeping										
Integrated farming										
Seed production	1	1	20	0	20	0	0	0	20	
Production of organic inputs										
Integrated Farming										
Planting material production										
Vermi-culture										
Sericulture										
Protected cultivation of vegetable crops										
Commercial fruit production										
Repair and maintenance of farm machinery and implements										
Nursery Management of Horticulture crops	1	2	30	0	30	0	0	0	30	
Training and pruning of orchards										
Value addition	1	2	0	25	25	0	0	0	25	
Production of quality animal products										
Dairying										
Sheep and goat rearing										
Quail farming										
Piggery										
Rabbit farming										
Poultry production										
Ornamental fisheries										
Para vets										

Thematic Area	No. of Courses	Duration (days)	No. of Participants								
			Others			SC/ST			Grand Total		
			Male	Female	Total	Male	Female	Total			
Para extension workers	3	6	35	1	36	9	0	9	45		
Composite fish culture											
Freshwater prawn culture											
Shrimp farming											
Pearl culture											
Cold water fisheries											
Fish harvest and processing technology											
Fry and fingerling rearing											
Small scale processing											
Post Harvest Technology											
Tailoring and Stitching											
Rural Crafts											
TOTAL	6	11	85	26	111	9	0	9	120		
(C) Extension Personnel											
Productivity enhancement in field crops											
Integrated Pest Management											
Integrated Nutrient management	1	1	12	0	12	3	0	3	15		
Rejuvenation of old orchards	1	1	0	28	28	0	2	2	30		
Protected cultivation technology	1	1	14	0	14	1	0	1	15		
Formation and Management of SHGs											
Group Dynamics and farmers organization	3	4	26	29	55	0	5	5	60		
Information networking among farmers	2	3	28	0	28	7	0	7	35		
Capacity building for ICT application											
Care and maintenance of farm machinery and implements											
WTO and IPR issues											
Management in farm animals											
Livestock feed and fodder production											
Household food security											
Women and Child care											
Low cost and nutrient efficient diet designing											
Production and use of organic inputs											
Gender mainstreaming through SHGs											
Any other (Pl. Specify)											
Value addition											
TOTAL	8	10	80	57	137	11	7	18	155		

B) OFF Campus

Thematic Area	No. of Courses	Duration (days)	No. of Participants								
			Others			SC/ST			Grand Total		
			Male	Female	Total	Male	Female	Total			
(A) Farmers & Farm Women											
I Crop Production											
Weed Management											
Resource Conservation Technologies											
Cropping Systems	1	1	19	0	19	1	0	1	20		
Crop Diversification											
Integrated Farming											
Water management											
Seed production											
Nursery management	3	5	38	2	40	18	2	20	60		
Integrated Crop Management	3	4	20	7	27	13	5	18	45		
Fodder production	1	1	14	0	14	6	0	6	20		
Production of organic inputs											
II Horticulture											
a) Vegetable Crops											
Production of low volume and high value crops											

Thematic Area	No. of Courses	Duration (days)	No. of Participants						Grand Total	
			Others			SC/ST				
			Male	Female	Total	Male	Female	Total		
Off-season vegetables										
Nursery raising	3	6	47	0	47	13	0	13	60	
Exotic vegetables like Broccoli										
Export potential vegetables										
Grading and standardization										
Protective cultivation (Green Houses, Shade Net etc.)	1	2	30	0	30	0	0	0	30	
Vegetable cultivation	8	14	125	5	130	24	6	30	160	
b) Fruits										
Training and Pruning										
Layout and Management of Orchards										
Cultivation of Fruit	1	2	16	0	16	4	0	4	20	
Management of young plants/orchards										
Rejuvenation of old orchards										
Export potential fruits										
Micro irrigation systems of orchards										
Plant propagation techniques										
c) Ornamental Plants										
Nursery Management										
Management of potted plants										
Export potential of ornamental plants										
Propagation techniques of Ornamental Plants										
d) Plantation crops										
Production and Management technology										
Processing and value addition										
e) Tuber crops										
Production and Management technology	2	2	17	15	32	3	5	8	40	
Processing and value addition										
f) Spices										
Production and Management technology										
Processing and value addition										
g) Medicinal and Aromatic Plants										
Nursery management										
Production and management technology										
Post harvest technology and value addition										
III Soil Health and Fertility Management										
Soil fertility management										
Soil and Water Conservation										
Integrated Nutrient Management	1	1	17	0	17	3	0	3	20	
Production and use of organic inputs										
Management of Problematic soils										
Micro nutrient deficiency in crops										
Nutrient Use Efficiency										
Soil and Water Testing	3	4	51	7	58	2	0	2	60	
IV Livestock Production and Management										
Dairy Management										
Poultry Management										
Piggery Management										
Rabbit Management										
Disease Management										
Feed management										
Production of quality animal products										
V Home Science/Women empowerment										
Household food security by kitchen gardening and nutrition gardening	1	2	0	17	17	0	3	3	20	
Design and development of low/minimum cost diet	1	2	0	18	18	0	1	1	19	
Designing and development for high nutrient efficiency diet										

Thematic Area	No. of Courses	Duration (days)	No. of Participants						Grand Total	
			Others			SC/ST				
			Male	Female	Total	Male	Female	Total		
Minimization of nutrient loss in processing										
Gender mainstreaming through SHGs										
Storage loss minimization techniques	1	2	0	20	20	0	0	0	20	
Value addition	2	2	0	40	40	0	0	0	40	
Income generation activities for empowerment of rural Women	3	6	0	51	51	0	9	9	60	
Location specific drudgery reduction technologies	1	2	0	20	20	0	0	0	20	
Rural Crafts										
Women and child care										
VI Agril. Engineering										
Installation and maintenance of micro irrigation systems	1	2	17	0	17	3	0	3	20	
Use of Plastics in farming practices										
Production of small tools and implements										
Repair and maintenance of farm machinery and implements										
Small scale processing and value addition										
Post Harvest Technology										
VII Plant Protection										
Integrated Pest Management	12	18	182	12	194	41	5	46	240	
Integrated Disease Management	5	4	88	0	88	12	0	12	100	
Bio-control of pests and diseases										
Production of bio control agents and bio pesticides										
VIII Fisheries										
Integrated fish farming	6	11	83	31	114	11	0	11	125	
Carp breeding and hatchery management										
Carp fry and fingerling rearing	2	4	32	0	32	3	0	3	35	
Composite fish culture	9	17	117	36	153	21	2	23	176	
Hatchery management and culture of freshwater prawn										
Breeding and culture of ornamental fishes										
Portable plastic carp hatchery										
Pen culture of fish and prawn										
Shrimp farming										
Edible oyster farming										
Pearl culture										
Fish processing and value addition										
IX Production of Inputs at site										
Seed Production										
Planting material production										
Bio-agents production										
Bio-pesticides production										
Bio-fertilizer production										
Vermi-compost production	2	3	13	17	30	7	3	10	40	
Organic manures production	2	2	37	0	37	3	0	3	40	
Production of fry and fingerlings										
Production of Bee-colonies and wax sheets										
Small tools and implements										
Production of livestock feed and fodder										
Production of Fish feed										
X Capacity Building and Group Dynamics										
Leadership development	2	3	25	7	32	2	1	3	35	
Group dynamics										
Formation and Management of SHGs										
Mobilization of social capital										

Thematic Area	No. of Courses	Duration (days)	No. of Participants						Grand Total	
			Others			SC/ST				
			Male	Female	Total	Male	Female	Total		
Entrepreneurial development of farmers/youths										
WTO and IPR issues										
XI Agro-forestry										
Production technologies										
Nursery management										
Integrated Farming Systems										
XII Others (Pl. Specify)										
Mushroom production										
TOTAL	77	127	988	305	1293	190	42	232	1525	
(B) RURAL YOUTH										
Mushroom Production	2	3	0	24	24	0	3	3	27	
Bee-keeping										
Integrated farming										
Seed production	2	4	28	2	30	6	4	10	40	
Production of organic inputs										
Integrated Farming										
Planting material production										
Vermi-culture	1	1	25	0	25	0	0	0	25	
Sericulture										
Protected cultivation of vegetable crops										
Commercial fruit production										
Repair and maintenance of farm machinery and implements										
Nursery Management of Horticulture crops										
Training and pruning of orchards										
Value addition										
Production of quality animal products										
Dairying										
Sheep and goat rearing										
Quail farming										
Piggery										
Rabbit farming										
Poultry production										
Ornamental fisheries										
Para vets										
Para extension workers										
Composite fish culture	1	2	14	0	14	4	2	6	20	
Freshwater prawn culture										
Shrimp farming										
Pearl culture										
Cold water fisheries										
Fish harvest and processing technology										
Fry and fingerling rearing										
Small scale processing										
Post Harvest Technology										
Tailoring and Stitching										
Rural Crafts										
TOTAL	6	10	67	26	93	10	9	19	112	
(C) Extension Personnel										
Productivity enhancement in field crops										
Integrated Pest Management										
Integrated Nutrient management										
Rejuvenation of old orchards										
Protected cultivation technology										
Formation and Management of SHGs	1	1	13	0	13	2	0	2	15	
Group Dynamics and farmers organization	2	2	14	3	17	5	2	7	24	
Information networking among farmers	1	1	13	2	15	0	0	0	15	

Thematic Area	No. of Courses	Duration (days)	No. of Participants					
			Others			SC/ST		
			Male	Female	Total	Male	Female	Total
Capacity building for ICT application								
Care and maintenance of farm machinery and implements								
WTO and IPR issues	1	1	24	4	28	2	0	2
Management in farm animals								
Livestock feed and fodder production								
Household food security								
Women and Child care								
Low cost and nutrient efficient diet designing								
Production and use of organic inputs								
Gender mainstreaming through SHGs								
Any other (Pl. Specify)								
TOTAL	5	5	64	9	73	9	2	11
								84

C) Consolidated table (On and Off Campus)

Thematic Area	No. of Courses	Duration (days)	No. of Participants					
			Others			SC/ST		
			Male	Female	Total	Male	Female	Total
(A) Farmers & Farm Women								
I Crop Production								
Weed Management								
Resource Conservation Technologies								
Cropping Systems	1	1	19	0	19	1	0	1
Crop Diversification								
Integrated Farming								
Water management								
Seed production								
Nursery management	3	5	38	2	40	18	2	20
Integrated Crop Management	3	4	20	7	27	13	5	18
Fodder production	1	1	14	0	14	6	0	6
Production of organic inputs								
II Horticulture								
a) Vegetable Crops								
Production of low volume and high value crops								
Off-season vegetables								
Nursery raising	3	6	47	0	47	13	0	13
Exotic vegetables like Broccoli								
Export potential vegetables								
Grading and standardization								
Protective cultivation (Green Houses, Shade Net etc.)	1	2	30	0	30	0	0	30
Vegetable production	8	14	125	5	130	24	6	30
b) Fruits								
Training and Pruning								
Layout and Management of Orchards								
Cultivation of Fruit	1	2	16	0	16	4	0	4
Management of young plants/orchards								
Rejuvenation of old orchards								
Export potential fruits								
Micro irrigation systems of orchards								
Plant propagation techniques								
c) Ornamental Plants								
Nursery Management								
Management of potted plants								
Export potential of ornamental plants								
Propagation techniques of Ornamental Plants								
d) Plantation crops								
Production and Management technology								

Thematic Area	No. of Courses	Duration (days)	No. of Participants						Grand Total	
			Others			SC/ST				
			Male	Female	Total	Male	Female	Total		
Processing and value addition										
e) Tuber crops										
Production and Management technology	3	4	38	15	53	5	5	10	63	
Processing and value addition										
f) Spices										
Production and Management technology										
Processing and value addition										
g) Medicinal and Aromatic Plants										
Nursery management										
Production and management technology										
Post harvest technology and value addition										
III Soil Health and Fertility Management										
Soil fertility management										
Soil and Water Conservation										
Integrated Nutrient Management	1	1	17	0	17	3	0	3	20	
Production and use of organic inputs										
Management of Problematic soils										
Micro nutrient deficiency in crops										
Nutrient Use Efficiency										
Soil and Water Testing	3	4	51	7	58	2	0	2	60	
IV Livestock Production and Management										
Dairy Management										
Poultry Management										
Piggery Management										
Rabbit Management										
Disease Management										
Feed management										
Production of quality animal products										
V Home Science/Women empowerment										
Household food security by kitchen gardening and nutrition gardening	1	2	0	17	17	0	3	3	20	
Design and development of low/minimum cost diet	1	2	0	18	18	0	1	1	19	
Designing and development for high nutrient efficiency diet										
Minimization of nutrient loss in processing										
Gender mainstreaming through SHGs										
Storage loss minimization techniques	2	3	0	35	35	0	0	0	35	
Value addition	3	4	0	60	60	0	0	0	60	
Income generation activities for empowerment of rural Women	3	6	0	51	51	0	9	9	60	
Location specific drudgery reduction technologies	1	2	0	20	20	0	0	0	20	
Rural Crafts										
Women and child care										
VI Agril. Engineering										
Installation and maintenance of micro irrigation systems	1	2	17	0	17	3	0	3	20	
Use of Plastics in farming practices										
Production of small tools and implements										
Repair and maintenance of farm machinery and implements										
Small scale processing and value addition										
Post Harvest Technology										
VII Plant Protection										
Integrated Pest Management	13	20	195	12	207	48	5	53	260	
Integrated Disease Management	6	6	102	0	102	18	0	18	120	
Bio-control of pests and diseases										

Thematic Area	No. of Courses	Duration (days)	No. of Participants						Grand Total	
			Others			SC/ST				
			Male	Female	Total	Male	Female	Total		
Production of bio control agents and bio pesticides										
VIII Fisheries										
Integrated fish farming	6	11	83	31	114	11	0	11	125	
Carp breeding and hatchery management										
Carp fry and fingerling rearing	2	4	32	0	32	3	0	3	35	
Composite fish culture	9	17	117	36	153	21	2	23	176	
Hatchery management and culture of freshwater prawn										
Breeding and culture of ornamental fishes										
Portable plastic carp hatchery										
Pen culture of fish and prawn										
Shrimp farming										
Edible oyster farming										
Pearl culture										
Fish processing and value addition										
IX Production of Inputs at site										
Seed Production										
Planting material production										
Bio-agents production										
Bio-pesticides production										
Bio-fertilizer production										
Vermi-compost production	3	5	30	17	47	10	3	13	60	
Organic manures production	2	2	37	0	37	3	0	3	40	
Production of fry and fingerlings										
Production of Bee-colonies and wax sheets										
Small tools and implements										
Production of livestock feed and fodder										
Production of Fish feed										
X Capacity Building and Group Dynamics										
Leadership development	2	3	25	7	32	2	1	3	35	
Group dynamics	1	1	0	30	30	0	0	0	30	
Formation and Management of SHGs										
Mobilization of social capital										
Entrepreneurial development of farmers/youths										
WTO and IPR issues										
XI Agro-forestry										
Production technologies										
Nursery management										
Integrated Farming Systems										
XII Others (Pl. Specify)										
Mushroom cultivation										
TOTAL	84	139	1053	370	1423	208	42	250	1673	
(B) RURAL YOUTH										
Mushroom Production	2	3	0	24	24	0	3	3	27	
Bee-keeping										
Integrated farming										
Seed production	3	5	48	2	50	6	4	10	60	
Production of organic inputs										
Integrated Farming										
Planting material production										
Vermi-culture	1	1	25	0	25	0	0	0	25	
Sericulture										
Protected cultivation of vegetable crops										
Commercial fruit production										
Repair and maintenance of farm machinery and implements										

Thematic Area	No. of Courses	Duration (days)	No. of Participants						Grand Total	
			Others			SC/ST				
			Male	Female	Total	Male	Female	Total		
Nursery Management of Horticulture crops	1	2	30	0	30	0	0	0	30	
Training and pruning of orchards										
Value addition	1	2	0	25	25	0	0	0	25	
Production of quality animal products										
Dairying										
Sheep and goat rearing										
Quail farming										
Piggery										
Rabbit farming										
Poultry production										
Ornamental fisheries										
Para vets										
Para extension workers	3	6	35	1	36	9	0	9	45	
Composite fish culture	1	2	14	0	14	4	2	6	20	
Freshwater prawn culture										
Shrimp farming										
Pearl culture										
Cold water fisheries										
Fish harvest and processing technology										
Fry and fingerling rearing										
Small scale processing										
Post Harvest Technology										
Tailoring and Stitching										
Rural Crafts										
TOTAL	12	21	152	52	204	19	9	28	232	
(C) Extension Personnel										
Productivity enhancement in field crops										
Integrated Pest Management										
Integrated Nutrient management	1	1	12	0	12	3	0	3	15	
Rejuvenation of old orchards	1	1	0	28	28	0	2	2	30	
Protected cultivation technology	1	1	14	0	14	1	0	1	15	
Formation and Management of SHGs	1	1	13	0	13	2	0	2	15	
Group Dynamics and farmers organization	5	6	40	32	72	5	7	12	84	
Information networking among farmers	3	4	41	2	43	7	0	7	50	
Capacity building for ICT application										
Care and maintenance of farm machinery and implements										
WTO and IPR issues	1	1	24	4	28	2	0	2	30	
Management in farm animals										
Livestock feed and fodder production										
Household food security										
Women and Child care										
Low cost and nutrient efficient diet designing										
Production and use of organic inputs										
Gender mainstreaming through SHGs										
Any other (Pl. Specify)										
Value addition										
TOTAL	13	15	144	66	210	20	9	29	239	

Note: Please furnish the details of training programmes as Annexure in the proforma given below

Date	Clientele	Title of the training programme	Duration in days	Venue (Off / On Campus)	Number of participants			Number of SC/ST		
					Male	Female	Total	Male	Female	Total
April 8/4/07	FW	IPM in betelvine	1	OF	20	0	20	5	0	5
17/4	FW	IPM in coconut	1	OF	20	0	20	4	0	4
24/4	FW	Nutritional garden	1	OF	0	20	20	0	3	3
30/4	FW	Cultivation of fodder crop	1	OF	20	0	20	6	0	6
May 5/5	FW	Green manuring in rice	1	OF	20	0	20	3	0	3
11/5	FW	Vermicomposting	1	OF	0	20	20	0	3	3
16/5 & 24/5	FW	Prod. Tech. of tuber crops	2	OF	20	20	40	3	5	8
30/5	IS	Motivation management	1	OF	9	0	9	2	0	2
June 2/6	FW	Nursery management in rice	1	OF	6	4	10	2	2	4
10/6	FW	Pack. Of practices for maize	1	OF	10	5	15	3	2	5
18/6	FW	Organic rice production	1	OF	13	7	20	3	3	6
19/6	FW	IPM in betelvine	1	OF	12	5	17	2	2	4
22/6	FW	IPM for control of eriyophidmite in coconut	1	OF	7	5	12	2	2	4
23/6	FW	Cultivation practices of papaya	1	OF	13	7	20	3	2	5
29/6	IS	Trg. Through ELC	1	OF	10	5	15	3	2	5
30/6	RY	Mushroom cultivation	1	OF	0	18	18	0	3	3
July 26-27/7	FW	Nursery mgt in rice	2	OF	30	0	30	16	0	16
28-29/7	FW	INM in rice	2	OF	20	0	20	7	0	7
7-8 & 10-11/7	FW	Nursery mgt. in veg. seedling	4	OF	40	0	40	11	0	11
3-4/7	FW	Pre of Bordeaux mixture	2	OF	20	0	20	8	0	8
28-29/7	FW	Mgt of fruit & shoot borer in brinjal	2	OF	20	0	20	10	0	10
18-19/7	RY	Integrated fish farming	2	OF	18	2	20	4	2	6
23-24/7	FW	Integrated fish farming	2	OF	15	0	15	4	0	4
25-26/7	FW	Fish fingerling production	2	OF	15	0	15	3	0	3
28-29/7	FW	Mushroom cultivation	2	OF	0	20	20	0	5	5
30/7	IS	Formation of Farm Science clubs	1	OF	15	0	15	2	0	2
Aug 1-2/8	FW	Vermicomposting techn	~2	On	20	0	20	3	0	3
4-5 & 22-23/8	FW	Cult practices of cabbage & cauliflower	4	OF	36	4	40	5	4	9
4-5/8	FW	Mushroom cultivation	2	OF	0	20	20	0	4	4
20-21 & 30-31/8	FW	Mgt of major pests in rice	4	OF	40	0	40	9	0	9
6-7/8	FW	Fish health mgt	2	OF	11	5	16	3	2	5
8-9/8	IS	Leadership development	2	On	12	3	15	0	0	0
17-18/8	IS	Planning & Evaluation of trg prog	2	On	20	0	20	7	0	7
Sept 4-5/9	FW	Cult practices of papaya	2	OF	20	0	20	4	0	4
6-7/9	FW	Package of practices of potato	2	OF	20	0	20	5	0	5
28-29/9	FW	Package of practices of potato	2	OF	20	0	20	2	0	2
5-6/9	FW	Mgt of major pests in coconut	2	On	20	0	20	7	0	7
17-18/9	FW	Prep. Of Bordeaux paste & mixture	2	On	20	0	20	6	0	6
24-25/9	FW	Fish health management	2	OF	20	0	20	3	0	3
17-18 & 26-27/9	FW	Post stocking mgt in composite fish culture	4	OF	40	0	40	4	0	4
21/9	IS	Trg through ELC	1	On	14	1	15	0	0	0
22/9	IS	Formation of FS clubs	1	On	15	0	15	0	0	0
12-13/9	RY	Seed prod. Tech. in tomato	2	OF	14	6	20	4	4	8
7-8/9	FW	Kitchen gardening	2	OF	0	20	20	0	3	3
Oct.										
3-4	FW	Vermicomposting technology	2	Off	20	0	20	7	0	7
5	IS	Formation of Farm science club	1	Off	13	2	15	0	0	0
5-6	FW	Package of practice for potato cultivation	2	Off	20	0	20	4	0	4
29-30	FW	Integrated management for Eriophyid mite	2	Off	20	0	20	4	0	4

Nov.										
12-13	FW	Integrated management of pests & diseases in potato	2	Off	20	0	20	2	0	2
12-13	FW	Intercropping in cole crops	2	Off	20	0	20	3	0	3
14-15	FW	Rearing of fish fry and fingerling	2	Off	20	0	20	0	0	0
15-16	FW	IDM in betelvine	2	Off	20	0	20	1	0	1
19-20	FW	Techniques of seed bed preparation for raising seedlings in winter vegetables	2	Off	20	0	20	2	0	2
21-22	FW	Improved methods of grain storage practices	2	Off	0	20	20	0	0	0
29&31	FW	Preparation of supplementary diet for pre-school children from locally available material	2	Off	0	19	19	0	1	1
Dec.										
4-5	FW	Paddy-cum-fish culture	2	Off	0	20	20	0	0	0
6-7	FW	Composite fish cultivation	2	Off	0	20	20	0	0	0
11-12	RY	Knowledge management in agriculture	2	On	14	1	15	0	0	0
13-14	FW	Fish health management	2	Off	12	8	20	0	0	0
17-18	FW	Techniques for soil sample collection for better crop production	2	Off	20	0	20	0	0	0
18	IS	INM in groundnut	1	On	15	0	15	3	0	3
19-20	FW	Preparation of value added products from tomato	2	On	0	20	20	0	0	0
26-27	FW	Paddy-cum-fish culture	2	Off	13	7	20	0	0	0
27	RY	Vermiculture	1	Off	25	0	25	0	0	0
27	IS	Seedling raising in poly house	1	On	15	0	15	1	0	1
28-29	FW	Use of improved sickle, paddy thresher and parboiling unit for drudgery reduction of farm women	2	Off	0	20	20	0	0	0
29	FW	IDM in betelvine	1	Off	20	0	20	-	-	-
Jan.08										
7-8	RY	Information management in agriculture	2	On	15	0	15	5	0	5
8	FW	Preparation of lemon squash	1	Off	0	20	20	0	0	0
10-11	FW	Post-stocking management of composite fish culture	2	Off	20	0	20	0	0	0
14-15	FW	Integrated fish farming	2	Off	20	0	20	0	0	0
15-16	RY	Information management through group discussion	2	On	15	0	15	4	0	4
18-19	FW	Oyster mushroom cultivation	2	Off	0	20	20	0	0	0
19	FW	Nursery management in rice	2	Off	20	0	20	0	0	0
19-20	RY	Seed production in vegetable tomato	2	Off	20	0	20	2	0	2
19&21	FW	Integrated management of pests & diseases in potato	2	Off	20	0	20	-	-	-
24	FW	Leadership development (Capacity building)	1	Off	15	0	15	1	0	1
25-26	FW	IDM in betelvine	2	Off	20	0	20	1	0	1
30-31	FW	Information management through leadership development	2	Off	12	8	20	1	1	2
Feb										
1	RY	Seed production in rice	1	On	20	0	20	0	0	0
5	FW	INM in rice	1	Off	20	0	20	3	0	3
6-7	FW	Composite fish culture	2	Off	16	14	30	6	0	6
7	FW	IPM for control of fruit & shoot borer in brinjal	1	Off	20	0	20	-	-	-
7-8	RY	Oyster mushroom cultivation	2	Off	0	9	9	0	0	0
8	FW	Management of major insect pests of coconut	1	Off	20	0	20	-	-	-
12	IS	Capacity building for WTO and IRI issue	1	Off	26	4	30	2	0	2
14	FW	Production of organic inputs	1	Off	20	0	20	0	0	0
19	FW	Improved method of grain storage practices to minimize storage loss	1	On	0	15	15	0	0	0
18&21	FW	Microirrigation system of orchard	2	Off	20	0	20	3	0	3
23-24	FW	Integrated fish culture	2	Off	26	4	30	7	0	7
Mar										

1	FW	Composite fish culture	1	Off	19	1	20	5	0	5
4	FW	Techniques for soil sample collection	1	Off	20	0	20	2	0	2
4-5	FW	Production technology of tuber crops	2	On	23	0	23	2	0	2
7-8	RY	Nursery raising and management in agro-shed net for vegetable crops	2	On	30	0	30	0	0	0
10	FW	Preparation of mixed vegetable pickle	1	Off	0	20	20	0	0	0
10	FW	Techniques for soil sample collection	1	Off	13	7	20	0	0	0
10	FW	Integrated fish cultivation	1	Off	20	0	20	0	0	0
11	FW	Group dynamics and leadership development	1	On	0	30	30	0	0	0
14-15	FW	Seedling raising in poly house	2	Off	30	0	30	0	0	0
14-15	RY	Preparation of prawn pickle	2	On	0	25	25	0	0	0
27	FW	Production and management of cucurbitaceous crops	1	Off	20	0	20	2	0	2
27	FW	Nutrient management for rice pulse cropping system	1	Off	20	0	20	1	0	1
26-27	FW	IPM for control of fruit & shoot borer in brinjal	2	Off	24	6	30	5	0	5
28	IS	Group dynamics and leadership development	1	On	0	30	30	0	5	5
29	IS	Rejuvenation of old orchard	1	On	0	30	30	0	2	2

(D) Vocational training programmes for Rural Youth :

Crop / Enterprise	Identified Thrust Area	Training title*	Duration (days)	No. of Participants			Self employed after training			Number of persons employed else where
				Male	Female	Total	Type of units	Number of units	Number of persons employed	
Vermicompost	Organic farming	Preparation of vermicompost	5	10	0	10	-	-	-	-
Organic input	Organic farming	Production of Azolla	5	10	0	10	-	-	-	-
Seed production technology	Commercial seed production tech. in vegetables	Commercial Seed production technique in brinjal	5	10	0	10	-	-	-	-
Fish farming	Composite fish farming	Composite pisciculture technology	5	20	0	20	-	-	-	-

* training title should specify the major technology /skill transferred

(E) Sponsored Training Programmes :Nil

Sl. No	Title	Thematic area	Month	Duration (days)	Client PF/RY/ EF	No. of courses	No. of Participants						Sponsoring Agency	
							Male		Female		Total			
							Others	SC/S T	Others	SC/S T	Others	SC/S T		

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	35	591	260	851	59	5	64	650	265	915
Kisan Mela	3	330	115	445	8	0	8	338	115	453
Kisan Ghosthi	35	237	56	293	0	0	0	237	56	293
Exhibition	2	260	65	325	6	0	6	266	65	331
Film Show	86	1214	520	1734	14	5	19	1228	525	1753
Method Demonstrations	84	995	220	1215	0	0	0	995	220	1215
Farmers Seminar	1	33	18	51	2	0	2	35	18	53
Workshop										
Group meetings	35	344	126	470	0	0	0	344	126	470
Lectures delivered as resource persons	32	760	660	1420	53	24	77	813	684	1497
Newspaper coverage	20									
Radio talks	10									
TV talks	8									
Popular articles	5									
Extension Literature	10									
Advisory Services										
Scientific visit to farmers field	191	620	250	870	0	0	0	620	250	870
Farmers visit to KVK	189	157	32	189	0	0	0	157	32	189
Diagnostic visits	105	472	190	662	0	0	0	472	190	662
Exposure visits										
Ex-trainees Sammelan	3	38	58	96	6	0	6	44	58	102
Soil health Camp										
Animal Health Camp										
Agri mobile clinic										
Soil test campaigns										
Farm Science Club Conveners meet										
Self Help Group Conveners meetings	2	0	60	60	0	2	2	0	62	62
Mahila Mandals Conveners meetings										
Celebration of important days (specify)										
Akshay Trutiya 20.4.07	1	24	1	25	2	0	2	26	1	27
Fish Farmers day 10.7.07	1	14	1	15	0	0	0	14	1	15
World food day 16.10.07	1	105	20	125	2	0	2	107	20	127
Women in Agriculture Day 4.12.07	1	0	35	35	0	2	2	0	37	37
International women day 7.3.08	1	0	30	30	0	2	2	0	32	32
Any Other (Specify)										
Total	861	6194	2717	8911	144	40	184	6338	2757	9095

3.5 Production and supply of Technological products

SEED MATERIALS : Nil

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			
TOTAL				

PLANTING MATERIALS

Sl. No.	Crop	Variety	Quantity (Nos.)	Value (Rs.)	Provided to No. of Farmers
1	FRUITS				
2	SPICES				
3	VEGETABLES				
	Chilly	Utkal ragini	2000	400	-
	Tomato	Utkal Kumari	1000	200	
	Brinjal	Utkal Jyoti	1500	300	
4	FOREST SPECIES				
5	ORNAMENTAL CROPS				
6	PLANTATION CROPS				
7	Others (specify)				

SUMMARY

Sl. No.	Crop	Quantity (Nos.)	Value (Rs.)	Provided to No. of Farmers
1	FRUITS			
2	VEGETABLES	4500	900	-
3	SPICES			
4	FOREST SPECIES			
5	ORNAMENTAL CROPS			
6	PLANTATION CROPS			
7	OTHERS			
TOTAL		4500	900	-

BIO PRODUCTS :

Sl. No.	Product Name	Species	Quantity		Value (Rs.)	Provided to No. of Farmers
			No	(kg)		
BIOAGENTS						
1	Vermins	<i>Eisinea foetida</i>	1000	1	500	
2						
BIOFERTILIZERS						
1						
2						
BIO PESTICIDES						
1						
2						

SUMMARY

Sl. No.	Product Name	Species	Quantity		Value (Rs.)	Provided to No. of Farmers
			No	(kg)		
1	BIOAGENTS	<i>Eisinea foetida</i>	1000	1	500	
2	BIO FERTILIZERS					
3	BIO PESTICIDE					
	TOTAL		1000	1	500	

LIVESTOCK : Nil

Sl. No.	Type	Breed	Quantity		Value (Rs.)	Provided to No. of Farmers
			(Nos)	Kgs		
Cattle						
Sheep and Goat						
Poultry						
Fisheries						
Others (Specify)						

SUMMARY

Sl. No.	Type	Breed	Quantity		Value (Rs.)	Provided to No. of Farmers
			Nos	Kgs		
1	CATTLE					
2	SHEEP & GOAT					
3	POULTRY					
4	FISHERIES					
5	OTHERS					
	TOTAL					

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	A study on stocking of stunted yearlings of major carps in fish ponds of Ganjam district of Orissa	R.Mishra, B.P.Mishra & N.Nayak (2007)	J. Appl. Zool. Researches 17(2) : 225-227
	Sustainable fish cultivation through use of sugarcane filter cake in carp diet	R.Mishra, B.P.Mishra & N.Nayak (2007)	J. Appl. Zool. Researches 18(1) : 67-70
	Quality of cured fishes along Gopalpur coast of Orissa, India	R.Mishra & B.P.Mishra (2007)	Asian J. of Animal Sciences 2(1&2) : 36-39
	Effect of square mesh cod end in demersal trawls off Paradeep coast for sustainable fishing	R.Mishra & K. Neelakantan (2007)	Asian J. of Animal Sciences 2(1&2) : 25-29
Technical reports	Action Plan 2008		
	Annual report -2007		
	XI th EFC, 2007-08 to 2011-12		
	Audit memo reports		
News letters	Under Preparation		

Technical bulletins	Nil		
Popular articles	Integrated aquaculture management in Ganjam district of Orissa	R.Mishra, N.Nayak & B.P.Mishra	Fishing Chimes 26(10): 36-37
	A vision for development of fisheries in India	S.C.Mishra and R.Mishra	Souvenir Silver Jubilee of Coll. Of Fisheries, OUAT p. 34-38
	Freshwater fish culture	R.Mishra	Chasira Sansar 41(5): 38-40
	Disinfection of pond water for fish culture	R.Mishra & N.Nayak	Chasira Sansar 42(1): 37-38
	Samagrika krushi vikash pain bhitti bhumira parichalana	B.P.Mishra	Chasira Sansar Dec. 2007
Extension literature	Krishi Vigyan Kendra, Puri for the service of farmers	B.P.Mishra & R.Mishra	
	Composite fish farming	R.Mishra	
	Hygienical method of fish drying	R.Mishra	
	Production of vermicompost	B.P.Mishra & R.Mishra	
	Pointed gourd – A profitable crop	B. Mishra & R.Mishra	
	Banana cultivation	B.Mishra & R.Mishra	
	Biofertilier for better productivity	H.K.Sahu & R.Mishra	
	IPM in brinjal	P.K.Nanda & R.Mishra	
	Groundnut cultivation	P.K.Nanda & R.Mishra	
	Paddy straw mushroom	D.Jena & R.Mishra	
	Dhingri mushroom cultivation	D.Jena & R.Mishra	
Others			
TOTAL	13		

N.B. Please enclose a copy of each. In case of literature prepared in local language please indicate the title in English

(C) Details of Electronic Media Produced :

S. No.	Type of media (CD / VCD / DVD / Audio-Cassette)	Title of the programme	Number
1	CD	Case study on IDM in betelvine	One

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

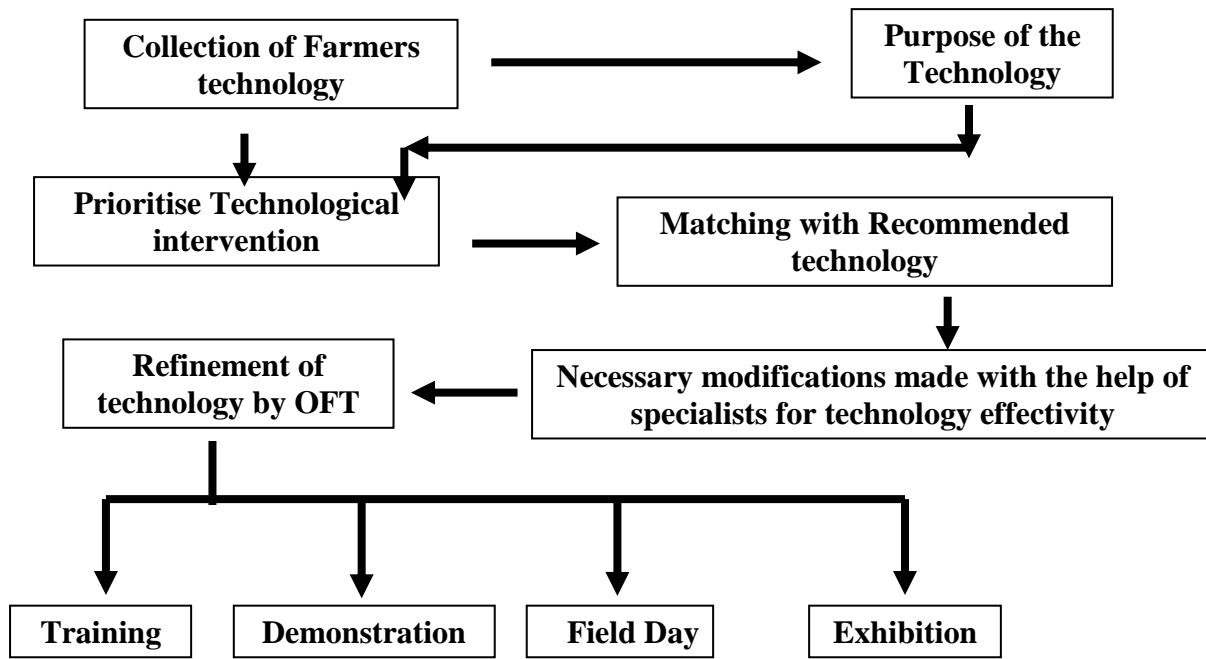
1.	Name of the Enterprise:	Betelvine
2.	Name and Address of the Farmer:	Sri Surendra Kumar Sahoo, At: Sundara, P.O. : Kusumbara, P.S. : Kakatpur, Dist: Puri
3.	Initial status Status of Technology adoption	<ul style="list-style-type: none"> Application of mustard oilcake Imbalance fertilizer application Lack of knowledge on selection of planting materials Incorrect identification of disease and insect pest Lack of knowledge on proper management of old Baraja Management of disease and pest problems through injudicious use of chemical pesticides and improper time, dose and method of ITK
	Crop area	8 Gunth (0.32 ac)
	yield	2.3 lakh leaves @ 18 lakh leaves per ha per year
	Net income	Rs70,000/- (Expenditure Rs30,000/-)

	Socio-economic status of the farmer	<ul style="list-style-type: none"> • Age : 54 yrs • Education : matriculate • Land holding : 2 ha partially irrigated land • Family size : 5 • Annual income : 1.75 lakh rupees
4.	Intervention of KVK:	<ul style="list-style-type: none"> • FLD on Integrated disease management practices using Neem oil cake @2.5 q/ha, Neem oil @ 3ml/lit for spraying, <i>Trichoderma viridae</i> @5kg/ha and application of Bordeaux mixture. • FLD and Training on INM through use of 15-20 cartloads of FYM/ac, NPK (150-100-125 kg/ha), Neem oil cake @250kg/ha. • Training on Proper packaging in bamboo basket and keeping layer of banana leaves in between layers of betelvine leaves and covering the basket with banana leaves to avoid perishability.
5.	Extension methodology applied:	<ul style="list-style-type: none"> • Diagnostic field visit to analyze the problems of the farmers • Awareness programme on pest and disease management of betelvine in the village Sundara • FLD on IDM practices in betelvine garden • Supply of inputs like neem oil cake and <i>T. viridae</i> • Method demonstration on application of fertilizers, orchard management, Bordeaux mixture preparation and use, improved packaging. • Skill training on correct identification of disease and insect infestation and knowledge on assessment of ETL. • Farmers Training on scientific betelvine cultivation • Distribution of literature – “Pana Chasa”
6.	Improved practices/technology adopted:	<ul style="list-style-type: none"> • Scientific Baraja, perfect leveling of land • Selection of good quality betelvine cuttings • Timely intercultural operation • Scientific method of fertilizer application and staking • Integrated disease management practices • Scientific harvesting and packaging • Scientific management of old Baraja • Planting of Tulasi and marigold in and around the Baraja as improved ITK to prevent disease and insect infestation • Balance use of fertilizers NPK as per recommendation
7.	Adoption of technology and benefit to the farmers	Adoption technology as per recommendation in the previous point.
	Area	8 Gunth (0.32 ac)
	Yield	3.5 lakh leaves @20 lakh leaves per ha per year
	Income	Net income Rs85,000/- (Expenditure Rs35,000/-)
	Socio-economic change	<ul style="list-style-type: none"> • Age : 54 yrs • Education : matriculate • Land holding : 2 ha partially irrigated land • Family size : 5 • Annual income : 1.90 lakh rupees
	Others	Gain in knowledge on <ul style="list-style-type: none"> • Application of neem oil cake in place of mustard oil cake • Preparation and application of Bordeaux mixture • Application of bio-parasite <i>Trichoderma viridae</i> • Proper packaging for market
8.	Model of technology dissemination	<ul style="list-style-type: none"> • FLD on IDM in betelvine • Training on betelvine cultivation and IDM practices • Application of input and technology through guidance of KVK scientists
	Services	<ul style="list-style-type: none"> • Supply of inputs assured at door step
	Linkage	<ul style="list-style-type: none"> • Linkage with state Agriculture and Horticulture Dept., Bank (Allahabad and Puri Gramya Bank)

9.	Farmer's Reaction and feed back:	<ul style="list-style-type: none"> Farmer has adopted the IDM practices and has learnt preparation of Bordeaux mixture. The effectivity of this technology is appreciated by him as these are easy to prepare, cost saving and eco-friendly. Though INM practices have been adopted, the farmer is interested on organic cultivation without use of chemical pesticides and fertilizers. Farmer has expressed his confidence on identifying the correct insect and pest affecting the crop. As all the inputs are available in the local market, he has changed his attitude in using mustard oil cake and replaced it by neem oil cake. The training and demonstrations are very much helpful, learned and applied the technologies. Farmers want to adopt the curing practices of betelvine for longer stability.
10.	Extent of diffusion of scientific technology:	<ul style="list-style-type: none"> The IDM practices has been partially adopted by twenty numbers of farmers of this village and adjacent villages. The scientific packaging has been diffused to his fellow farmers and few farmers of the adjacent villages. Preparation of Bordeaux mixtures has been learnt by all the farmers of the village. Majority of the farmers are now able to manage their old Baraja scientifically.
11.	Follow-up action by KVK:	<ul style="list-style-type: none"> Post-training follow-up to assess the knowledge of adoption through group discussion and field visits. Diagnostic visit to his field during the period of demonstration i.e. IDM, INM components practiced. Problems have been solved as and when required by the farmer during critical stages of operation Skill demonstration were assessed through post skill assessment during and after demonstrations The learning – by –doing concept has been duly emphasized during the entire period of transfer of technology. Field day during demonstration, harvesting and packaging
12	Action photographs	Attached

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

Innovative Extension Technology Developed



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	Pulses	Use of Begonia leaf powder, fly ash and turmeric powder	to control stored grain pests
2	Rice	Spraying of fresh cow dung extract	for control of BLB
3	solanaceous vegetables and betel vine	Neem and Karanja oil cake	for management of wilt
4	solanaceous vegetables	Use of solution of turmeric powder, hengu and zinc sulphate	to manage wilting
5	cattle	Neem bark decoction	Foot and mouth disease

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

- Identification of courses For farmers/farm women : PRA and Bench Mark Survey
- Rural Youth : Personal contact and group discussion
- In-service Personnel : Personal contact, group discussion, weekly and monthly meetings

3.11 **Field activities**

- i. Number of villages adopted : 4
- ii. No. of farm families selected : 380
- iii. No. of survey/PRA conducted : 4

3.12. **Activities of Soil and Water Testing Laboratory** : Nil

- 1. Status of establishment of Lab :
- 2. Year of establishment :
- 2. List of equipments purchased with amount :

Sl. No	Name of the Equipment	Qty.	Cost
1			
2			
3			
Total			

3. Details of samples analyzed so far :

Details	No. of Samples	No. of Farmers	No. of Villages	Amount realized
Soil Samples				
Water Samples				
Total				

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)
Mushroom cultivation	87	20	Nil	Rs60/- per bed

NB: Should be based on actual study, questionnaire/group discussion etc. with ex-participants.

4.2. Cases of large scale adoption : Nil

(Please furnish detailed information for each case)

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

The KVK is one and half year old. However, the impact analysis for training conducted was carried out through group discussion with Ex-trainees.

5.0 LINKAGES

5.1 Functional linkage with different organizations

Sl. No	Name of the organization	Nature of linkage
1.	District magistrate and Collector, Puri	Developmental activities of KVK , Participation in meeting
2.	DRDA, Puri	For rural development programmes
3.	Dept. of Agril., Puri	For selection of adopted village, training, demonstration, SMS workshop and field visits, Joint diagnostic survey, Participation in meeting
4.	Dept. of Horti., Sakhigopal	For selection of adopted village, training, demonstration, SMS workshop and field visits, Joint diagnostic survey, Participation in meeting
5.	Dept. of Vety. Sc. and A.H., Puri	For selection of adopted village, training, demonstration, SMS workshop and field visits, Joint diagnostic survey, Participation in meeting
6.	Dept. of Fisheries, Puri	For selection of adopted village, training, demonstration, SMS workshop and field visits, Joint diagnostic survey, Participation in meeting
7.	NGOs/ Cooperatives etc.	For imparting training and providing technical guidance

NB The nature of linkage should be indicated in terms of joint diagnostic survey, joint implementation, participation in meeting, contribution received for infrastructural development, conducting training programmes and demonstration or any other

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

Name of the scheme	Date/ Month of initiation	Funding agency	Amount (Rs.)

5.3 Details of linkage with ATMA

a) Is ATMA implemented in your district Yes/ No : Started in the month of **September, 2007**

S. No.	Programme	Nature of linkage	Remarks
1	Governing Body meetings, working committee meetings	Execution of activities	Without affecting KVK activities
2	Technical guidance, SREP	As a member of DPD (technical)	-do-
3	Training to farmers	As resource person	As and when invited without affecting KVK activities

5.4 Give details of programmes implemented under National Horticultural Mission:

S. No.	Programme	Nature of linkage	Constraints if any
1	Training to farmers	As resource person	As and when invited without affecting KVK activities

5.5 Nature of linkage with National Fisheries Development Board :

S. No.	Programme	Nature of linkage	Remarks
1	Training to farmer	Funding by NFDB	Initiation has been started

6. PERFORMANCE OF INFRASTRUCTURE IN KVK : NIL

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	

6.2 Performance of instructional farm (Crops) including seed production

Name of the crop	Date of sowing	Date of harvest	Area (ha)	Details of production			Amount (Rs.)		Remarks
				Variety	Type of Produce	Qty.	Cost of inputs	Gross income	
Cereals									
Pulses									
Oilseeds									
Fibers									
Spices & Plantation crops									

Floriculture									
Fruits									
Vegetables									
Others (specify)									

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	

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	

6.5 Utilization of hostel facilities

Accommodation available (No. of beds) :

Months	No. of trainees stayed	Trainee days (days stayed)	Reason for short fall (if any)

(for whole of the year)

7. FINANCIAL PERFORMANCE

7.1 Details of KVK Bank accounts

Bank account	Name of the bank	Location	Account Number
With Host Institute	SBI, OUAT Campus	Bhubaneswar	-
With KVK	SBI, Tulasipur Branch	Tulasipur	11346446097 (Main)
	SBI, Tulasipur Branch	Tulasipur	30356069907 (RF)

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

Item	Released by ICAR		Expenditure		Unspent balance as on 1 st April 2008
	Kharif 2007	Rabi 2007 -08	Kharif 2007	Rabi 2007 -08	
Inputs	-	12250	-	12250	NIL
Extension activities	-	1750	-	1750	NIL
TA/DA/POL etc.	-	1750	-	1750	NIL
TOTAL	-	15750	-	15750	NIL

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

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

7.4 Utilization of funds under FLD on Cotton (Rs. In Lakhs) : ---

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					

7.5 Utilization of KVK funds during the year 2007 - 08 (in lakhs)

S. No.	Particulars	Sanctioned	Released	Expenditure
A. Recurring Contingencies				
1	Pay & Allowances	22.0	22.0	22.46240 (Including Terminal Benefit : 0.735 and Minus balance of 2006-07 : 1.12521)
2	Traveling allowances	0.63	0.63	0.63
Contingencies				
A	Stationery, telephone, postage and other expenditure on office running, publication of Newsletter and library maintenance (Purchase of News Paper & Magazines)	5.50	5.50	5.50 (Including Monitoring : 0.08715)
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			
TOTAL (A)		28.13	28.13	28.5924
B. Non-Recurring Contingencies				
1	Works			
2	Equipments including SWTL & Furniture	1.70	1.70	1.68964
3	Vehicle (Four wheeler/Two wheeler, please specify)			
4	Library (Purchase of assets like books & journals)			
TOTAL (B)		1.7	1.7	1.68964
C. REVOLVING FUND				
GRAND TOTAL (A+B+C)		29.83	29.83	30.29639

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 2004 to March 2005				
April 2005 to March 2006				
April 2006 to March 2007	0.35	-	0.075	0.275
April 2007 to Mar. 2008	0.275	-	0.01435	0.26065

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

1. Technical guidance for SRI method of paddy cultivation is being provided by KVK to Line Department.

8.1 Constraints

a. Administrative

1. There is no infrastructural facility
2. There is no farm
3. Vacant position of scientific and other staffs may kindly be filled up immediately for carrying out different KVK activities

b. Financial

1. Adequate funds may kindly provided to conduct various KVK programmes
2. Funds may be provided for fencing of KVK

c. Technical

1. A computer with accessories (Printer, scanner), Laptop, LCD Projector and furniture may kindly be provided
2. Two motor cycles is required for conducting various programmes in rural areas

(Signature of Programme Coordinator)

PROCEEDINGS OF 1ST SCIENTIFIC COMMITTEE MEETING OF KVK, PURI

The 1st Scientific Advisory Committee Meeting of KVK, Puri, Kakatpur was held in the Block Resource Center of Kakatpur Block under the chairmanship of Dr. Sarat Chandra Mishra, Dean of Extension Education, OUAT, Bhubaneswar on 27.10.2007. The following members and invitees attended the meeting.

1	Dr. Sarat Chandra Mishra Dean of Extension Education OUAT, Bhubaneswar	Chairman
2	Dr. Rabinarayan Mishra KVK, Puri, Kakatpur	Programme Coordinator
3	Sri RajKishore Swain AAO, O/O DDA, Puri Range	Member Representative of DDA, Puri
4	Sri B.C.Barik A.H.O., Nimapara	Member Representative of DDH, Puri
5	Dr. Bhagabat Ghosh Addl. V.S., Kakatpur	Member Representative of CDVO, Puri
6	Dr. B.K.Sontakke Assoc. Dean of Research, RRTTS, OUAT, BBSR	Member
7	Sri N.C.Pani AGM, NABARD, Puri	Member
8	Sri J.M.pattanayak LDM, Puri	Member
9	Sri M. M. Mishra DDF,Chandrabhaga and DFO, Puri	Member
10	Sri Maheswar Sahoo Suara, Farmer	Member
11	Sri Laxmidhar Muduli Nandipur, farmer	Member
12	Smt. Saudamini Mishra Kakatpur	Member
13	Sri Akshya Kumar Ray Advisor, LWS, Nimapara	Member (NGO)
14	Smt. Bidyut Prava Sahoo Suara	Member
15	Akshya Kumar Rout, Reporter, Sambad, Kakatpur	Member

Invitees

1	Dr. LaxmiNarayan Kar, Retd. Director, extension, OUAT
2	Sri Minaketan Mohanty, DSF, Puri
3	Sri Rushava Prasad Nanda, DSF, Puri
4	Sri H.N.Mohanty, I.C.S. (Fy), O/O DFO, Puri
5	Ajay Kumar Bastia. FEO, Kakatpur
6	Sri Narendra Kumar Dixhit, Kakatpur
7	Sri Prashanta Kumar Sahoo, AAO, Kakatpur

The 1st SAC Meeting of KVK, Puri, Kakatpur was initiated by lighting the candle by the Chairman Dr. Sarat Chandra Mishra, Dean of Extension Education and other guests at 11.00 AM. The technical session was set on motion with a very cordial welcome by Sri Hemant Kumar Sahu, S.M.S (Agronomy) of this KVK.

At the outset, the Chairman gave an introductory speech highlighting the objectives of establishment of KVK. He put glimpses on development programs in post-independence era during 5 year plans where the agriculture was given a special sector along with other departments following the top down approach of extension imposing the farmers to adopt the technologies. He emphasized the establishment of KVK for different category of farmers with special attention to small, marginal and landless labourers. He also explained about the activities of KVK through On-farm trials, Front line demonstrations and training programmes.

Dr. Rabinarayan Mishra, Programme Coordinator appraised the activities of the KVK for the last one year covering all the mandates of transfer of technology of KVK in brief.

During the period of August 2006 to September 2007, 86 nos. of training programmes were organized and 818 farmers, 269 farm women, 293 rural youth including school dropout girls (Including SC/ST trainees), 166 in-service personnel of line departments and NGOs were trained in the field of Agronomy, Horticulture, Plant Protection, Fishery, Women in Agriculture, Agricultural Engineering & Extension Education.

Front line Demonstrations on oilseed and pulses during the period covered 5 ha in oilseed and 5 ha in pulses. Demonstrations were conducted in village Raisa and Tulamala with 30 beneficiaries in a compact patch. Programme Coordinator then presented the proposed action plan of KVK for 2008 along with future thrust programmes.

The chairman then invited suggestions from members for open discussion regarding the activities of KVK in future programmes.

☞ Sri B.C.Barik, A.H.O., Nimapara suggested that

- (i) The technical know how on disease management, processing and marketing of betelvine should be extended by KVK. DEE, OUAT assured for conduct of training programmes in this regard to progressive farmers for further multiplier effect and the processing aspect will be taken up after discussion with Post-Harvest Technology Dept. of Agril Engg of OUAT. The marketing is to be strengthened through line departments.
- (ii) Biological control lab. should be established at KVK. DEE suggested for procuring cards from Dept of Entomology, CA, OUAT where the cards are available at a nominal price. Dr. B.Mishra of the Dept may be contacted for the purpose..

☞ Sri B.C.Jena, A.A.O., Puri suggested for

- (i) popularization of HYV of colocasia along with local var which is liked by farmers from village Lataharan through KVK programmes.
- (ii) Farmers should be encouraged for potato cultivation in large areas.

☞ Dr. L.N. Kar suggested

- (i) the line departments to concentrate on dissemination of full package of practice of different crops to the farmers with continuous follow up.
- (ii) Department should concentrate on marketing of Okra which is plentifully grown during Kharif and Rabi.
- (iii) The new technologies should be tested in the fields of progressive farmers.
- (iv) Irrigation should be available to farmers at critical crop growth stage like flowering etc without fail.

(v) KVK scientists should disseminate scientific knowhow when ever required by the farmers and line departments.

- ☛ LDM, Puri suggested for propagation of varieties of papaya which will give more female plants.
- ☛ AGM, NABARD suggested for implementing KVK activities in few villages of other blocks of Puri district in addition to adopted villages.
- ☛ Sri N. Dixhit suggested for pest and disease management of coconut plants.
- ☛ Sri A.K.Ray suggested for imparting training on details of vermicomposting to farmers.
- ☛ Smt. Saudamini Mishra suggested for training programmes on vermicomposting, mushroom cultivation, value addition of milk and its assured marketing channel.
- ☛ Dr. B.Ghosh suggested for spread of fodder cultivation and introduction of azolla cultivation for cattle feed.
- ☛ Smt Bidyut Prava Sahoo asked for detailed know how on vegetable cultivation for early crops for good market price. Training on mushroom cultivation should be provided to farm women for earning.
- ☛ Sri Man Mohan Mishra, Dy Director, Fisheries expressed satisfaction over the activities of KVK on fisheries and assured whole hearted support from department as and when required by KVK.

At last, Dean, Extension Education assured the house that the suggestion given by the members and invitees will be included in the future action plans of KVK to solve the problems of the farmers with collaboration of the authorities of the line departments of the district, if necessary.

The meeting ended with vote of thanks by Dr (Mrs). B.P. Mishra, SMS, Extension.