

ANNUAL REPORT

(April, 2008 to March, 2009)

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	
Mayurbhanj	At/Po – Shamakhunta, Mayurbhanj Orissa, Pin – 757 049	06792	211555	211555	kvkmayurbhanj@redifmail

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	
OUAT	At/Po – Bhubaneswar – 751 003	0674	2392677	2397780	vc@ouat.nic.in

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

Name	Telephone / Contact		
	Residence	Mobile	Email
Dr. Sangram Keshari Swain	-	94372 -06151	swainsangram@yahoo.co.in

1.4. Year of sanction: 2005

1.5. Staff Position (as on 31st March 2009)

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. S.K. Swain	P.C.	Agriculture. Engineering	10,000-15,500-19,388/-	7.1.2006	Permanent	Gen.
2	Subject Matter Specialist		SMS	Animal Science	Vacant			
3	Subject Matter Specialist	J. Patra	SMS	Extension	8000-13500-12775/-	18-07-05	Temporary	OBC
4	Subject Matter Specialist	Mrs M. Bhol	SMS	Home Science	8000-13500-12413/-	02-01-06	Temporary	OBC
5	Subject Matter Specialist	Mrs S. Pattnaik	SMS	Horticulture	8000-13500-12413/-	10-01-06	Temporary	Gen.
6	Subject Matter Specialist	Mrs A. Sasmal	SMS	Plant Protection	8000-13500-12775/-	10-01-06	Temporary	Gen.
7	Subject Matter Specialist	Mr. T. R. Mohanty	SMS	Plant Protection	8000-13500-8550/-	01.07.08	Temporary	Gen.
8	Programme Assistant	Sj. Dillip Ranjan Sarangi	Prog. Asst (Agril)	Agril (Soil Sc.)	5500-9000 8513/-	20-01-06	Temporary	Gen.
9	Computer Programmer	Sj. Sanjay Kumar Barik	Prog. Asst (Computer)	Computer	5500-9000 8850/-	23-06-07	Temporary	Gen.
10	Farm Manager	Sj. Kishore chandra Sahoo	Farm Manager	Agronomy	5500-9000 8513/-	3-08-06	Temporary	OBC
11	Accountant / Superintendent	Vacant						
12	Stenographer	Sj. R.N .Pati	Steno		4000-6000 6000/-	16-10-06	Temporary	Gen
13	Driver	Pradeepta Kumar Biswal	Driver		3050-4590 4075/-	25-07-07	Temporary	Gen
14	Driver	B. K. Behera	Driver		3050/- (Conso.)	18.07.08	Temporary	Gen
15	Supporting staff	Dinabandhu Swain	Attendant		2550-3200 4823/-	20.12.07	Temporary	OBC
16	Supporting staff	Harihar Pradhan	Attendant		2550-3200 4823/-	22.12.07	Temporary	OBC

1.6. Total land with KVK (in ha): 27.94ha

S. No.	Item	Area (ha)
1	Under Buildings	0.44
2.	Under Demonstration Units	1.0
3.	Under Crops	20.0
4.	Orchard/Agro-forestry	-
5.	Others (Ponds)	4.0
6.	Seed Storage	0.3

1.7. Infrastructural Development:

A) Buildings

S. No.	Name of building	Source of funding	Stage					
			Complete			Incomplete		
			Completion Date	Plinth area (Sq.m)	Expenditure (Rs.)	Starting Date	Plinth area (Sq.mt)	Status of construction
1.	Admin. Building	ICAR	Dec.2007	754	4200004			
2.	Farmers Hostel	ICAR	Dec.2007	304.7	2515918			
3.	Staff Quarters (3)	Received from State Govt. (Agril. Department)						Needs Renovation
4.	Demo. Units (1) Poultry Brooding	DRDA ,Baripada	24.09.07	92.9	420000			
5	Fencing (compound wall)	ICAR				Jan. 08	350 mts	Under progress
6	Rain Water harvesting system	-						
7	Threshing floor	ICAR	28.08.07	44.6	170000			
8	Farm godown (1)	Received from State Govt.						

B) Vehicles

Type of vehicle	Year of purchase	Cost (Rs.)	Total kms. Run	Present status
Tata Sumo	2005	5.40.000		Good
Tractor	2006	3.41658		Good

C) Equipments & AV aids

Name of the equipment	Year of purchase	Cost (Rs.)	Present status
Desktop PCI	2009	29700	Good
Flatbed Scanner	2009	5200	Good
Colour laser printer	2009	19932	Good
Line interactive UPS	2009	1500	Good
Beds -20 nos.	2009	54000	Good
Dining table- 4 nos	2009	15200	Good
Moulded chairs with arm- 50 nos.	2009	19500	Good
Mattresses -20 nos	2009	38400	Good
Pillow-20 nos	2009	4400	Good
Steel alna- 6 nos	2009	10200	Good
Steel table (small)- 6 nos	2009	7500	Good
Bed sheet- 40 nos	2009	7200	Good
Mosquito net- 20nos.	2009	7000	Good
Blanket- 20 nos	2009	9000	Good
Steel rack- 4 nos	2009	12400	Good
Table with drawer-9 nos	2009	93953	Good
Table without drawer-7 nos	2009	40233	Good
Chair (S-Type)-19 nos	2009	34881	Good
Steel Almirah-(Big)-2 nos	2009	28284	Good
Steel Almirah-minor-8 nos	2009	83185	Good
Multipurpose long table- 3 nos	2009	23460	Good

File cabinet-3 nos	2009	31426	Good
Book case-4 nos	2009	41706	Good
Computer table-2 nos	2009	14973	Good
Sofa	2009	13672	Good
Computer chair	2009	3288	Good
Water purifier	2009	7199	Good
Vacuum Cleaner	2009	9999	Good
T.V & DVD	2007	13600	Good
0.5 KV Voltage stabilizer	2007	1000	Good
Display Board (2 nos)	2006	5000	Good
White Board(2 nos)	2006	2978+4980	Good
Grooving Type Display Board	2007	4780	Good
Camera	2007	9980	Good
Paddle winnower	2006	2415	Good
Paddy thresher	2006	3275	Good
Power sprayer	2007	5434	Good
Rotavator	2006	64335	Good
Cono weeder	2006	1204	Good
Water purifier	2008	7190	Good
Cycle	2008	2365	Good
Gas stove	2008	4395	Good
Utensils	2008	4500	Good
Cage	2008	4200	Good
Horticultural tools	2008	4909	Good
Display Board	2008	3637	Good
Acrylic Notice Board	2008	4750	Good
Pre germinated paddy Drum seeder	2008	2520	Good
Wheel finger weeder	2008	800	Good
Cono weeder	2008	1204	Good

1.8. A). Details SAC meeting conducted in the year (2008-09):

Sl. No.	Date	No. of Participants	Salient Recommendations	Action taken
1.	24.10.07	17	Involvement the SHG for their empowerment in different activities like vocation training, FLD, exposure visit etc. by deciding their potentials in enterprises like agriculture, vegetable cultivation, pisciculture, poultry, goatery, value addition, homestead management, honey bee rearing etc.	Vocational training and FLD on Mushroom Cultivation, Bee Keeping, Agarbati Making, Value addition of fruit & Vegetable products, nutritional garden, preparation of household of decorative, backyard poultry in adopted villages like Baunsabilla, Satapoutia, Khandia involving women SHG groups. Steps are initiated to form Farmers Club including male farmers for better vocational activities.
2			Developing linkages with NABARD, IFFCO and other input agencies having their own extension system for collaborative support in implementing vocation trainings in different field and other extension activities.	Linkages are developed with NABARD for technological support to the farmers clubs & NGOs under its financial assistance like CIDR, DULAL and its adopted village in Kulia block. For formation of farmers club, linkage was established with NABARD. Linkages are developed with Srusti (NGO) for development of Model Watershed with the financial assistance from ICRISAT.

3		Convergence of different line departments for implementation of programmes.	Different training programmes were conducted for capacity building & rapport making involving multidisciplinary departments. Training programme, FLD, OFT & Other extension activities were conducted jointly with ATMA and other line departments
4		Training and exposure visit for extension functionaries of agriculture department on SRI cultivation in the KVK campus.	Many of the Extension Officials including Joint Director (Agriculture) from Agriculture Directorate visited the SRI demonstration plot. Training programme was also conducted.
5		For pure line selection of Ratila mung (a local variety performing well in cold climate of Mayurbhanj situation) and crop management practices for acidic soil as 82% soils of Mayurbhanj are acidic. It was communicated to the Pulse Research Station, situated at Ratanpur, Ganjam under OUAT.	It was communicated to the Pulse Research Station, situated at Ratanpur, Ganjam under OUAT.
6		More emphasis on remunerative crops like sunflower cultivation, groundnut cultivation (Seed production on Smruti variety) etc. Full package demonstration on groundnut cultivation was conducted in Shamakhunta, Suliapada, Barasahi Block. The produce of the demonstration plots at Suliapada in Kharif season was used as the seed purpose.	Full package demonstration on groundnut cultivation was conducted in Shamakhunta, Suliapada, Barasahi Block. The produce of the demonstration plots at Suliapada in Kharif season was used as the seed purpose.
7		Rainy season raddish and off-season vegetable cultivation to be promoted in 12 blocks of high altitude areas.	Yet to take up
8		Technological interventions in ITDA schools to promote agriculture and allied sectors for self-employment of tribal youth and school drop outs.	Technological support was imparted to Chandua Govt. High Scholl (Kuliana Block) which is one of the largest ITDA school of Mayurbhanj district for vegetable nursery raising, Green House preparation & Vegetable Cultivation.

2. SAC meeting conducted on 05.03.2009 -Members present-17 nos

Salient Recommendation / Suggestions

- 1) Encouragement of tribal people to take up the poultry farming as entrepreneurship basis.
- 2) Implementation SRI technology in Seed Village Programme.
- 3) More programme on dry land agriculture and rain water harvesting. There should be on farm testing for increase in production of Sabai cultivation.
- 4) Extensive demonstrations on agricultural implements like Rotavator, paddy reaper, paddy transplanter, power thresher, zero till drill etc. and exposure visit of farmers to show the performance of farm implements should be carried out.
- 5) Various programmes should be conducted in collaboration with the farmers club and SHGs.
- 6) To give a proposal to AIR, Baripada to allot a regular programme for the farmers of Mayurbhanj district on behalf of KVK, Mayurbhanj.
- 7) To send proposal for setting up Mushroom Spawn Units, Bio-Technology Research Laboratory, from external funding like RKVY, P.D, DRDA or NABARD.

* Action on the recommendations is yet to take up in coming financial year

2. DETAILS OF DISTRICT (2008-09)

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

S. No	Farming system/enterprise
1.	Paddy
2.	Paddy + Groundnut
3.	Paddy + Groundnut +Vegetable
4.	Animal Husbandry
5.	Paddy + Mung
6.	Arhar
7.	Paddy + Vegetable + Mung
8.	Paddy + Pisciculture
9.	Agri+ Animal Husbandry
10.	Vegetable + Animal Husbandry
11.	Paddy + Vegetable
12.	Paddy + Mung + Vegetable

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

S. No	Agro-climatic Zone	Characteristics
1	North Central Plateau	Climate : Hot and humid Rainfall : 1554mm annually Mean max. Summer temp : 36.6 0C Mean Winter temperature : 11.1 0C Soil groups : Lateritic, Red & and Yellow, Mixed red and Black

Agro ecological situations

S. No	Agro ecological situation	Characteristics
1.	AES – I	Low Rainfall, Low Elevation Blocks (Five) : Tiring, Rirangpur, Rasgovindpur, Bahalda, Shuliapada
2.	AES – II	Low Elevation, Medium Rainfall Blocks (Fifteen): Baripada, Badasahi, Shamakhunta, Khunta, GB Nagar, Betonati, Moroda, Kuliana, Bangiriposi, Udala, Saraskana, Kusumi, Bishoi, Bijatota, Jamuda
3.	AES – III	Low Elevation, High Rainfall Blocks (One): Kaptipada
4.	AES – IV	Medium Elevation, Medium Rainfall Blocks (Five): Karanjia, Sukruli, Jashipur, Raruan, Thakurmunda

2.3 Soil type/s

S. No	Soil type	Characteristics	Area in ha
1	Mixed Red & Yellow	<ul style="list-style-type: none"> • 82% soils are acidic. • Low in N and P • Rich in K • Deficient in B and Mo. • 16% to 18% soils are neutral in reaction 	100%

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

S. No	Crop	Area (ha)	Productivity (Q/ha)
KHARIF-2008			
1	Paddy	305012	24.59
2	Maize	13462	11.06
3	Small millet	733	3.77
4	Arhar	3381	8.87
5	Mung	3861	4.7
6	Biri	11521	4.02
7	Cowpea	4589	7.27
8	Kulthi	3210	3.86
9	Groundnut	1545	9.56
10	Til	2161	3.0
11	Niger	6276	8.49
12	Mesta	3467	7.21
13	Sunhemp	386	7.0
14	Sweet patato	1927	91.37
15	Other vegetables	44389	95.13
16	Chilli	4997	11.18
17	Turmeric	3581	17.89
18	Ginger	3356	17.28
RABI-2008-2009			
1	Paddy	5816	27.78
2	Wheat	1508	16.59
3	Mung	4383	4.75
4	Biri	3137	5.10
5	Kulthi	7977	3.35
6	Gram	5345	7.91
7	Cowpea	1181	7.97
8	Lentil	3476	4.0
9	Groundnut	5501	12.5
10	Mustard	4468	3.84
11	Linseed	12887	4.28
12	Niger	18	3.350
13	Potato	103	88.0
14.	Onion	2073	78.20
15	Total vegetables	19223	94.38
16	Chilli	2972	10.75
17	Coriander	2009	5.10
18	Garlic	1141	25.30
19.	Sugar cane	80	702.75

2.5. Weather data

Month	Rainfall (mm)	Temperature ° C		Relative Humidity (%)	
		Maximum	Minimum	I –Hrs	II-Hrs
April,2008	29.5	42.0	18.0	85	50
May	79.2	41.4	21.2	84	48
June	776.6	37.8	22.1	83	73
July	499.8	34.8	21.7	92	76
August	304.2	32.9	24.1	88	70
September	267.0	33.2	20.1	83	71
October	70.0	33.2	16.9	81	69
November	20.6	33.2	11.1	85	65
December	0	29.7	9.1	85	57
January, 2009	0	32.8	10.2	87	58
February	0	37.1	14.9	86	55
March	3.2	39.0	18.7	72	4

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

Category	Population	Production	Productivity
Cattle			
<i>Crossbred</i>	47703	Milk- 28150 MT	
<i>Indigenous</i>	888446		
Buffalo	26260		
Sheep(<i>Indigenous</i>)	166636		
Goats	686785	Meat -3.29 TMT	
Pigs			
<i>Crossbred</i>	4447		
<i>Indigenous</i>	80902		
Poultry			
Hens		Egg. -793.72Million	
<i>Desi</i>	2072478		
<i>Improved</i>	598817		
Ducks	113634		
Fish			
<i>Marine</i>	-	-	
<i>Inland</i>	-	9501.84 MT	1.2 q/ac

2.6 Details of Operational area / Villages (2008-09)

Sl.No	Taluk	Name of the block	Name of the village	Major crops & enterprises	Major problem identified	Identified Thrust Areas
1	Baripada sadar	Shama k-hunta	Balidiha	Rice, Groundnut, Arhar, Mung, Biri, Tomato Vegetables, Maize, Mango, Poultry, Goatery, Dairy, Fishery	<ul style="list-style-type: none"> • Weed problem in rice & groundnut. • Water problem in upland rice. • Water stagnation and iron toxicity in lowland. • Pest and disease problems in Kharif rice. • Low return from milch animal. • Unscientific management of poultry and goatery. • Low production of fishery. 	<ul style="list-style-type: none"> • Seed production programme in paddy • Scented rice cultivation. • Hybrid vegetable cultivation. • Improved livestock management • Integrated fish farming. • Mushroom cultivation. • Vermi composting
2.	Baripada Sadar	Shama khunta	Baunsabilla	Paddy, Mung, Bamboo, Arhar, Okra, Poultry, Buffalo, Goatery, Sheep & Deshi Cow, Fishery	<ul style="list-style-type: none"> • Weed problem in rice, • Pest & disease problem in rice. • Low yield of Mung and Arhar. • Low output of live stock. • Low return from pisciculture. 	<ul style="list-style-type: none"> • Off-season vegetable cultivation. • Backyard rearing of poultry. • Commercial pisciculture. • Goatery. • Fruit orchard. • Mushroom cultivation
3	Baripada Sadar	Shama khunta	Khandia	Paddy, Groundnut, Sabai, Backyard Vegetable, Bamboo, Mung, Mango, Banana, Dairy, Poultry, Goatery, Sheep, Fishery	<ul style="list-style-type: none"> • Weed and plant protection problem in rice. • Low yield of vegetable. • Low return from fruit crops. • Imbalanced fertilizers application in groundnut. • Low milk return from dairy • Worm problem in Goatery. • Ranikhet disease in poultry. 	<ul style="list-style-type: none"> • Bee Keeping • Backyard Poultry • Commercial Goatery • Value Addition Of Bamboo And Sabai • Vermin Composting • Orchard Plantation.

4.	Baripada Sadar	Shama khunta	Satpouti a	Rice, Mung, Arhar, Vegetable, Mango, Bamboo, Coconut, Jack Fruit, Poultry, Goatery, Dairy And Orchard Plants	<ul style="list-style-type: none"> • Faulty land use management in uplands. • Low return from live stocks. • Water stagnation and flood in lowland rice. • Low yield of rice due to improper management. • Imbalance fertilizer application in vegetables. • Wild growing of orchard plant. 	<ul style="list-style-type: none"> • Nutritional garden • Backyard poultry cultivation • Mushroom cultivation • Hybrid vegetable cultivation • Orchard plantation • Value addition of fruit and vegetable.
	Baripada Sadar	Shama khunta	Sindurgura	Rice, Moong, Tomato, Sabai, Bamboo, Drumstick, Lemon, Papaya, Guava, Goatery, Sheep, Poultry, Buffalo, Duckery, Fishery	<ul style="list-style-type: none"> • Weed problem in upland rice. • Pest and disease in medium land rice. • Low yield of mung due to traditional practice, • Wilt problem in tomato causing low yield. • Worm problem in goatery. • Low milk production of buffalo. • Ranikhet disease in poultry. • Low yield of desi duck. • Low production of vegetables. 	<ul style="list-style-type: none"> • Commercial pisciculture. • Hybrid vegetable cultivation. • Goat and sheep rearing. • Orchard plantation of lemon, Guava and papaya. • Commercial floriculture. • Bee keeping.

2.7 Priority thrust areas

S. No	Thrust area
1.	Scented rice cultivation
2.	Back yard poultry cultivation
3.	Commercial pisciculture
4.	Mushroom cultivation
5.	Vermi-composting
6.	Off season & hybrid vegetable cultivation
7.	Goatery
8.	Fruit orchards
9.	Commercial floriculture
10.	Bee keeping
11.	Value addition of fruits & vegetables
12.	Nutritional garden.
13.	Seed production programme in paddy & vegetables.

3.1. B. Details of each On Farm Trial to be furnished in the following format

OFT-1

1.	Title of on-farm trials	Assessment of IPM in Pumpkin
2.	Problem diagnose	Low yield of pumpkin due to Fruit Damage by pest attack
3.	Details of technologies selected for assessment/refinement	- Poison baiting with 0.1 % insecticide (Malathion) and 10% jaggery in water - Need based spraying of chemicals (Malathion)
4.	Source of technology	IIHR, 2006
5.	Production system	Small production system
6.	Thematic area	Integrated Pest management
7.	Micro –farming Situation	Rainfed Medium land
8.	Performance of the Technology with performance indicators	* Percentage of damaged fruits (%) * Yield
9.	Final recommendation for micro level situation	Adoption of IPM practice
10	Constraints identified and feedback for research	• Rain damages the baiting • May be injurious for other domestic animals
11	Process of farmers participation and their reaction	Interested to adopt the new technology

3.1.C. Results of On Farm Trials

Crop/enterprise	Farming situation	Problem Diagnosed	Title of OFT	No. of trials*	Technology Assessed	Parameters of assessment
1	2	3	4	5	6	7
Pumpkin	Rainfed Medium land	Fruit damage due to pest attack	Assessment of IPM in Pumpkin	5	Poison baiting with 0.1% insecticide (Malathion) and 10% jaggery in water	% of damaged fruits due to pest Yield (q/ha) No. of insects/bait/week

Data on the parameter	Results of assessment	Feedback from the farmer	Any refinement done	Justification for refinement
8	9	10	11	12
% of fruit damage Farmer's practice -T ₁ - 20 % Technology Assessed - T ₂ - 05%	Fruit damage in pumpkin due to pest attack (Fruit fly) by the IPM technology	<ul style="list-style-type: none"> Interested to adopt the new technology Satisfied with the performance 		
Farmer's practice -T ₁ - 165 Technology Assessed - T ₂ - 182				
Farmer's practice -T ₁ - nil Technology Assessed - T ₂ - 4				

Technology Assessed / Refined	*Production per unit	Net Return (Profit) in Rs. / unit	BC Ratio
13	14	15	16
Farmer's practice (Local)-T ₁	165q/ha	Rs.24,500 / ha.	1.96
Technology Assessed –T ₂	182 q/ha	Rs.30,600 /ha.	2.25

OFT-2

1.	Title of on-farm trials	Assessment of IDM for wilt in tomato
2.	Problem diagnose	- Plant mortality due to wilt
3.	Details of technologies selected for assessment/refinement	- Seed treatment with Carbendaium & Streptomil
4.	Source of technology	OUAT
5.	Production system	Small production system
6.	Thematic area	IDM
7.	Micro –farming Situation	Rainfed Medium land
8.	Performance of the Technology with performance indicators	- % of wilt - Yield
9.	Final recommendation for micro level situation	Adoption of seed treatment seedling treatment and need based application of chemicals.
10.	Constraints identified and feedback for research	Not identified
11.	Process of farmers participation and their reaction	Positive response and receptive mood of participants

3.1.C. Results of On Farm Trials

Crop/ Enterprise	Farming situation	Problem Diagnosed	Title of OFT	No. of trials*	Technology Assessed	Parameters of assessment
1	2	3	4	5	6	7
Tomato	Rainfed Medium land	Plant mortality due to wilt	Assessment of IDM for wilt in tomato	5	* Seed treatment with * Carbendiyam & Streptomil * Need based application of Cu-oxychloride & Streptomil	% of mortality due to wilt Yield

Data on the parameter	Results of assessment	Feedback from the farmer	Any refinement done	Justification for refinement
8	9	10	11	12
- <u>%age of mortality due to wilt</u> Farmer's practice -T ₁ -25% Technology Assessed -T ₂ -3%	Wilt problem managed by adopting the seed treatment, seedling treatment and need based application of chemicals	- Farmers become satisfied with the result of the trial		
Farmer's practice -T ₁ -170q/ha Technology Assessed -T ₂ -200 q/ha				

Technology Assessed / Refined	*Production per unit	Net Return (Profit) in Rs. / unit	BC Ratio
13	14	15	16
Farmer's practice (local) -T ₁	170 q/ha	Rs.47,000 / ha.	1.85
Technology Assessed -T ₂	200 q/ha	Rs.70,000 /ha.	2.4

OFT-3

1.	Title of on-farm trials	Assessment of Suitable lemon variety (Kuliana Lime)
2.	Problem diagnose	Low yield and disease pest incidence is more in local traditional variety
3.	Details of technologies selected for assessment/refinement	Variety of Kuliana lime with recommended full package of practices
4.	Source of technology	
5.	Production system	Small production system
6.	Thematic area	Orchard plantation system
7.	Micro –farming Situation	Upland rain fed
8.	Performance of the Technology with performance indicators	Yield Disease & pest incidences
9.	Final recommendation for micro level situation	Results awaited
10.	Constraints identified and feedback for research	Results awaited
11.	Process of farmers participation and their reaction	For testing of the technology on the Varietal substitution, lemon is decided in collaboration with the farmers. Separating the plots in two parts i.e. one for local check and other for testing plots makes the design.

3.1.C. Results of On Farm Trials

Crop/enterprise	Farming situation	Problem Diagnosed	Title of OFT	No. of trials*	Technology Assessed	Parameters of assessment
1	2	3	4	5	6	7
Lemon	Upland rainfed	Low yield diseases and pest incidence	Assessment of suitable Lemon Variety (Kuliana Lime)	5	Kuliana lime	Yield Diseases and pest incidences.

Data on the parameter	Results of assessment	Feedback from the farmer	Any refinement done	Justification for refinement
8	9	10	11	12
Yield - Results awaited	In progress	Plant canopy is good. Disease and pest not yet affected	-	-
Diseases and pest incidences. Farmers' practice T ₁ -20 %affected due to citrus die back, canker Technology assessed T ₂ -No citrus die back, canker				

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

OFT-4

1.	Title of on-farm trials	Assessment of tomato variety (Utkal Raja)
2.	Problem diagnose	Low yield in traditional variety due to wilt (30%) and yield 180q/ha.
3.	Details of technologies selected for assessment/refinement	Wilt tolerant variety Utkal Raja with recommended full package and practices.
4.	Source of technology	OUAT, Bhubaneswar
5.	Production system	Small production system
6.	Thematic area	Production of low volume and high value crop / Off season vegetable cultivation
7.	Micro –farming Situation	Irrigated Upland
8.	Performance of the Technology with performance indicators	- Yield - Wilt % - No. of fruits / plant -Pest & diseases incidence - B.C ratio
9.	Final recommendation for micro level situation	Wilt tolerant variety of Tomato will be a profitable enterprise due to high production and resistance to wilting.
10.	Constraints identified and feedback for research	Unavailability of seeds in local market. Early harvesting in yellow stage as the keeping quality is low.
11.	Process of farmers participation and their reaction	5 Nos. of farmers were participated in the OFT programme. High yield, fruits appear in 8 clusters having 5 nos. of fruits which is just double as compared to local. Keeping quality should be improved as the outer covering of fruit is very thin.

3.1.C. Results of On Farm Trials

Crop/ enterprise	Farming situation	Problem Diagnosed	Title of OFT	No. of trials*	Technology Assessed	Parameters of assessment
1	2	3	4	5	6	7
Tomato	Irrigated upland	Low yield in traditional variety due to wilt (30%)	Assessment of Tomato variety Utkal Raja	5	T ₁ - Traditional variety T ₂ - Wilt tolerant Tomato variety	<ul style="list-style-type: none"> • Yield • Wilting % • No. of fruits/plant • Pest & disease incidence • B:C ratio

Data on the parameter	Results of assessment	Feedback from the farmer	Any refinement done	Justification for refinement
8	9	10	11	12
Yield T ₁ – 180q / ha. T ₂ -380 q/ha.	Wilt tolerant tomato variety Utkal Raja increased yield almost double as compared to local check and wilting % is nil where as 30% in local check	Yield is just double as compared to local variety is nil where as 30% in local. Flowering appears in 38 days and fruits / plant is 40 and fruit weight is around 97 gm. But it should be early harvested in yellow stage as keeping quality is low (Thin skin)	-	-
Wilting % T ₁ – 30% , T ₂ – Nil				
No. of fruits / plant T ₁ -18-20 , T ₂ -40				
Pest & disease incidence - T ₁ – 30 to 40 % , T ₂ – 5%				
B :C ratio - T ₁ – 1.6 , T ₂ – 2.76				

Technology Assessed / Refined	*Production per unit	Net Return (Profit) in Rs. / unit	BC Ratio
13	14	15	16
Farmer's practice – T ₁	180 q/ha.	Rs.27,000/-	1.6
Technology assessed – T ₂	380 q/ha.	Rs.97,000/-	2.76

OFT-5

1.	Title of on-farm trials	Assessment of chilli variety – Utkal Rashmi
2.	Problem diagnose	Low yield in traditional / desi variety due to wilt (20%)
3.	Details of technologies selected for assessment/refinement	Wilt tolerant variety Utkal Rashmi with recommended full package and practices
4.	Source of technology	OUAT, Bhubaneswar
5.	Production system	Small production system
6.	Thematic area	Low volume and high value crop
7.	Micro –farming Situation	Rainfed upland
8.	Performance of the Technology with performance indicators	- Yield - Wilt % - Nos. of fruits / plant - Pest diseases incidence - B: C ratio
9.	Final recommendation for micro level situation	Wilt tolerant variety of Chilli (Utkal Rashmi) will be a profitable enterprise due to high production and resistance to wilting.
10.	Constraints identified and feedback for research	Unavailability of seeds in market. Pungency should be improved for green chilli
11.	Process of farmers participation and their reaction	5 nos. of farmers were participated for the process. Yield increased by 74% as compared to local and wilting is nil. Pungency should be improved for table purposes as pungency is very low.

3.1.C. Results of On Farm Trials

Crop/enterprise	Farming situation	Problem Diagnosed	Title of OFT	No. of trials*	Technology Assessed	Parameters of assessment
1	2	3	4	5	6	7
Chilli	Rainfed upland	Low yield in traditional variety due to wilt (20%)	Assessment of Chilly variety : Utkal Rashmi	5	T ₁ - Traditional variety T ₂ - Wilt resistant Chilli Variety	- Yield - Wilting % - No. of fruits / plant - Pest and disease incidence - B : C ratio

Data on the parameter	Results of assessment	Feedback from the farmer	Any refinement done	Justification for refinement
8	9	10	11	12
Yield T ₁ -50q/ha. T ₂ -87 q/ha.	Wilt tolerant Chilli variety Utkal Rashmi increased yield by 74% over the farmers practice and wilting % is nil where as 20% in local check.	Yield increased by 74% over the local check and wilting is nil where as 20% in local check. Pungency is very low which should be improved.	-	-
Wilting % T ₁ 20%, T ₂ – Nil				
No. of fruits / plant T ₁ 250 to 300 T ₂ 900				
Pest & disease incidence T ₁ 30 to 40% T ₂ Nil				
B : C ratio T ₁ 1.66 T ₂ 2.17				

Technology Assessed / Refined	*Production per unit	Net Return (Profit) in Rs. / unit	BC Ratio
13	14	15	16
Farmer's practice - T ₁	50 q/ha.	Rs.16,000/-	1.66
Technology assessed – T ₂	87 q/ha.	Rs.37,600/-	2.17

OFT-6

1.	Title of on-farm trials	Assessment of Tissue Culture Banana
2.	Problem diagnose	Low yield in traditional suckers due to wilt complex, Pavan, wilt, Sigatoka leaf split creates hindrance for large scale cultivation.
3.	Details of technologies selected for assessment/refinement	Tissue cultured Banana (Bantala) are free to type, uniform, disease free. Commercial cultivation prove profitable.
4.	Source of technology	Regional Plant Resource Centre, Bhubaneswar
5.	Production system	Small production system
6.	Thematic area	Cultivation of fruit
7.	Micro –farming Situation	Irrigated medium land
8.	Performance of the Technology with performance indicators	- Yield (Bunch / ha.) - No. of hands / plant - Nos. of banana/ hand - Disease & Pest incidence - Mortality %
9.	Final recommendation for micro level situation	Results awaited
10.	Constraints identified and feedback for research	Results awaited
11.	Process of farmers participation and their reaction	For testing of the technology on the Varietal substitution, tissue cultured banana is decided in collaboration with the farmers separating the plots in two parts is one for local check and other for testing plots makes the design.

3.1.C. Results of On Farm Trials

Crop/ enterprise	Farming situation	Problem Diagnosed	Title of OFT	No. of trials*	Technology Assessed	Parameters of assessment
1	2	3	4	5	6	7
Tissue cultured Banana	Irrigated medium land	Low yield in traditional suckers due to wilt complex, Panama will sigatoka leaf spot.	Assessment of tissue cultured Banana	5	T ₁ - Traditional suckers T ₂ - Tissue cultured plants	- Yield (bunch / ha.) - Nos. of hands / plant - Nos. of banana / hand - Disease & pest incidence - mortality % - B: C ratio

Data on the parameter	Results of assessment	Feedback from the farmer	Any refinement done	Justification for refinement
8	9	10	11	12
<u>Technical</u> - Yield – (bunch / ha.) - Nos. of hands / plant - Nos. of banana / hand - Disease & Pest incidence - Mortality % <u>Economic</u> B : C ratio	In progress	Plant canopy is good.		

Technology Assessed / Refined	*Production per unit	Net Return (Profit) in Rs. / unit	BC Ratio
13	14	15	16
In progress			

OFT-7

1.	Title of on-farm trials	Assessment of Wheel Finger Weeder
2.	Problem diagnose	High labour and cost involvement in manual hand weeding
3.	Details of technologies selected for assessment/refinement	- Capacity .015 ha / hr. - Labour requirement – 8.3 mandays / ha. - Weight – 7 kg
4.	Source of technology	CAET, OUAT, 2004
5.	Production system	Green revolution production system
6.	Thematic area	Location specific drudgery reduction
7.	Micro –farming Situation	Irrigated medium land
8.	Performance of the Technology with performance indicators	Weeding capacity, labour requirement, mandays / ha. Weeding efficiency %
9.	Final recommendation for micro level situation	Suitable for weeding and inter-cultural operation in groundnut
10.	Constraints identified and feedback for research	Availability of wheel finger weeder to farm women
11.	Process of farmers participation and their reaction	Field visit, training and group discussion.

3.1.C. Results of On Farm Trials

Crop/ Enterprise	Farming situation	Problem Diagnosed	Title of OFT	No. of trials*	Technology Assessed	Parameters of assessment
1	2	3	4	5	6	7
Groundnut	Irrigated medium land	High labour and cost involvement in manual hand weeding using hand hoe	Assessment of wheel finger weeder	5	Wheel finger weeder (T ₂)	Weeding Capacity Labour requirement Weeding efficiency

Data on the parameter	Results of assessment	Feedback from the farmer	Any refinement done	Justification for refinement
8	9	10	11	12
Weeding capacity T ₁ -0.029 ha / hr. T ₂ -0.12 ha/hr	Weeding and inter-culture operation can be managed by saving labour cost due to continuous operation	It avoids bending, squatting pastures, which is generally adopted in traditional method.	-	-
Labour requirement T ₁ - 43.75 mandays /ha. T ₂ -11.2 mandays/ha.				
Weeding efficiency T ₁ - 87% T ₂ -100%				
Cost of operation T ₁ - Rs 1470/- per ha. T ₂ - Rs 785.75 per ha.				

Technology Assessed / Refined	*Production per unit	Net Return (Profit) in Rs. / unit	BC Ratio
13	14	15	16
Farmer's practice (Local) - T ₁	25 q/ha	14,700/-	1.48
Technology assessed -T ₂	32 q/ha	18,000/-	1.55

OFT-8

1.	Title of on-farm trials	Assessment of Pedal operated Groundnut Thresher
2.	Problem diagnose	High labour and cost involvement in manual hand picking method
3.	Details of technologies selected for assessment/refinement	Pedal operated Groundnut Thresher Weight – 45.6 kg, Length – 85 cm Width – 75 cm, Height – 98 cm Capacity – 27.5 kg/hr. Labour requirement – 3.64 manhour/q
4.	Source of technology	CAET, OUAT
5.	Production system	Green revolution production system
6.	Thematic area	Location specific drudgery reduction technologies
7.	Micro –farming Situation	Irrigated medium land
8.	Performance of the Technology with performance indicators	Threshing capacity, Threshing efficiency, Labour requirement, Cost of operation
9.	Final recommendation for micro level situation	Useful for rabi groundnut crop
10.	Constraints identified and feedback for research	
11.	Process of farmers participation and their reaction	Field visit and discussion on existing practices. Farmers reaction : High output, Easy to operate

3.1.C. Results of On Farm Trials

Crop/ Enterprise	Farming situation	Problem Diagnosed	Title of OFT	No. of trials*	Technology Assessed	Parameters of assessment
1	2	3	4	5	6	7
Groundnut	Irrigated medium land	High labour, time & cost for threshing in manual hand picking method.	Assessment of pedal operated Groundnut thresher	5	Pedal operated groundnut thresher (T ₂)	Threshing capacity.
						Threshing efficiency
						Labour requirement manhr./q
						Cost of operation

Data on the parameter	Results of assessment	Feedback from the farmer	Any refinement done	Justification for refinement
8	9	10	11	12
Threshing capacity T ₁ -3.85 kg / hr. T ₂ -22.65 kg/hr	Labour & time requirement is less in pedal operated Groundnut thresher	Higher output. It helps to reduce the drudgery involved in groundnut threshing operation	-	-
Threshing efficiency T ₁ - 100% T ₂ - 93.75%				
Labour requirement T ₁ - 25.97 man hr/q. T ₂ -4.42 man hr/q				
Cost of operation T ₁ - Rs 227.24/- per q T ₂ - Rs 55.6 per q.				

Technology Assessed / Refined	*Production per unit	Net Return (Profit) in Rs. / unit	BC Ratio
13	14	15	16
Farmer's practice - T ₁ (Manual hand picking method)	23 q/ha	19,400/-	1.32
Technology assessed -T ₂	28 q/ha	17,200/-	1.41

OFT-9

1.	Title of on-farm trials	Assessment of SRI method of paddy cultivation
2.	Problem diagnose	Low yield of paddy due to improper plant population, use of old seedlings, weed and water management
3.	Details of technologies selected for assessment/refinement	Low seed rate, Proper nursery management, Early planting Plant population, Optimum water management
4.	Source of technology	ANGRAU, Hyderabad, 2005
5.	Production system	Commercial production system
6.	Thematic area	Integrated crop management
7.	Micro –farming Situation	Irrigated medium land
8.	Performance of the Technology with performance indicators	Technical parameter No. of effective tillers / hill, No. of hills / m ² , No. of grains / panicle , yield Economic parameter CB ratio, Additional income
9.	Final recommendation for micro level situation	Farmers may choose a medium duration variety for taking of SRI cultivation in a field where water logging is not a problem. During Kharif season transplanting should be done on raised beds and arrangements should be made for adequate drainage. Water may be pumped into the field one day before operation of <i>cono weeder</i> .
10.	Constraints identified and feedback for research	It is difficult to operate the cono weeder for management of weeds after 25-30 days of transplanting due to profuse tillering. Necessary refinement may be done with the implement.
11.	Process of farmers participation and their reaction	The OFT was conducted in a participatory mode in all stages of management and they are willing to adopt the technology.

3.1.C. Results of On Farm Trials

Crop/ Enterprise	Farming situation	Problem Diagnosed	Title of OFT	No. of trials*	Technology Assessed	Parameters of assessment
1	2	3	4	5	6	7
Paddy	Irrigated medium land	Low yield of paddy due to improper plant population, use of old seedlings, weed and water management	Assessment of SRI method of paddy cultivation	5	SRI method of paddy cultivation (T ₂)	No. of effective tillers/hill Hills/m ² No. of grains/panicle Yield (t/ha)

Data on the parameter	Results of assessment	Feedback from the farmer	Any refinement done	Justification for refinement
8	9	10	11	12
T ₁ -8.29 T ₂ -24.05 T ₁ -38.4 T ₂ -16 T ₁ -154.5 T ₂ -172.8 T ₁ -5.1 t/ha T ₂ -6.8 t/ha	The SRI method of cultivation produced more nos. of panicle / m ² , more nos. of grains / panicle and higher yield than conventional method of transplanting	Through transplanting of juvenile seedlings (12 days old) is difficult as compared to normal transplanting, but they will get accustomed to it after practicing it for 2-3 seasons. The farmers are willing to adopt the technology.	-	-

Technology Assessed / Refined	*Production per unit	Net Return (Profit) in Rs. / unit	BC Ratio
13	14	15	16
Farmer's practice** -T ₁	5.1 t/ha	29900	2.86
Technology assessed** - T ₂	6.8 t/ha	46000	4.02

OFT-10

1.	Title of on-farm trials	Assessment of medium duration rice variety <i>Manaswini</i>
2.	Problem diagnose	Low yield of ruling var. MTU-1001
3.	Details of technologies selected for assessment/refinement	Var. Manaswini, Duration- 132 days Resistant to gall midge, leaf folder, white ear head ; moderately resistant to WBPH, moderately tolerant to blast and sheath blight, Milling- 72%, HRR-70
4.	Source of technology	OUAT, Bhubaneswar, 2007
5.	Production system	Commercial production system
6.	Thematic area	Integrated crop management
7.	Micro –farming Situation	Irrigated medium land
8.	Performance of the Technology with performance indicators	Technical parameter <ul style="list-style-type: none"> • No. of effective tillers/hill • Hills/m² • No. of grains/panicle • Yield Economic parameter <ul style="list-style-type: none"> • CB ratio • Net profit
9.	Final recommendation for micro level situation	
10.	Constraints identified and feedback for research	
11.	Process of farmers participation and their reaction	

3.1.C. Results of On Farm Trials

Crop/ Enterprise	Farming situation	Problem Diagnosed	Title of OFT	No. of trials*	Technology Assessed	Parameters of assessment
1	2	3	4	5	6	7
Paddy	Irrigated medium land	Low yield of ruling var. MTU- 1001	Assessment of medium duration rice var. Manaswini	4	Var. Manaswini (T ₂)	No. of effective tillers/hill Hills/m ² No. of grains/panicle Yield (t/ha)

Data on the parameter	Results of assessment	Feedback from the farmer	Any refinement done	Justification for refinement
8	9	10	11	12
T ₁ -6.9 T ₂ -8.2 T ₁ -39.8 T ₂ -40.4 T ₁ -132.8 T ₂ -152.6 T ₁ -3.84 t/ha T ₂ -4.62 t/ha	The variety performed well under medium land situation.	The variety is producing more no. of tillers, it is tastier and fetches more price in the market as it is finer than <i>MTU-1001</i> .	-	-

Technology Assessed / Refined	*Production per unit	Net Return (Profit) in Rs. / unit	BC Ratio
13	14	15	16
Farmer's practice** -T ₁	3.84 t/ha	17408	2.09
Technology assessed** - T ₂	4.62 t/ha	25580	2.59

OFT-11

1.	Title of on-farm trials	Assessment of liming material in groundnut
2.	Problem diagnose	Low yield of groundnut (12.22 q/ha) due to soil acidity
3.	Details of technologies selected for assessment/refinement	Application of 0.2 L.R (L.R= 6t/ha) Application of FYM @ 5t/ha
4.	Source of technology	NICH area of acid soil management, OUAT Bhubaneswar 2007
5.	Production system	Commercial production system
6.	Thematic area	Integrated crop management
7.	Micro –farming Situation	Irrigated medium land
8.	Performance of the Technology with performance indicators	<u>Technical parameter</u> no of pods /plant shelling %age yield
		Economic Parameter: C: B ratio, additional income
9.	Final recommendation for micro level situation	In progress
10.	Constraints identified and feedback for research	
11.	Process of farmers participation and their reaction	

3.1.C. Results of On Farm Trials

Crop/ Enterprise	Farming situation	Problem Diagnosed	Title of OFT	No. of trials*	Technology Assessed	Parameters of assessment
1	2	3	5	5	6	7
Groundnut	Irrigated medium land	Low yield of groundnut (12.22 q/ha) due to soil acidity	Assessment of liming material in groundnut	5	-	<u>Technical parameter</u> no of pods /plant shelling %age yield Economic Parameter: C: B ratio

Data on the parameter			Results of assessment	Feedback from the farmer	Any refinement done	Justification for refinement
8			9	10	11	12
	T1	T2				
In progress						

Technology Assessed / Refined	*Production per unit	Net Return (Profit) in Rs. / unit	BC Ratio
13	14	15	16
Farmer's practice** -T ₁			
Technology assessed** - T ₂			
Technology refined**			

OFT-12

1.	Title of on-farm trials	Assessment of Bio-fertilizer & Sodium Molybdate in green gram
2.	Problem diagnose	Low yield (4.54 q/ha) of green gram due to improper nutrient management
3.	Details of technologies selected for assessment/refinement	Application of Bio-fertilizer (Rhizobium and PSB) along with Sodium Molybdate
4.	Source of technology	Dept. of Soil Science, OUAT, 2005
5.	Production system	Commercial production system
6.	Thematic area	Integrated crop management
7.	Micro –farming Situation	Irrigated medium land
8.	Performance of the Technology with performance indicators	Technical parameter: Yield
		Economic Parameter: C: B ratio
9.	Final recommendation for micro level situation	In progress
10.	Constraints identified and feedback for research	
11.	Process of farmers participation and their reaction	

3.1.C. Results of On Farm Trials

Crop/ Enterprise	Farming situation	Problem Diagnosed	Title of OFT	No. of trials*	Technology Assessed	Parameters of assessment
1	2	3	5	5	6	7
Green Gram	Irrigated medium land	Low yield (4.54 q/ha) of green gram due to improper nutrient management	Assessment of Bio-fertilizer & Sodium Molybdate in green gram	5	-	Technical parameter: Yield Economic Parameter: C: B ratio

Data on the parameter			Results of assessment	Feedback from the farmer	Any refinement done	Justification for refinement
8			9	10	11	12
	T1	T2				
In progress						

Technology Assessed / Refined	*Production per unit	Net Return (Profit) in Rs. / unit	BC Ratio
13	14	15	16
Farmer's practice** -T ₁			
Technology assessed** - T ₂			
Technology refined**			

OFT-13

1.	Title of on-farm trials	Assessment of Low cost Transplanting Guide
2.	Problem diagnose	Improper plant population in random transplanting resulting in higher time and cost for intercultural operation and reduction in yield (8-10 %).
3.	Details of technologies selected for assessment/refinement	Line transplanting by transplanting Guide Weeding by Cono Weeder
4.	Source of technology	CAET, OUAT-1997
5.	Production system	Green revolution production system
6.	Thematic area	Use of farm machinery and implements
7.	Micro –farming Situation	Irrigated medium high yielding
8.	Performance of the Technology with performance indicators	Technical parameter Output – Transplanting, weeding (ha/hr), Time requirement - Transplanting, weeding (man hrs/ha) No of effective tillers/m ² , Yield – q/ha. Economic parameter Cost-benefit Ratio
9.	Final recommendation for micro level situation	Line transplanting was made easier by the low cost transplanting guide which facilitated use of cono weeder
10.	Constraints identified and feedback for research	Labour requirement for line transplanting was higher, but weeding cost was lower.
11.	Process of farmers participation and their reaction	Group discussion and demonstration in the field.

3.1.C. Results of On Farm Trials

Crop/ Enterprise	Farming situation	Problem Diagnosed	Title of OFT	No. of trials*	Technology Assessed	Parameters of assessment
1	2	3	4	5	6	7
Paddy	Irrigated medium land	Improper plant population in random transplanting	Assessment of Low cost Transplanting Guide Device	5	Line transplanting by transplanting Guide Weeding by Cono Weeder (T ₁)	Output – Transplanting(ha/hr) Output –weeding (ha/hr) Time requirement Transplanting (man hrs/ha), Time requirement weeding (man hrs/ha) No of effective tillers/m ² Yield – q/ha.

Data on the parameter	Results of assessment	Feedback from the farmer	Any refinement done	Justification for refinement
8	9	10	11	12
T ₁ – 0.0032 T ₂ - 0.0042 T ₁ – 0.0084 T ₂ - 0.0047 T ₁ – 315.8 T ₂ - 235.8 T ₁ – 118.5 T ₂ - 212.6 T ₁ – 315 T ₂ - 290 T ₁ – 51.5 T ₂ - 45.4	The labour requirement for line transplanting using low cost transplanting guide was higher (80.3 manhrs/ha. But the labour requirement for weeding by cono weeder was less as compared to manual hand weeding (94.1 manhrs/ha.). The yield was higher in case of line transplanting (6.1q/ha.) with net saving in labour by 13.8 manhrs/ha.	Labour requirement for Weeding by Cono Weeder was less compared to manual hand weeding in random transplanting case.	-	-

Technology Assessed / Refined	*Production per unit	Net Return (Profit) in Rs. / unit	BC Ratio
13	14	15	16
Farmer's practice** -T ₁	16071	30323	2.89 : 1
Technology assessed** - T ₂	16027	24789	2.54 : 1

OFT-14

1.	Title of on-farm trials	Assessment of Tractor Operated Groundnut Planter (Inclined plate)
2.	Problem diagnose	Improper plant population in conventional method of manual hill dropping behind the plough.
3.	Details of technologies selected for assessment/refinement	Tractor operated inclined plate planter 35 hp tractor, 6 row (row to row spacing: 20:45 cm) Depth of placement – Adjustable, Capacity : 2.5 hrs/ha.
4.	Source of technology	CAET, OUAT-2004
5.	Production system	Green revolution production system
6.	Thematic area	Use of farm machinery and implements
7.	Micro –farming Situation	Irrigated medium high yielding
8.	Performance of the Technology with performance indicators	Technical parameter Output – ha/hr, Time requirement - hrs/ha, Cost of operation – Rs./ha., Plant population/m ² , Yield – q/ha.
		Economic parameter Cost-benefit Ratio
9.	Final recommendation for micro level situation	Line sowing was made easier with less cost and time.
10.	Constraints identified and feedback for research	Availability of the Tractor Operated Groundnut Planter.
11.	Process of farmers participation and their reaction	Training programme, Group discussion and demonstration in the field.

3.1.C. Results of On Farm Trials

Crop/ Enterprise	Farming situation	Problem Diagnosed	Title of OFT	No. of trials*	Technology Assessed	Parameters of assessment
1	2	3	4	5	6	7
Groundnut	Irrigated medium land	Improper plant population in conventional method of manual hill dropping behind the plough.	Assessment of Tractor Operated Groundnut Planter (Inclined plate)	5	Tractor operated inclined plate planter	Technical parameter
						Output – ha/hr
						Time requirement - hrs/ha
						Cost of operation – Rs./ha.
						Plant population/m ²
Yield – q/ha.						

Data on the parameter	Results of assessment	Feedback from the farmer	Any refinement done	Justification for refinement
8	9	10	11	12
T ₁ – 0.267 T ₂ - 0.024	Time requirement for line sowing by the planter was 3.75 hrs/ha. only as compared to conventional method of manual hill dropping behind the plough (5 bullock pair days and 20 mandays). The cost of operation was also less (Rs.275 / ha.). -In progress -	Line sowing by the planter was found to be easier with less cost of operation.	-	-
T ₁ – 3.75 T ₂ - 5 bullock pair days and 20 mandays.				
T ₁ – 1400 T ₂ - 1675				
T ₁ – 63.8 T ₂ - 68.5				
Not harvested				

Technology Assessed / Refined	*Production per unit	Net Return (Profit) in Rs. / unit	BC Ratio
13	14	15	16
Farmer's practice** - T ₁	Not harvested		
Technology assessed** - T ₂			

3.2 Achievements of Frontline Demonstrations

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

Sl. No.	Thematic Area*	Technology demonstrated	Details of popularization methods suggested to the Extension system	Horizontal spread of technology		
				No. of villages	No. of farmer	Area in ha.
1.	Integrated pest management in paddy	1. Use of bio-pesticides 2. Installation of pheromone traps 3. Use of egg parasites (Trico cards)	Training Field day Media coverage Leaflets	6	124	7.5
2	IPM in Tomato	1. Spraying of Neem oil 2. Use of traps with Heli-lure to capture Helicarpa	Training	4	100	1.5
3	Bee keeping		Training Field day Radio Talk	7	30	30 units
4	Cultivation of hybrid mango	Hybrid variety	Training Field day	6	15	7
5	Cultivation of fruit	Hybrid Papaya	Training Leaflet	7	30	10
6	Expert potential of ornamental plants / Commercial floriculture	French Marigold hybrid	Training	5	20	4
7	Production of low volume and high value crop	Wilt resistant variety of Brinjal replacement of variety due to wilting	Training Radio Talk, ETV programme	10	40	15
8	Location specific drudgery reduction	Hand Ridger	Radio talk, TV shows Leaflets Training	5	50	
9	Income generation activities for empowerment of rural women	Oyster mushroom cultivation	Radio talk TV shows, Training Group discussion Field day	1	20	20 nos.
10	Income generation activities for empowerment of rural women	Paddy Straw cultivation	TV shows Radio talk Training Group discussion	2	50	50 nos.
11	Household food security by kitchen gardening	Nutritional garden	Training Radio talk Group discussion	5	50	0.02
12	Repair and maintenance of farm machinery and implements	Power Reaper	TV shows Radio talk Training Group discussion	10	200	125

b. **Details of FLDs implemented during 2008-09 (Information is to be furnished in the following three tables for each category i.e. cereals, horticultural crops, oilseeds, pulses, cotton and commercial crops.)**

Sl. No.	Crop	Thematic area	Technology Demonstrated	Season and year	Area (ha)		No. of farmers/ demonstration			Reasons for shortfall in achievement
					Proposed	Actual	SC/ST	Others	Total	
1	Paddy	IPM	<ul style="list-style-type: none"> ▪ Application of granular pesticides in the nursery ▪ Capture of adult male stem borer by pheromone trap ▪ Use & installation of egg cards (Trichogramma sp) ▪ Application of Neem pesticides 	Kharif- 2008	2	2	10	0	10	
2	Brinjal	IPM	<p>Application of Neem cake during land preparation</p> <p>Spraying of neem pesticides</p> <p>Installation of pheromone trap with lucin-lure</p> <p>Need based application of chemicals (Triazophes) & (Cartap hydrochloride)</p>	Rabi 2008-09	0.5	0.5	3	7	10	
3	Cabbage	IPM	<p>Application of botanical pesticides</p> <p>Need based application of chemicals (Cartap hydrochloride)</p>	Rabi 2008-09	0.5	0.5	0	10	10	
4	Tomato	IPM	<p>Application of NVP</p> <p>Installation of Pheromone traps with Heli-lure</p> <p>Need based application of botanical pesticides</p>	Rabi, 2008-09	0.5	0.5	10	0	10	
5	Mango	Varietal substitution	Hybrid variety	Kharif, 2007	1.0	1.2		6	6	

Details of FLDs implemented during 2008-09 (Information is to be furnished in the following three tables for each category i.e. cereals, horticultural crops, oilseeds, pulses, cotton and commercial crops.)

6	Drumstick	Varietal substitution	Introduction of hybrid variety (drumstick) replacement of variety	Kharif, 2008	0.2	0.2	3	3	6	
7	Papaya	Varietal substitution	Introduction of hybrid variety, replacement of variety	Kharif, 2008	0.2	0.2	3	2	5	
8	Brinjal	Varietal substitution	Wilt resistant variety of Brinjal. Replacement of variety due to wilting	Rabi 2008-09	0.2	0.5	6	11	17	
9	Elephant foot yam	Production and management techniques	Introduction of high yielding elephant foot yam	Rabi 08-09	0.02	0.03	3	2	5	
10	Paddy	Integrated crop management	Aromatic rice	Kharif,2008	2.0	1.5	3	6	9	Seed not available
11	Paddy	Integrated crop management	Varietal substitution	Kharif,2008	2.0	0.2	-	2	2	Seed not available

Details of farming situation

Sl. no.	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					
1	Paddy	Kharif, 08	Irrigated medium land	Sandy loam				Greengram	22.06.08	20.11.08		
2	Brinjal	Rabi,08-09	Irrigated medium land	Sandy loam				Paddy	01.12.08	28.03.09		
3	Cabbage	Rabi 2008-09	Irrigated medium land	Sandy loam				Brinjal	04.12.08	18.02.09		
4	Tomato	Rabi 2008-09	Irrigated medium land	Sandy loam				Cabbage	28.12.08	30.03.09		
5	Mango	Kharif, 07	Irrigated upland	Sandy loam	L	L	M	Fallow	03.08.07	Continuing In progress		
6	Drumstick	Kharif, 08	Rainfed upland	Sandy loam				Fallow	22.06.08	In progress		
7	Papaya	Kharif, 08	Irrigated upland	Sandy loam				Vegetable	22.06.08	In progress		
8	Brinjal	Rabi, 08-09	Irrigated upland	Sandy loam				Vegetable	30.09.08	16.01.09		
9	Elephant foot yam	Rabi 08-09	Irrigated medium land	Sandy loam				Vegetable	30.03.09	In progress		
10	Paddy	Kharif, 08	Irrigated medium land	Sandy loam				Paddy	19.07.08-22.07.08	2 nd Nov. to 6 th Nov.08		
11	Paddy	Kharif, 08	Rainfed irrigated	Sandy loam				Paddy	20.07.08	6 th to 7 th December, 08		

Performance of FLD

Sl. No	Crop	Technology Demonstrated	Variety	No. of Farmers	Area (ha.)	Demo. Yield Qtl/ha			Yield of local Check Qtl./ha	Increase in yield (%)	Data on parameter in relation to technology demonstrated	
						H	L	A			Demo	Local
1	2	3	4	5	6	7	8	9	10	11	12	13
1	Paddy	IPM	Puja	10	2	48	32	40	31.5	27	stem borer attack (Dead heart) -3%	8%
											Gall midge damage(Silver shoot) -1%	14%
											% Leaf Folder damage (Leaf damage) -7%	35%
											Average nos. of insects / trap-16	-
											Yield 40q/ha	31.5q/ha.
2	Brinjal	IPM	Blue star	10	0.5	230	150	190	175	8	damaged shoots-14%	30%
											% damaged fruits-8	20%
											Avg. no. of insects / trap/week-3	-
											Yield- 190q/ha.	175q/ha.
3	Cabbage	IPM	Golden Acre	10	0.5	239	215	227	215	5	damaged head-4%	9%
											Yield -227q/ha.	215q/ha.
4	Tomato	IPM	Punjab Keshari	10	0.5	240	220	230	200	15	% damaged fruits (Fruit borer) -2%	18%
											Avg. no. of insects/trap/week-4	-
											Yield 230q/ha.	200q/ha.
5	Mango	Introduction of hybrid variety	Amrapalli	6	1.2				In progress			
6	Drumstick	Replacement of variety	PKM-2	6	0.2				In progress			
7	Papaya	Replacement of variety	Chadha Selection-2	5	0.2				In progress			
8	Brinjal	Replacement of variety	Utkal Keshari	17	0.5	303	244	278	180	54	Yield – 278q/ha Wilting-Nil	180 q/ha. 30-40%
9	Elephant foot yam	Introduction of hybrid variety	Gajendra	5	0.03				In progress			
10	Paddy	Aromatic rice	Gitanjali	9	1.5	44.2	36.6	41	44.4	-7.6	Effective tillers/hill-7.2	8.4
											Hills / m ² -41.4	38.7
											Grains / panicle-48.4	52.5
11	Paddy	Varietal substitution	Pratikhya	2	0.2	56.2	53.4	54.8	48.6	12.75	Effective tillers/hill-12.8	10.6
											Hills / m ² - 37.8	38.2
											Grains / panicle - 179.6	160.7

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	Local Check	
	14	15	16	17	18	19	
1	14,500	14,000	36,000	28,350	21,500	14,350	2.48
2	46,800	45,600	95,000	87,500	48,200	41,900	2.02
3	42,000	40,000	90,800	86,000	48,800	46,000	2.16
4	42,000	38,000	92,000	80,000	50,000	42,000	2.19
5	In progress						
6							
7							
8	50,000	40,000	1,39,000	90,000	89,000	50,000	2.78
9	In progress						
10	16000	16000	49200	39960	33200	23960	3.07
11	15800	16250	49320	43740	33520	27490	3.1

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

Crop	Season	Component	Farming situation	Average yield (q/ha)	Local check (q/ha)	Percentage increase in productivity over local check
Paddy	Kharif-08	Plant protection	Irrigated medium land	40	31.5	27%
Brinjal	Rabi – 08-09	Plant protection	Irrigated medium land	190	175	8%
Cabbage	Rabi-08-09	Plant protection	Irrigated medium land	227	215	5%
Tomato	Rabi 08-09	Plant protection	Irrigated medium land	230	200	15%
Mango	Kharif-07	Variety	Rainfed upland	In progress		
Drumstick	Kharif-08	Variety	Rainfed upland	In progress		
Papaya	Kharif 08	Variety	Irrigated upland	In progress		
Brinjal	Rabi 08-09	Variety	Irrigated upland	2789 q/ha.	180q/ha	54%
Elephant Foot Yam	Rabi 08-09	Variety	Irrigated medium land	In progress		
Mango	Kharif-07	Variety	Rainfed upland	In progress		
Paddy	Kharif-08	Aromatic Rice	Irrigated Medium land	41	44.4	-7.6 (increase in income % is 23.12)
Paddy	Kharif-08	Variety	Irrigated Medium land	54.8	48.6	12.75

Technical Feedback on the demonstrated technologies

S. No	Feed Back
IPM in paddy	IPM strategy can be adopted on the paddy production system instead of rely on only chemical pesticides because the performance of IPM module in the field is good & farmers friendly.
IPM in Brinjal	IPM module with traps & bio-pesticides with need based chemical application is effective in the management of fruit and shoot borer. Adoption of this module can reduce the pesticide load on the crop.
IPM in Cabbage	Management of cabbage borers by bio-pesticides is a novel approach towards environmental safety and is also an effective strategy.
IPM in Tomato	Use of traps and bio-pesticides can substitute the application of chemicals in tomato which is consumed now. From the result it has been found that the performance of botanicals and bio-pesticides is good.
Hybrid Mango	Crop growth is satisfactory in its second year
Hybrid Drumstick	Crop canopy is good after thrice deheading
Hybrid Papaya	30% of total plants have become male although productivity seems to be higher than traditional variety from initial observations.
Wilt resistant variety of Brinjal	Due to heavy fruit size, there is breakage of branches; where as wilting was not seen. Marketability is poor for which farmers do not prefer such size of fruit.
Elephant Foot Yam	In progress
Aromatic Rice	The variety showed segregation
Medium duration variety <i>Pratikashya</i>	The variety was not affected by disease and pest problem as compared to local check <i>MTU-7029</i> .

Farmers' reactions on specific technologies

S. No	Feed Back
IPM in Paddy	Farmers are very interested to adopt the IPM technology.
IPM in brinjal	Farmers show positive response towards the components of IPM module
IPM in Cabbage	Farmers feel that application of bio-pesticides can substitute chemicals
IPM in Tomato	Farmers realize the bad effects of chemicals and have a positive attitude towards the new technology.
Hybrid Mango	Crop canopy is good and no disease pest attack
Hybrid Drumstick	Crop canopy is good and flowering appeared.
Hybrid Papaya	30% male where as in local 50% male. Farmers' acceptance is poor.
Wilt resistant variety of Brinjal	No wilting where as in traditional variety 20-30% wilting. Yield is increased 54% more than local. Farmer's acceptance is not good due to its heavy size.
High yielding Elephant Foot yam	In progress
Aromatic Rice	Due to its Aroma and high yielding nature the farmers showed positive interest for the variety. The cooking quality was appreciated by farmers.
Medium duration variety <i>Pratikashya</i>	The variety was apparently pest free, it tastes better than <i>MTU-7029</i> and is very good for preparing local food – <i>Mudhi</i>

Extension and Training activities under FLD

Sl. No.	Activity	No. of activities organized	Date	Number of participants	Remarks
1	Field day	9	03.11.08 21.11.08 22.11.08 09.03.09 13.03.09 25.03.09 26.03.09 28.03.09 30.03.09	500	
2	Farmer's training	10	03.07.08 & 05.07.08 04.11.08 & 05.11.08 15.12.08 & 16.12.08 05.01.09 & 06.01.09 16.03.09 & 17.03.09 13.05.08 & 14.05.08 29.01.09 & 30.01.09 25.02.09 & 26.02.09 26.09.08 to 27.09.08 16.05.08 & 17.05.08	200	
3	Media coverage	2	24 April & 3 rd November, 08		
4	Training for Extension Functionaries	1	12.09.08 & 13.09.08	15	

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 Reaper	Paddy	5	2.5	Capacity, ha/hr.	0.16	0.007	23 times more	Higher output with less labour, time and cost for harvesting. Useful for standing crop.
				Labour requirement, man hr/ha.	6.25	145.6	95.74% less	
				Cost of operation, Rs./ha.	385	1274	Rs.889 / ha. less	
Rotavator	Paddy	5	2.0	Capacity, ha/hr.	0.37	0.19	94.74 % less	Higher yield (5.29%) due to better quality of puddle with less cost (Rs.861.73 / ha) and time (48.48%).
				Time requirement, hrs/ha.	2.72	5.28	48.48% less	
				Fuel Consumption, ltr/ha.	12.24	23.76	48.48% less	
				Cost of Puddling	1091.29	1953.2	Rs.861.73 / ha. less	
				Yield, Rs./ha.	45.8	43.5	5.29 % more	
Pre-germinated paddy seeder	Paddy	5	2.0	Capacity, ha./hr.	0.029	0.004	-	Saving in labour (36.2 man days/ha.) and saving in cost (77.40 %) with higher yield (3.6 q/ha.)
				Labour requirement, mandays/hr.	8.5	44.7	80.98 % less	
				Cost of operation, Rs./ha.	707.20	3129	Rs.2421.80 less	
				Yield q/ha.	46.1	42.5	8.47 % more	

(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 (Desi)		
								-
								-

(iii) Other Enterprises

Enterprise	Variety/ breed/Species/ others	No. of farmers	No. of Units	Performance parameters / indicators	Data on parameter in relation to technology demonstrated		% change in the parameter	Remarks
					Demon.	Local check		
Apiary	<i>Apis indica</i>	10	10	Yield	4.5 kg/box	-		
				New colony	2 colony per box	-		
Oyster Mushroom	<i>P.sajarcaju</i>	10	10	Yield (kg/ bed)	1.8	1.3	38% more	In local check Oyster mushroom without substrates (wheat)
				Biological efficiency	100%	83%	-	
				B:C ratio	1.94	1.63	-	
Hand Ridger	Manually operated Hand Ridger	10	10	Total no. of riders of 25 m length made / hr.	83	79	5.06 more	<ul style="list-style-type: none"> ❖ About 78.62% saving in cardiac cost of worker per unit output with the Ridger. ❖ It avoids bending posture.
				Area covered m ² /hr	300	80	3.75 times more	
				Resting Pulse rate, beats/min.	74	70	5.79 less	
				Working Pulse rate, beats/min	102	105	2.86 more	
				Heart Rate, beats/m ²	28	35	20 less	
				Cardiac cost beats / m ² /hr	5.6	26.2	78.62 less	
				Saving in Cardiac cost/m ² (%)			78.62 in demo	
Nutritional Garden	Khada (Utkal Mayuri)	10	.025	Season Yield	50	40	25	<ul style="list-style-type: none"> It provides fresh vegetables to the farm family throughout the year. It meets the daily requirement of the farm family
	Ridge gourd (Green gold)				39.5	27	46	
	Tomato (BT-10)				75	40	87	
	Cow pea (Arka garima)				25	15	66	
	Chilli (Utkal Ava)				31.2	24.2	29	
	Bhindi (Pusa Parbanikranti)				37.5	27	37	
Paddy straw mushroom	<i>V.volvacea</i>	20	20	Yield (kg/bed)	1.3			
				Biological Efficiency	5%	NI		
				B: C ratio	1.47			
Vermicompost	<i>E. foetida</i>	10	10	In progress				

III Soil Health and Fertility Management									
Soil fertility management									
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	1	2		21	21		4	4	25
Design and development of low/minimum cost diet	1	2		25	25				25
Designing and development for high nutrient efficiency diet									
Minimization of nutrient loss in processing	1	2		12	12		13	13	25
Gender mainstreaming through SHGs									
Storage loss minimization techniques									
Value addition	2	4		46	46		4	4	50
Income generation activities for empowerment of rural Women									
Location specific drudgery reduction technologies	1	2		2	2		23	23	25
Rural Crafts									
Women and child care									
VI Agril. Engineering									
Installation and maintenance of micro irrigation systems									
Use of Plastics in farming practices	1	2				8	17	25	25
Production of small tools and implements									
Repair and maintenance of farm machinery and implements	3	6	21		21	54		54	75
Small scale processing and value addition									
Post Harvest Technology									
VII Plant Protection									
Integrated Pest Management	3	6	18		18	50	7	57	75
Integrated Disease Management	1	2	18		18	7		7	25
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									
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									
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	2	21	-	21	4	-	4	25
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) Farm Management									
TOTAL	21	42	165	109	274	167	84	251	525
(B) RURAL YOUTH									
Mushroom Production									
Bee-keeping	1	4	13	2	15				15
Integrated farming									
Seed production	1	2	18		18	7		7	25
Production of organic inputs									
Integrated Farming									
Planting material production									
Vermi-culture									
Sericulture									
Protected cultivation of vegetable crops									
Commercial floriculture									
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									
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	1	2		4	4		21	21	25
Rural Crafts									
TOTAL	3	8	31	6	37	7	21	28	65
I Extension Personnel									
Productivity enhancement	1	2	16		16	2		2	18
Integrated Pest Management									
Integrated Nutrient management									
Rejuvenation of old orchards									
Protected cultivation technology									
Formation and Management of SHGs	1	2	-	12	12	-	3	3	15
Group Dynamics and farmers organization	1	2	5	7	12	1	2	3	15
Information networking among farmers									
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									
Repair & Maintenance of Farm Machinery	1	2	15		15	1		1	16
Any other (Capacity building)	1	2	21	5	26	4	-	4	30
TOTAL	5	10	57	24	81	8	5	13	94

B) OFF Campus

Thematic Area	No. of Courses	Duration (days)	No. of Participants						Grand Total
			Others			SC/ST			
			Male	Female	Total	Male	Female	Total	
(A) Farmers & Farm Women									
I Crop Production									
Weed Management									
Resource Conservation Technologies									
Bio control in pest and disease									
Cropping Systems	1	2	25		25				25
Integrated Pest Management									
Integrated Disease Management									
Crop Diversification	1	2	25		25				25
Integrated Farming									
Water management									
Production of bio-control agents									
Seed production									
Nursery management									
Integrated Crop Management	1	2	22		22	3		3	25
Fodder production									
Production of organic inputs	1	2	25		25				25
II Horticulture									
a) Vegetable Crops									
Production of low volume and high value crops									
Off-season vegetables	1	2				25		25	25
Nursery raising									
Exotic vegetables like Broccoli									

Thematic Area	No. of Courses	Duration (days)	No. of Participants						Grand Total
			Others			SC/ST			
			Male	Female	Total	Male	Female	Total	
Export potential vegetables	1	2		2	2	11	12	23	25
Grading and standardization									
Protective cultivation (Green Houses, Shade Net etc.)									
Short duration vegetable crops									
b) Fruits									
Training and Pruning									
Layout and Management of Orchards									
Cultivation of Fruit	1	2	22	3	25				25
Management of young plants/orchards									
Rejuvenation of old orchards									
Export potential fruits	1	2	17		17	8		8	25
Micro irrigation systems of orchards									
Plant propagation techniques									
c) Ornamental Plants									
Nursery Management									
Management of potted plants									
Export potential of ornamental plants	1	2	16		16	9		9	25
Propagation techniques of Ornamental Plants									
d) Plantation crops									
Production and Management technology	1	2	19		19	6		6	25
Processing and value addition									
e) Tuber crops									
Production and Management technology	1	2	15		15	10		10	25
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									
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									

Thematic Area	No. of Courses	Duration (days)	No. of Participants						Grand Total
			Others			SC/ST			
			Male	Female	Total	Male	Female	Total	
Value addition	2	4		23	23		27	27	50
Income generation activities for empowerment of rural Women	1	2		7	7		18	18	25
Location specific drudgery reduction technologies									
Rural Crafts									
Women and child care									
VI Agril. Engineering									
Installation and maintenance of micro irrigation systems	1	2	25		25				25
Use of Plastics in farming practices	1	2				25		25	25
Production of small tools and implements									
Repair and maintenance of farm machinery and implements	1	2				25		25	25
Small scale processing and value addition									
Post Harvest Technology									
VII Plant Protection									
Integrated Pest Management	2	4	12	3	15	32	3	35	50
Integrated Disease Management	2	4	11	0	11	39	0	39	50
Bio-control of pests and diseases	2	4	17	8	25	25	0	25	50
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									
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									
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									
Formation and Management of SHGs	1	2	24	-	24	1	-	1	25
Mobilization of social capital									
Entrepreneurial development of farmers/youths	1	2	25	-	25	-	-	-	25
WTO and IPR issues									

Thematic Area	No. of Courses	Duration (days)	No. of Participants						Grand Total
			Others			SC/ST			
			Male	Female	Total	Male	Female	Total	
XI Agro-forestry									
Production technologies									
Nursery management									
Integrated Farming Systems									
XII Others (Pl. Specify)									
TOTAL	25	50	300	46	346	219	60	279	625
(B) RURAL YOUTH									
Mushroom Production	1	2		25	25				25
Bee-keeping									
Integrated farming									
Seed production	1	2	7		7	13	5	18	25
Production of organic inputs	1	2	11		11	14		14	25
Integrated Farming									
Planting material production									
Vermi-culture									
Sericulture									
Protected cultivation of vegetable crops									
Production of low volume and high value crop	1	2				25		25	25
Cultivation of fruits	1	2	2		2	23		23	25
Commercial floriculture production									
Export potential of ornamental plant	1	2	24		24	1		1	25
Repair and maintenance of farm machinery and implements									
Nursery Management of Horticulture crops									
Training and pruning of orchards									
Value addition	2	4		23	23		27	27	50
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									
Freshwater prawn culture									
Shrimp farming									
Pearl culture									
Cold water fisheries									
Fish harvest and processing technology									
Fry and fingerling rearing									
Small scale processing	1	2	1		1	21	3	24	25
Post Harvest Technology	1	2				25		25	25
Tailoring and Stitching									
Rural Crafts	1	2		5	5		20	20	25
TOTAL	11	22	45	53	98	122	55	177	275
© Extension Personnel									
Productivity enhancement in fruit crops									
Integrated Pest Management	1	2	7	1	8	5	2	7	15
Integrated Nutrient management									
Rejuvenation of old orchards									
Protected cultivation technology									
Formation and Management of SHGs									
Group Dynamics and farmers organization									
Information networking among farmers									
Capacity building for ICT application									

Thematic Area	No. of Courses	Duration (days)	No. of Participants						
			Others			SC/ST			Grand Total
			Male	Female	Total	Male	Female	Total	
Care and maintenance of farm machinery and implements									
WTO and IPR issues									
Management in farm animals									
Livestock feed and fodder production									
Household food security	1	2		15	15		10	10	25
Women and Child care									
Low cost and nutrient efficient diet designing									
Production and use of organic inputs									
Gender mainstreaming through SHGs									
Capacity building on training management									
PRA Training									
Repair & Maintenance of farm implements	1	2	16		16	10		10	26
Post Harvest Technique									
TOTAL	3	6	23	16	39	15	12	27	66

C) Consolidated table (On and 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	2	4	31	3	34		16	16	50
Crop Diversification	2	4	45		45	5		5	50
Integrated Farming									
Water management									
Seed production									
Nursery management									
Integrated Crop Management	2	4	41		41	9		9	50
Fodder production									
Production of organic inputs	1	2	25		25				25
II Horticulture									
a) Vegetable Crops									
Production of low volume and high value crops									
Off-season vegetables	3	6	19		19	56		56	75
Nursery raising									
Exotic vegetables like Broccoli									
Export potential vegetables	1	2		2	2	11	12	23	25
Grading and standardization									
Protective cultivation (Green Houses, Shade Net etc.)									
Short Duration vegetable crops									
b) Fruits									
Training and Pruning									
Layout and Management of Orchards									
Cultivation of Fruit	2	4	45	3	48	2		2	50
Management of young plants/orchards									
Rejuvenation of old orchards									
Export potential fruits	1	2	17		17	8		8	25
Micro irrigation systems of orchards									
Plant propagation techniques									
c) Ornamental Plants									
Nursery Management									
Management of potted plants									
Export potential of ornamental plants	1	2	16		16	9		9	25
Propagation techniques of Ornamental Plants									

Thematic Area	No. of Courses	Duration (days)	No. of Participants						Grand Total
			Others			SC/ST			
			Male	Female	Total	Male	Female	Total	
d) Plantation crops									
Production and Management technology	1	2	19		19	6		6	25
Processing and value addition									
e) Tuber crops									
Production and Management technology	1	2	15		15	10		10	25
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									
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	1	2		21	21		4	4	25
Design and development of low/minimum cost diet	1	2		25	25				25
Designing and development for high nutrient efficiency diet									
Minimization of nutrient loss in processing	1	2		12	12		13	13	25
Gender mainstreaming through SHGs									
Storage loss minimization techniques									
Value addition	4	8		69	69		31	31	100
Income generation activities for empowerment of rural Women	1	2		7	7		18	18	25
Location specific drudgery reduction technologies	1	2		2	2		23	23	25
Rural Crafts									
Women and child care									
VI Agril. Engineering									
Installation and maintenance of micro irrigation systems	1	2	25		25				25
Use of Plastics in farming practices	2	4				33	17	50	50
Production of small tools and implements									
Repair and maintenance of farm machinery and implements	4	8	21		21	79		79	100
Small scale processing and value addition									
Post Harvest Technology									

Thematic Area	No. of Courses	Duration (days)	No. of Participants						Grand Total
			Others			SC/ST			
			Male	Female	Total	Male	Female	Total	
VII Plant Protection									
Integrated Pest Management	5	10	30	3	33	82	10	92	125
Integrated Disease Management	3	6	29		29	46		46	75
Bio-control of pests and diseases	2	4	17	8	25	25		25	50
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									
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									
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	2	21	-	21	4	-	4	25
Formation and Management of SHGs	1	2	24	-	24	1	-	1	25
Mobilization of social capital									
Entrepreneurial development of farmers/youths	1	2	25	-	25	-	-	-	25
WTO and IPR issues									
XI Agro-forestry									
Production technologies									
Nursery management									
Integrated Farming Systems									
XII Others (Pl. Specify)									
TOTAL	46	92	465	155	620	386	144	530	1150
(B) RURAL YOUTH									
Mushroom Production	1	2	-	25	25	-	-	-	25
Bee-keeping	1	4	13	2	15				15
Integrated farming									
Seed production	2	4	25		25	20	5	25	50
Production of organic inputs	1	2	11		11	14		14	25
Integrated Farming									
Planting material production									
Vermi-culture									
Sericulture									

Thematic Area	No. of Courses	Duration (days)	No. of Participants						
			Others			SC/ST			Grand Total
			Male	Female	Total	Male	Female	Total	
Protected cultivation of vegetable crops	1	2	-	-	-	25	-	25	25
Commercial floriculture	1	2	24	-	24	1	-	1	25
Cultivation of fruits	1	2	2	-	2	23	-	23	25
Repair and maintenance of farm machinery and implements									
Nursery Management of Horticulture crops									
Training and pruning of orchards									
Value addition	2	4		23	23		27	27	50
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									
Freshwater prawn culture									
Shrimp farming									
Pearl culture									
Cold water fisheries									
Fish harvest and processing technology									
Fry and fingerling rearing									
Small scale processing and value addition	1	2	1		1	21	3	24	25
Post Harvest Technology	1	2				25		25	25
Tailoring and Stitching	1	2		4	4		21	21	25
Rural Crafts	1	2		5	5		20	20	25
TOTAL	14	30	76	59	135	129	76	205	340
© Extension Personnel									
Productivity enhancement	1	2	16		16	2		2	18
Integrated Pest Management	1	2	7	1	8	5	2	7	15
Integrated Nutrient management									
Rejuvenation of old orchards									
Protected cultivation technology									
Formation and Management of SHGs	1	2	-	12	12	-	3	3	15
Group Dynamics and farmers organization	1	2	5	7	12	1	2	3	15
Information networking among farmers									
Capacity building for ICT application									
Care and maintenance of farm machinery and implements	2	4	31		31	11		11	42
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 : Capacity building training & FLD	1	2	21	5	26	4	-	4	30
PRA Training									
Repair & Maintenance									
Post Harvest Training									
TOTAL	8	16	80	40	120	23	17	40	160

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
03.04.08 to 04.04.08	Farmer / Farmwomen	Management of nutrient loss in food products during cooking	2	On	-	25	25	-	13	13
07.04.08 to 08.04.08		Diseases & pest problems in cucurbitaceous crops and their suitable controlling method	2	Off	19	6	25	7	3	10
08.04.08 to 09.04.08		Off season vegetable cultivation	2	Off	25	-	25	25	-	25
17.04.08 to 18.04.08		Entrepreneurship development among the farmers	2		25	-	25	-	-	-
21.04.08 to 22.04.08		Use & maintenance of primary & secondary tillage equipments	2	On	25	-	25	19	-	19
29.04.08 to 30.04.08		Backyard poultry & duck rearing for egg production	2	Off	-	25	25	-	10	10
03.05.08 to 14.05.08	Rural Youth	Package and practices of drumstick	2	Off	25		25	25		25
13.05.08 to 14.05.08	Farmers and Farm Women	Preparation of low cost nutritious diet by using locally available cereals	2	On	-	25	25	-	-	-
16.05.08 to 17.05.08		Repair & maintenance of Pre-germinated paddy seeder	2	Off	25	-	25	25	-	25
19.05.08 to 20.05.08		Care & Management of dairy animals for optimum milk production	2	Off	5	20	25	-	1	1
21.05.08 to 22.05.08		Package and practices of coconut	2	Off	22	3	25	-	-	-
23.05.08 to 24.05.08		Preparation of value added products from mango, jamun and jackfruit	2	On	-	25	25	-	-	-
28.05.08 to 29.05.08		Major diseases of rice and their management methods	2	On	25	0	25	7	0	7
30.05.08 to 31.05.08		Operation & maintenance of transplanting guide & conoweeder	2	On	25	-	25	13	-	13
20.06.08 to 21.06.08		Operation, use & maintenance of Dal Mill	2	Off	22	3	25	21	3	24
25.06.08 to 26.06.08		Selection of suitable crops and fruit plants for nutritional garden	2	On	-	25	25	-	5	5
27.06.08 to 28.06.08		Tissue culture banana plantation	2	Off	25	-	25	8	-	8
30.06.08 to 01.07.08	Formation & management of farm science club	2	On	25	-	25	-	-	-	

03.07.08 to 05.07.08	Farmer / Farm women	IPM against major pests of rice	2	Off	25	0	25	25	0	25
19.07.08 to 20.07.08	In-service	Care & maintenance of Tractor Drawn Machinery	2	On	15	0	15	1	0	1
24.07.08 to 25.07.08	Rural Youth	Improved variety of Papaya cultivation	2	Off	25		25	23		23
24.07.08 to 25.07.08		Embroidery work and value addition in plain clothes for income generation among SHG.	2	On	-	25	25	-	21	21
22.08.08 to 23.08.08	Farmer/Farm Women	SRI method of cultivation	2	Off	25	0	25	3	0	3
25.08.08 to 26.08.08	Farmer/Farm Women	Off season vegetable cultivation	2	On	25		25	24		24
30.08.08 to 31.08.08		Use of plastics in farming practices	2	Off	-	-	-	25		25
04.09.08 to 05.09.08	In service	IPM in paddy	2	On	25	-	25	-	-	-
15.09.08 to 16.09.08	Rural Youth	Seed Production techniques in paddy	2	On	25	-	25	7	-	7
17.09.08 to 18.09.08		Commercial Floriculture	2	Off	25		25	1		1
18.09.08 to 19.09.08	Farm and Farm Women	Management of Wilt in Solanaceous vegetables by bi-control agents	2	Off	25		25	16		16
22.09.08 to 23.09.08		Commercial Floriculture	2	Off	25		25	9		9
22.09.08 to 23.09.08		Formation and management of SHG	2	Off	25	-	25	1	-	1
26.09.08 to 27.09.08		Rice based cropping system	2	Off	25	-	25	-	-	-
30.09.08 to 01.10.08		Training on Training Management	2	On	25	5	30	4		4
21.10.08 to 22.10.08		Disease Management in vegetables seedling	2	Off	25		25	23		23
24.10.08 to 25.10.08		Package and practices of chilly	2	Off	25		25	6		6
24.10.08 to 25.10.08	Rural Youth	Value addition in mushroom	2	Off		25	25		23	23
29.10.08 to 30.10.08		Post harvest technology of rice	2	Off	-	-	-	25	-	25
30.10.08 to 31.10.08		Production of Organic inputs	2	Off	25	-	25	14	-	14
04.11.08 to 05.11.08	Farm / Farm Women	IPM against major pest of brinjal	2	On	25		25	7		7

21.11.08 to 22.11.08	Farm / Farm Women	Repair and maintenance of axial flow thresher	2	On	3	-	3	22		22
26.11.08 to 27.11.08		Groundnut production technology	2	On	25	-	25	6	-	6
28.11.08 to 29.11.08		Package and practices of Papaya Cultivation	2	On	25		25	2		2
15.12.08 to 16.12.08		Biological control of pests of cole crops	2	Off	17	8	25			
22.12.08 to 23.12.08		Oilseed Production technology	2	On	25	-	25	5	-	5
30.12.08 to 31.12.08		Pulse Production technology	2	Off	25	-	25	-	-	-
05.01.09 to 06.01.09		IPM module in tomato	2	On	18	7	25	18	7	25
12.01.09 to 13.01.09	Rural Youth	Prevention technique on fruits and vegetables	2	Off		25	25		4	4
29.01.09 to 30.01.09	Farm / Farm Women	Off Season Vegetable Cultivation	2	On	25		25	7		7
30.01.09 to 31.01.09		Use of plastics in agriculture	2	On				8	17	25
30.01.09 to 31.01.09		Use of handy implements for farm women	2	On		25	25		23	23
16.02.09 to 17.02.09		IPM in groundnut	2	On	25		25	25		25
24.02.09 to 25.02.09		Composting techniques	2	Off	25	-	25	-	-	-
25.02.09 to 26.02.09		Production and management technology of tuber crops	2	Off	25		25	10		10
25.02.09 to 26.02.09		Value addition of fruits and vegetables	2	On		25	25		4	4
06.03.09 to 09.03.09	Rural Youth	Bee Keeping	4	On	13	2	15			
07.03.09 to 08.03.09		Hybrid vegetable cultivation	2	Off	11	14	25	11	12	23
09.03.09 to 10.03.09	In service personnel	Productivity enhancement of crops through water management	2	On	18	-	18	2	-	2
13.03.09 to 14.03.09		Operation, Use & Maintenance of Tractor Drawn Primary Tillage Implements	2	Off	16		16	10		10

16.03.09 to 17.03.09	Farm / Farm Women	Stem Borer Management in rice by bi-control agents	2	Off	25		25	25		25
18.03.09 to 19.03.09	Inservice Personnel	Storage grain pest management	2	Off	12	3	15	5	2	7
20.03.09 to 21.03.09		Group dynamics	2	On	6	9	15	1	2	3
23.03.09 To 24.03.09	Farmer / Farm Women	Maize based Cropping System	2	On	6	19	25	-	16	16
23.03.09 to 24.03.09		Use of Drip and Sprinkler Irrigation	2	Off	25		25	-	-	-
26.03.09 to 27.03.09	Rural Youth	Seed production techniques in paddy	2	Off	20	5	25	13	5	18
30.03.09 to 31.03.09	Inservice Personnel	Formation and Management of SHGs	2	On		15	15		3	3

(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 elsewhere
				Male	Female	Total	Type of units	Number of units	Number of persons employed	
Drumstick	Hybrid vegetable cultivation	Package and practices of drumstick	2	25		25	-	-	-	-
Papaya	Hybrid vegetable cultivation	Improved variety of papaya cultivation	2	25		25	-	-	-	-
Commercial Floriculture	Marigold, tuberose, gladioli	Commercial floriculture	2	25		25	-	-	-	-
Bee keeping	Bee keeping	Bee keeping	4	13	2	15				

(E) Sponsored Training Programmes

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/ST	Others	SC/ST	Others	SC/ST		Total
1.	Acid Soil Management for higher production	Management of Problematic soils	Jan, 2009	1	PF	1	66	1	33	-	99	1	100	CA, OUAT
2	Scaling of water productivity in agriculture for livelihood	Water management	March, 2009	7	PF	1	35	15	-	-	35	15	50	CA, OUAT
Total				8		2	101	16	33	-	134	16	150	

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	11	420	128	548	12	0	12	432	128	560
Kisan Mela	3	119	91	210	8	2	10	127	93	220
Kisan Ghosthi	0	0	0	0	0	0	0	0	0	0
Exhibition	0	0	0	0	0	0	0	0	0	0
Film Show	6	305	70	375	0	0	0	305	70	375
Method Demonstrations	0	0	0	0	0	0	0	0	0	0
Farmers Seminar	0	0	0	0	0	0	0	0	0	0
Workshop	0	0	0	0	0	0	0	0	0	0
Group meetings	27	102	36	138	0	0	0	102	36	148
Lectures delivered as resource persons	0	0	0	0	0	0	0	0	0	0
Newspaper coverage	17	0	0	0	0	0	0	0	0	0
Radio talks	22	0	0	0	0	0	0	0	0	0
TV shows	9	0	0	0	0	0	0	0	0	0
Popular articles	0	0	0	0	0	0	0	0	0	0
Extension Literature	0	0	0	0	0	0	0	0	0	0
Advisory Services	25	25	0	25	0	0	0	25	0	25
Scientific visit to farmers field	247	1253	696	1949	0	0	0	1253	696	1949
Farmers visit to KVK	201	201	0	201	0	0	0	201	0	201
Diagnostic visits	20	44	6	50	0	0	0	44	6	50
Exposure visits	2	100	0	100	3	0	3	103	0	103
Ex-trainees Sammelan	0	0	0	0	0	0	0	0	0	0
Soil health Camp	0	0	0	0	0	0	0	0	0	0
Animal Health Camp	0	0	0	0	0	0	0	0	0	0
Agri mobile clinic	0	0	0	0	0	0	0	0	0	0
Soil test campaigns	0	0	0	0	0	0	0	0	0	0
Farm Science Club Conveners meet	10	255	15	270	0	0	0	255	15	270
Self Help Group Conveners meetings	1	0	25	25	0	0	0	0	25	25
Mahila Mandals Conveners meetings	0	0	0	0	0	0	0	0	0	0
Women in Agriculture Day	1	0	50	50	2	2	4	2	52	54
World food day celebration	1	60	0	60	4	0	4	64	0	64
Akhyaya trutiya celebration	1	59	41	100	2	0	2	61	41	102
Total	604	2943	1158	4101	31	4	35	2974	1164	4138

3.5 Production and supply of Technological products

SEED MATERIALS

Category	Crop	Variety	Quantity (qtl.)	Value (Rs.)	Provided to No. of Farmers
CEREALS	Paddy	MTU-7029	680.7	10,63,253	Provided to OSSC for supply to farmers

SUMMARY

Sl. No.	Crop	Quantity (qtl.)	Value (Rs.)	Provided to No. of Farmers
1	CEREALS	680.7	10,63,253	OSSC
2	OILSEEDS			
3	PULSES			
4	VEGETABLES			
5	FLOWER CROPS			
6	OTHERS			
TOTAL		680.7	10,63,253	

PLANTING MATERIALS

Sl. No.	Crop	Variety	Quantity (Nos.)	Value (Rs.)	Provided to No. of Farmers
FRUITS	Papaya	Chadha Selection	1300	9100	20
	Drumstick	PKM-2	400	1200	6
VEGETABLES	Brinjal	Utkal Keshari, Blue star, Madhuri, F1 Hybrid Shalin	29200	5840	37
	Chilli	Utkal Rashmi Haladia Khadi	5250	1050	8
	Tomato	Utkal Raja, Jyoti, Punjab Keshari, Amar Yoti	11500	2300	13
	Curli Flower	Barkha	2000	600	4
	Cabbage	Golden Acre	2000	600	2
	Elephan Foot Yam	Gajendra	2 quintal	3000	5
ORNAMENTAL CROPS					
Others (specify)					

SUMMARY

Sl. No.	Crop	Quantity (Nos.)	Value (Rs.)	Provided to No. of Farmers
1	FRUITS	1700	10300	26
2	VEGETABLES	44700	9340	56
3	SPICES	5250	1050	8
4	TUBER CROPS	2	3000	5
5	ORNAMENTAL CROPS			
6	PLANTATION CROPS			
	TOTAL	89945	41123	55

BIO PRODUCTS

Sl. No.	Product Name	Species	Quantity		Value (Rs.)	Provided to No. of Farmers
			No	(kg)		
	BIOAGENTS					
	BIOFERTILIZERS					
	BIO PESTICIDES					

SUMMARY

Sl. No.	Product Name	Species	Quantity		Value (Rs.)	Provided to No. of Farmers
			No	(kg)		
1	BIOAGENTS					
2	BIO FERTILIZERS					
3	BIO PESTICIDE					
	TOTAL					

LIVESTOCK

Sl. No.	Type	Breed	Quantity		Value (Rs.)	Provided to No. of Farmers
			(Nos)	Kgs		
Cattle						
Sheep and Goat						
Poultry	Chicks (21 days old)	Banaraja, Black rock, Kada Katha, CARI Gold	9600	-	3,36,000	SHG, Govt. Departments, NGOs
Fisheries	Advanced fingerling	IMC	2500	-	1750	
Others (Specify)						

SUMMARY

Sl. No.	Type	Breed	Quantity		Value (Rs.)	Provided to No. of Farmers
			Nos	Kgs		
1	CATTLE					
2	SHEEP & GOAT					
3	POULTRY	Banaraja, Black rock, Kada Katha, CARI Gold	9600	-	3,36,000	SHG, Govt. Departments, NGOs
4	FISHERIES	IMC	2500	-	1750	
5	OTHERS					
	TOTAL		12000	-	3,37,750	

3.6. Literature Developed/Published (with full title, author & reference)**(A) KVK News Letter (Date of start, Periodicity, number of copies distributed etc.)****KVK, MAURBHANJ NEWS LETTER**

- Date of start- March. 2008
- Periodicity- Half yearly
- Number of copies distributed- 2000 nos.

(B) Literature developed/published

Item	Title	Authors name	Number
Research papers	Efficiency of some newer insecticides and commercial neem formulations against rice leaf hoppers	A. Sasmal	2
	Evaluation of neem derivatives and commercial neem formulations against tissue borers of rice		
Technical reports	PRA Report, DPR for Model watershed, Annual report and action plan		
News letters	KVK, MAURBHANJ NEWS LETTER- oriya (BHANJABHUMI KRISHAK KATHA)	Programme Coordinator	02
Technical bulletins			
Popular articles			
Extension literature (Oriya)	Organic farming (Oriya)	Programme Coordinator	450
Others (Pl. specify)			
TOTAL			02

N.B. Please encloses 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.	VCD	Paddy reaper in English and oriya	01

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 farmer :** Gorahari Mohanta

2. **Address of the farmer:**

Karanjia
Baunsabilla
Shamakhunta.,
Mayurbhanj
Orissa

3. **Contact details:** Mob. No.-09937606066



4. **Details of farm:** 4 nos of fish grow out pond of 1 ac. (each) alongwith stocking pond
Dairy farming (5 nos of milch crossbred cows)
Poultry farming having synthetic bird (vanaraja & black rock)
Apiary
Horticultural and rice fields

5. **Membership:** Actively involve in Pani Panchayat, farmers' club

6. **Names of the scheme:** Assistant under state scheme of KSK (Krishi Sahayak Kendra)

7. Initial Status:

Gorahari, an unemployed rural youth having only traditional paddy cultivation and in habit rearing desi poultry birds

8. Technology/Good agricultural practices/ facilities/ benefits obtained with details:

- Scientific pisciculture and dairy farming-technology obtained from KVK
- Introduction of dual purpose colour bird “Vanaraja” for higher meat (2.5 kg in 4 months) and egg production (180 eggs annually)
- SRI method in paddy cultivation



of

9. Detail of results:

- Rearing of 125 nos of Vanaraja and Black rock poultry birds in 3 phases in last 6 months, he invested only Rs 4375/- towards chicks @ Rs 35/- per 21 days old chick and additional Rs 500/- for other miscellaneous expenditure. He got an amount of Rs 3500/- by selling only 28 nos of male birds
- At an average of 10-12q of fish production from ponds for 2 years
- 60q/ha in paddy cultivation investing only Rs.1350/- per ha this year
- 5-6 kg of honey from apiary investing only Rs. 4000/- once.this year

10. Marketing strategy: Though private/self due to proximity to the district headquarter i.e. urban area

11. Factors contributing to success:

- Vocational Training Programmes of KVK
- Front Line Demonstration of KVK
- Linkage with different line departments

13. Any other relevant information:

Awarded with best farmers for the district during OUAT foundation day celebration from Honourable Chief Minister on 24 th Aug. 2008

14. Diffusion of technology:

The success story was well propagated through print media and electronic media. The technology has transmitted through the SHG and farmers club, Govt. agencies and NGOs

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

Harvesting of Sabai grass (which is a very predominant crop in Mayurbhanj district) can be done by the farm machinery like self-propelled back pack cutter, attaching a circular blade with 80 teeth. The output of the machine is 1 acre/hr with fuel consumption of 1 litre/hr. Definitely the machine can reduce the drudgery among the farmers and it will also reduce the possibility of injury to hands during harvesting of the Sabai grass. The technology is demonstrated in farmer's fields of Baripada, Barasahi and Shamakhunta block.

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)

a) Value addition of Sabai Grass

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

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

-Identification of courses for farmers/ farm women :PRA outputs, Group discussion, Observation

-Rural Youth: PRA outputs, Secondary data

-In-service personnel :Questionnaire, Brainstorming, Group Discussion

3.11 Field activities

- i. Number of villages adopted -5
- ii. No. of farm families selected -
- iii. No. of survey/PRA conducted -5

3.12. Activities of Soil and Water Testing Laboratory : Not Available

Status of establishment of Lab :

1. Year of establishment :
2. List of equipments purchased with amount :
3. Details of samples analyzed so far :

4.0 IMPACT :As the KVK is only of two & half years the impact analysis is not done.

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)

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

4.2. Cases of large scale adoption

(Please furnish detailed information for each case)

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

5.0 LINKAGES

5.1 Functional linkage with different organizations

Name of organization	Nature of linkage
1.Department of agriculture, Govt. of Orissa	Forward and backward technical linkage like passing advanced researches and receiving feedbacks. Input supply and field demonstrations
2.Department of horticulture, Govt. of Orissa	-do-
3.Department of soil conservation, Govt. of Orissa	-do-
4.Department of animal resource development, Govt. of Orissa	-do-
5.Department of fishery, Govt. of Orissa	-do-
6.Department of forestry, Govt. of Orissa	-do-
7.Seed certification office, Govt. of Orissa	Seed and seedling production programme
8.Orissa state seed corporation	-do-
9.Central Rice Research Institute, Cuttack	Technical support and procuring recently released seeds
10.Central Avian Research Institute, Bhubaneswar	Technical support and collection of synthetic chicks
11.Central Institute Of Fresh Water Aquaculture, Bhubaneswar	Technical support and supply of fingerlings
12.ATMA, Mayurbhanj	Serving as resource person and conducting OFT & demonstration with collaborative mode
13.District and local administration	Administrative support
14.Banks and MRT division of SBI	Market led extension
15.Women and child development department	Extension through SHG

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

Name of the scheme	Date/ Month of initiation	Funding agency	Amount (Rs.)
R.S.V.Y, Mayurbhanj (Poultry Brooding house for Banaraja chicks of 1000 sq.ft. area)	Jan, 2007 and completed on Nov, 2007	DRDA, Mayurbhanj	5,00,000/-
NREGS scheme, Mayurbhanj (Renovation of two old ponds and two fingerling & yearling production unit)	March, 2009	DRDA, Mayurbhanj	5,00,000/-
Model watershed project	Dec., 2008	ICRISAT	-

5.3 Details of linkage with ATMA

a) Is ATMA implemented in your district : Yes

S. No.	Programme	Nature of linkage	Remarks
1.	Formulation of SREP	Providing service as a resource person and implementation & joint diagnostic survey	
2.	Programme Planning	Participation in Governing body and working committee member	
3	OFFICIATING	Acting as Deputy Project Director (Technical)	
4	On farm research	Implementation	

5.4 Give details of programmes implemented under National Horticultural Mission

S. No.	Programme	Nature of linkage	Constraints if any
1	Programme Planning	Members in District steering committee	
2	Resource person	In different trainings and demonstrations	

5.5 Nature of linkage with National Fisheries Development Board

S. No.	Programme	Nature of linkage	Remarks

6. PERFORMANCE OF INFRASTRUCTURE IN KVK

6.1 Performance of demonstration units (other than instructional farm)

Sl. No.	Demo Unit	Year of estt.	Area	Details of production			Amount (Rs.)		Remarks
				Variety	Produce	Qty.	Cost of inputs	Gross income	
1	Poultry	2007	-	Banaraja and Black Rock	21 day old chicks	9600		336000	
2	Vermi compost	2008							
3	Shade net	2007							
4	Poly house	2007							
5	Organic model farm	2008							
5	Medicinal units	2008							
6	Azolla								
7	Fishery	2008			Advanced fingerling	2500		1750	
8	Nutritional garden	2007			Vegetables			1760	
9	Mushroom	2008		Oyster	Mushroom	6.5		325	

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										
Paddy	27.06.08	25.11.09	18	Swarna	Seed (F)	680q		10,63,253		
Pulses										
Spices & Plantation crops										
Banana										
Floriculture										
Marigold										
Fruit crops										
Papaya				Chadha selection-1	Seedling	1300		9100		
Papaya										
Drumstick				PKM-2	Seedling	400		1200		
Vegetables										
Brinjal			-	Bluestar	Seedling	29200		5840		
				Utkal Keshari						
				Madhuri						
				F1 hybrid						
Tomato			-	Punjab Keshari	Seedling	11500		2300		
				Utlal Jyoti						
				Utkal raja						
				Amar jyoti						
Chilli			-	Utkal rasmi	Seedling	5250		1050		
				Haladikhadi						
Cabbage				Golden acre	Seedling	2000		600		
Elephant foot yam				Gajendra	Seedling	2 q		3000		

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	
1					

6.4 Performance of instructional farm (livestock and fisheries production)

Sl. No	Name of the animal / bird / aquatics	Details of production			Amount (Rs.)		Remarks
		Breed	Type of Produce	Qty.	Cost of inputs	Gross income	
1	Poultry	Banaraja	21 day old chick	9600		336000	
2	Fisheries	IMC	Advanced fingerling	2500	-	1750	

6.5 Utilization of hostel facilities:

Accommodation available (No. of beds) : NA

7. FINANCIAL PERFORMANCE

7.1 Details of KVK Bank accounts

Bank account	Name of the bank	Location	Account Number
KVK Contingency	State Bank of India	Shamakhunta	11600031037
Revolving fund	State Bank of India	Shamakhunta	30490126394

7.2 Utilization of funds under FLD on Oilseed (KHARIF, 2008 & Rabi, 2008-09)

Item	Released by ICAR		Expenditure		Unspent balance as on 1 st April 2009
	Kharif	Rabi	Kharif	Rabi	
Inputs				11983	
Extension activities				1750	
TA/DA/POL etc.				1750	
TOTAL				15483	Nil

7.3 Utilization of funds under FLD on Pulses (KHARIF, 2008 & Rabi, 2008-09)

Item	Released by ICAR		Expenditure		Unspent balance as on 1 st April 2009
	Kharif	Rabi	Kharif	Rabi	
Inputs			3626	8555	
Extension activities			520	1270	
TA/DA/POL etc.			786	1965	
TOTAL			4932	11790	Nil

7.5 (A) Utilization of KVK funds during the financial year 2008-09

S. No.	Particulars	Sanctioned	Released	Expenditure
A. Recurring Contingencies				
1	Pay & Allowances	2700000	-	2700000
2	Traveling allowances	100000	100000	100000
3	Contingencies			
A	Stationery, telephone, postage and other expenditure on office running, publication of Newsletter and library maintenance (Purchase of News Paper & Magazines)	236850	2366850	89446
B	POL, repair of vehicles, tractor and equipments			147404
C	Meals/refreshment for trainees (ceiling upto Rs.40/day/trainee be maintained)			131530
D	Training material (posters, charts, demonstration material including chemicals etc. required for conducting the training)			51014
E	Frontline demonstration except oilseeds and pulses (minimum of 30 demonstration in a year)			86402
F	On farm testing (on need based, location specific and newly generated information in the major production systems of the area)			32218 (O & P)
G	Training of extension functionaries			27494
H	Maintenance of buildings			12455
I	Establishment of Soil, Plant & Water Testing Laboratory			58887
J	Library	425000	400000	-
TOTAL (A)		3461850	3436850	3436850
B. Non-Recurring Contingencies				
1	Works	200000	-	2000000
2	Equipments including SWTL & Furniture	6500000	650000	649700
3	Vehicle (Four wheeler/Two wheeler, please specify)			
4	Library (Purchase of assets like books & journals)			
TOTAL (B)		6500000	650000	2649700
C. REVOLVING FUND				
GRAND TOTAL (A+B+C)				6086550

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 2006 to March 2007	64000	582638	242384	31616
April 2007 to March 2008	31616	1027631	628607	196520
April 2008 to March 2009	19652	1063253	1148196	409633

8.0 Please include information, which has not been reflected above

8.1 Constraints

- Administrative- Filling of vacant post SMS, Accountant / Superintendent, Driver
- Financial- Inadequate Meal Cost of Trainees, Funds for Infrastructure (Compound Wall, Training Hall, Irrigation facility)
- Technical – Soil and biological laboratory is required, non- availability of sophisticated A.V. aids.

Signature of Programme Coordinator