ANNUAL PROGRESS REPORT

April 2015 to March 2016

Krishi Vigan Kendra, Angul

Zone-VII

Orissa University of Agriculture & Technology, Bhubaneswar

CONTENTS

Instructions for Filling the Format

1. **Do not change/modify/ delete any column of any of the table. However, additional rows can be created, if required.**
2. **Do not merge columns, rows.**
3. **Please repeat the name of KVK in each table in the column "Name of KVK"**
4. **Do not fill the non-numerical values in numeric field**
5. **Do not repeat the unit while reporting data as it is already mentioned in the heading row**
6. **Strictly fill the data in desired unit only. If it is reported in other unit, convert it in the desired unit**
7. **Please mention only standard English names of crops (Do not mention Urd, Arhar, Til, Kulthi, Moong, Bajra, etc.)**
8. **Additional relevant information may be provided at the end of Format by creating heading "Additional Information"**
9. **Also read the instructions mentioned just below the table**
10. **Your suggestions for improvement in the format for your simplicity as well as data compilation may be given at the end of the format**
11. **Do not press any Enter Key in any of the columns while making entry in the columns of the table. Use only arrow key /Tab key/ mouse pointer while movement from one column/row to another.**
12. **Grey color cells in summary table need not to be filled.**
13. **Crop name should be spelled correct and standard English name should be used i.e Cereals, Pulses, Oilseed:- Rice (not use Paddy), Wheat, Barley, Kodo, Kutki, Maize, Jwar, Bajra, Pigeon pea (not use Tur, Arhar, Red gram), Blackgram (not use Urd), Greengram (not use Moong/Moongbean), Chickpea (not use Gram, Chana), Field pea, Horse gram (Kulthi), Lentil, Mustard (not use Rai, Sarsoan), Soybean, Linseed, Groundnut, Sesame (not use Til), Niger (not use Ram Til), Safflower (not use Kusum).**
    Vegetable :- Vegetable pea, Bottle guard, Bitter guard, Okra (not use Bhindi or Ladies finger).
    Fruits :- Mango, Guava, Custard apple, Pear etc.
    Spices :- Black Peeper, Turmeric, Ginger, Cardamom etc.

REPORTING PERIOD – April 2015 to March 2016

Summary of KVK Annual Report (Quantifiable Achievement) for the year 2015-16

S.N.	Quantifiable Achievement	Number	Beneficiaries (nos.)	
1	**On Farm Testing**			
	Proposed OFT	**25**	322	
	On Going OFT	2	110	
	Technologies assessed (Completed OFT)	23	212	
	Technologies refined	0	0	
	On farm trials conducted	25	322	
2	**Frontline demonstrations**			
	Proposed Frontline demonstrations	31	516	
	On Going Frontline demonstrations	3	11	
	FLDs conducted on crops	16	427	
	Area under crops (ha.)	139.6	427	
	FLD on farm implement and tools	4	20	
	FLD on livestock/ AH enterprises (Dairy/ Sheep and Goat/Poultry/ Duckery/ Piggery etc.)	2	15	
	FLD on Fisheries - Finger lings	4	13	
	FLD on other enterprises (Bee keeping, lac, mushroom, sericulture, value addition, vermi compost, etc.)	2	11	
	FLD on Women in Agriculture-(Nutritional garden, Income generation, Value addition, Drudgery reduction, etc.)	2	20	
3	**Training programmes**	**No. of Course**	**Duration (days)**	**Participants**
	Farmers	38	44	950
	Farm women	8	11	200
	Rural youth	12	24	180
	Extension personnel/ In service	5	9	50
	Vocational trainings	4	31	40
	Sponsored Training	1	30	30
	Total	68	149	1450
		No. of programmes	**Participants**	
4	**Extension Programmes**	160	5853	
5	**Production of technology inputs etc**	**Qty**	**Beneficiaries (nos.)**	
	Seed (qt.)	30	-	
	Planting material produced (nos.)	44236	207	
6	**Livestock**	**Qty**	**Beneficiaries (nos.)**	
	Livestock strains (Nos)	170	12	
	Milk Yield - Cow, Buffelo etc. (in liter)			
	Fish (Kg.)			
	Fingerlings (nos.)			
	Poultry-Eggs (nos.)			
	Ducks (nos.)			
	Chicks etc. (nos.)			
7	**Bio Products**	**Qty**	**Beneficiaries (nos.)**	
	Bio Agents -Earth worm (Kg.)			
	Trichoderma (kg.)			

	Bio Fertilizers- Vermi compost, Rhizobium, PSB , BGA , Mycorriza , Azotobacter , Azospirillum etc. (Kg.)	1630	51	
	Bio Pesticide-Panchgavya, Neem Extract , Neem oil etc.(lit.)			
8	**Any other significant achievement in the Zone**	**Nos.**	**Participants/ beneficiaries**	
	Award (Best KVK award and scientist and farmer's award)	1	1	
	Publications (Res. Paper/ pop. Art./Bulletin,etc.)	33	5050	
	KVK News letter	4	2000	
	SAC Meetings conducted	2	49	
	Soil sample tested	673	1901	
	Water sample tested	-	-	
	RWH System (Special training and field visit on RWH structure and MIS in KVKs)	-	-	
	KVK-KMA (Message and beneficiaries)	50	12758	
	Convergence programmes	18	590	
	Sponsored programmes	1	30	
	KVK Progressive Farmers interaction	12	360	
	No. of Technology Week Celebrations	1	225	
	Attended HRD activities organized by ZPD	16	8	
	Attended HRD activities organized by DES	2	2	
	Attended HRD activities by KVK Staff(Refresher /Short course, Training programme etc.)	6	5	
9	Current status of Revolving Funds (Amt. in Rs.)		200964	
10		**No. of blocks**	**No. of villages**	
	Outreach of KVK in the District	8	205	
11		**ICAR**	**SAU**	**Others**
	No. of important visitors to KVK (nos.)	-	09	10
12		**Working (Yes/No)**	**No. of Update**	
	Status of KVK Website	Yes	51	
13		**Application received**	**Application disposed**	
	Status of RTI (nos.)			
14		**Query received**	**Query dissolved**	
	Citizen Charter (nos.)			
15		**Working (Yes/No)**	**No. of programme viewed**	
	E-connectivity			
16		**Filled**	**Vacant**	
	Staff Position	15	1	
17	Workshop/ Seminar/ Conference attended by staff of KVK (nos)	16		
18	Publication received from ICAR /other organization (nos.)	1		
19		**Particulars**	**Organization**	
	Agri alerts (epidemic, high serious nature problem, Cyclone etc. reported first time to ZPD, SAU, Agri. Deptt. and ICAR)			

GENERAL INFORMATION

1.1. Staff Position (as on date)

Summary of Staff position in KVKs on March, 2016

Name of KVK	Sanctioned Posts	PC (1)		SMS (6)		PA (3)		Admn. (6)		Total	
		Sanc.	Filled	Sanc.	Filled	Sanc.	Filled	Sanc.	Filled	Sanc.	Filled
Angul	16	1	1	6	6	3	3	6	5	16	15

Name of KVK	Sanction post	Name of the incumbent	Discipline	Highest degree	Subject of specilization	Pay scale	Present pay	Date of joiing	Per./ Temp.	Category
Angul	Senior Scientist & Head	Dr. B.Satpathy	Agril.Extension	Ph.D	Agri. Extension	15600-39100	15600	12.11.2015 12.01.2006	Permanent	Others
Angul	Scientist	Sri B.Mohanty	Agril. Engg.	M.Tech.	Soil & water conservation Engineering	15600-39100	23070	14.03.2005	Permanent	Others
Angul	Scientist	Dr.S. Acharya	Home Science	Ph.D	Home Science	15600-39100	19810	11.05.2010	Permanent	Others
Angul	Scientist	Sri T.K. Samant	Agronomy	M.Sc	Agronomy	15600-39100	17610	12.12.2012	Permanent	Others
Angul	Scientist	Sri Gyanranjan Sahoo	Forestry	M.Sc	Forestry	15600-39100	19810	06.10.2015	Permanent	Others
Angul	Scientist	Dr. Monalisa Behera	Animal Sc.	M.Sc	Pathology	15600-39100	15600	23.07.2015	Permanent	Others
Angul	Scientist	Ipsita Mishra	Pl. Protection	M.Sc	Entomology	15600-39100	15600	06.11.2015	Permanent	Others
Angul	Programme Assistant	Mrs.R. P. Misra	Fishery Science	M.FSc	Fisheries Environment	9300-34,800	10560	30.07.2012	Permanent	Others
Angul	Farm Manager	Dr. T. Sarangi	Plant Protection	Ph.D	Nematology	9300-34800	9300	04.02.2015	Permanent	Others
Angul	Programme Assistant (Comp.)	Sri P.K. Sahoo	Comp Sc.	MCA	RDBMS	9300-34800	15240	25.08.2015	Permanent	OBC
Angul	Accountant / superintendent	Vacant								
Angul	Stenographer	Sri.B. Jena	-	Degree	Secretarial practice	5200-20200	7560	13.10.2006	Cont.	Others
Angul	Driver-cum-Mechanic	Mr. S. K. Mishra	-	Degree	Driving	5200-20200	6600	17.06.2013	Cont.	Others

Name of KVK	Sanction post	Name of the incumbent	Discipline	Highest degree	Subject of specilization	Pay scale	Present pay	Date of joiing	Per./ Temp.	Category
Angul	Driver-cum-Mechanic	Mr. B. Parida	-	10th pass	Driving	5200-20200	6600	14.07.2014	Cont	Others
Angul	Peon-cum-Watchman	Sri N. Behera	-	8th pass	-	4750-14680	5600	30.07.2008	Cont.	Others
Angul	Peon-cum-Watchman	Sri R. Parida	-	8th pass	-	4750-14680	5600	02.08.2008	Cont.	Others

1.2. DISTRICT PROFILE (detail of geographical area, cultivation, Land, resources, opportunities, irrigation, populations etc.)–

KVK Name	Agro-climatic zone	No . of Blocks	No. of Panchayats	Population	Literacy	SC and ST Population	No. of farmers	Average land holding
Angul	Mid-Central Table Land Zone	8	209	1272000	78.9%	SC-196109 ST-132994	141041	1.08 ha

- Angul lies between 20° 31′ N & 21° 40′ N latitude and 84° 15′ E & 85° 23′ E longitude. The total geographical area of Angul is 6232 sq.kms, and is the 11th largest district among 30 districts of Orissa. Angul shares its borders with Sundargarh in the north, Deogarh, Sambalpur & Sonepur in the west, Boudh & Nayagarh districts in the south, Dhenkanal & Cuttack in the south-east and Keonjhar in the east.
- Angul has a total population of 11,40,003 consisting of 51.51 percent male population and 48.49 percent female population and sex ratio is 941 which is slightly less than the state average of 972.
- There are 1910 villages in the district out of which 1661 are inhabited and 249 are uninhabited.
- The Human Development Index (HDI) of Angul is 0.663 which is higher than the state average of 0.579. Similarly, the income index is also significantly higher 0.748 for Angul as against the state average of 0.545.
- The participation rate of women in the total workforce of the district is slightly higher (32.48 percent) than the state average 31.54 percent.
- The total cultivable area of this district is 2, 16,403 ha constituting 32.7 percent of the total geographical area of the district.
- The mean annual rainfall of the district is 1422 mm & the irrigation potential is 23 percent with the net irrigated area 38867 hectares in kharif and 24120 hectares in rabi.
- The prime cropping system of the district is rice - pulse (Greengram & Blackgram), rice-Oilseed (Groundnut & Sesamum) and in irrigated condition rice-pulse/oilseed-vegetables and rice-vegetables-vegetables.

1.3. DETAILS OF ADOPTED VILLAGE during the reporting period (Approved by competent Authority in meetings/workshops)

KVK Name	Village Name	Year of adoption	Block Name	Distance from KVK	Population	Number of farmers (having land in the village)
Angul	Thelkonali	2012	Kishorenagar	80 km	600	85
Angul	Sandhapal	2013	Chendipada	24 Km	550	75
Angul	Ragudiapada	2013	Angul	25 Km	501	100
Angul	Kantiapasi	2014	Pallahara	75 km	300	85
Angul	Hatiganj	2015	Athamalik	65 km	550	75
Angul	Banusahi	2015	Banarpal	25 km	450	55

1.4. THRUST AREAS identified by KVK (Approved by competent Authority in meetings/workshop)

KVK Name	THRUST AREA
Angul	To increase production and productivity of Paddy ,oilseeds and pulses through integrated crop management
Angul	Varietal substitution in paddy, oilseed, pulse & vegetables
Angul	Management of soil through Integrated Nutrient Management
Angul	To increase water use efficiency through micro-irrigation system in vegetables and fruits
Angul	To mechanize oilseed and pulse cultivation through improved implements
Angul	Post harvest management of vegetables and fruits & field crops
Angul	To enhance farmers income through Innovative extension approaches
Angul	Knowledge and Information Management
Angul	To develop entrepreneurship through capacity building measures
Angul	To reduce drudgery in farm women
Angul	Income generating activities for farm women
Angul	To enhance productivity of fish and goat through scientific approach
Angul	Value addition, processing and market facilitation of household and commercial enterprises
Angul	Small scale mechanization for reducing cost and drudgery
Angul	Capacity building among rural youths towards self-employment
Angul	Empowerment of women in terms of improved nutrition, income and drudgery reduction through technological literacy
Angul	Scientific management of livestock
Angul	Integrated pest and disease management in field crops, vegetables and fruits
Angul	Bio intensive pest management in vegetables
Angul	Promotion of use of bio-pesticides and bio control agent

1.4. PROBLEM IDENTIFIED by KVK (Approved by competent Authority in meetings/workshop)

KVK Name	Problem identified	Methods of problem identification	Location Name of Village & Block
Angul	Low yield from upland Paddy	PRA Tools	Bauligarh (Banarpal), (Sandhapal (Chendipada)
Angul	Severe weed problem in upland Paddy and Kharif groundnut	Diagnostic survey	Bouligarh (Banarpal), Sandhapal (Chendipada), Thelkonali (Kishorenagar)
Angul	No 7knowledge about improved varieties in vegetables and spices like bitter gourd, onion, Ivy gourd, tomato	Group Discussion	Bauligarh (Banarpal), Ragudiapada (Angul), Kantiapasi (Pallahara), Sandhapal (Chendipada)
Angul	Lack of knowledge about nutrient management in groundnut paddy, green gram, groundnut, Mustard	Group Discussion	Balijharan (Chhendipada), Ragudiapada (Angul), Sandhapal (Chendipada), Kanteipasi (Pallahara), Balijharan (Chendipada)
Angul	Inefficient use of water	PRA Tools (Transect walk)	Sandhpal (Chendipada), Ragudiapada (Angul), Bauligarh (Banarpal)
Angul	High Drudgery among farmwomen	Group Discussion	Maranda (Angul), Bargaunia,
Angul	More labour, time and cost involved in farm activities due to low level of mechanization and use of manual labour.	Group Discussion	Ragudiapada, Maranda (Angul), Bauligarh (Banarpal), Sandhapal, (Chendipada)
Angul	Low yield of fruit and vegetable crops due to inefficient irrigation system / method.	Group Discussion	Ragudiapada (Angul), Sandhapal, Handiguda, Jamunali (Chendipada)
Angul	Lack of capacity building measures among farmers	Group Discussion (Activity clock)	Ragudiapada (Angul), Dhobapal (Talcher), Balijharan (Chhendipada)
Angul	Lack of knowledge about advanced extension methodologies amongst Extension workers	Focused Group Discussion, Questionnaire	DAO, Office Angul, Consultation with line departments.
Angul	Lack of income opportunities for farm women	PRA Tools (Livelihood mapping)	Mahidharpur (Angul), Kumanada, Kaniaipasi (Pallahara)
Angul	Lack of entrepreneurship	Group Discussion	Mahidharpur (Angul), Ragudiapada (Angul),
Angul	Less production of fish	PRA tools, Group discussion	Kisinda (Angul), Durgapur (Chhendipada)
Angul	Yield loss in field crops and vegetables due to insect pest & diseases	PRA tools, Group discussion	Sandhapal (Chendipada), Ragudiapada (Angul), Bauligada (Banarpal), Handiguda (Chendipada)
Angul	Loss of vegetables due to lack of scientific storage practice	PRA tools, Group discussion	Ragudiapada, Thelkonali
Angul	Unutilized interspaces of forest plantation	Group discussion	Ragudiapada and banuasahi (Angul)
Angul	Use of Unimproved and desi variety of turmeric and ginger	Diagnostic survey	Sandhapal (Chhendipada)

2. On Farm Testing

Note-

*** Thematic area should be spelled correct and follow standard pattern i.e. Integrated Nutrient Management in place of INM or Inte. Nutrient Mngt. Etc.**

***Crop name should be spelled correct and standard English name should be used i.e Chick pea in place of gram/chana , Paddy in place of Rice/chawal , brinjal in place of egg plant/bhata/baigan etc.**

***Don't press enter key to navigate among column use arrow or tab key**

***don't add space before or after statement within the table cell**

2.1 Information about OFT

KVK name	Year	Season	Problem diagnose	Title of OFT	Category of technology (Assessment/ Refinement)	Thematic Area	Crop/ enterprise	Farming Situations	No. of trials	Results (q/ha)			Net Returns (Rs./ha)			Recommendations
										FP (T_1)	RP (T_2)	T3	FP (T_1)	RP (T_2)	T3	
Angul	2015	Kharif	Low yield in milch cow due to scarcity of green fodder in lean period	Assessment of fodder Maize and Stylo(1:1) intercropping	Assessment	ICM	Maize Stylo	Rainfed upland	10	162.38	240.54		11366	26070		Cultivation of fodder maize and stylo (1:1) intercropping produced 48% higher GFY, profitability with availability of fodder through the year.
Angul	2015	Kharif	Low yield due to heavy weed infestation at early stage and scarcity of labour	Assessment of weed management in rainfed transplanted rice	Assessment	Integrated Weed Management	Rice	Rainfed medium land	10	49.52	48.26		32559	32959		Pre-emergence application of Bensulfuron methyl(0.6%)+ Pretilachlor(6%) @ 660g/ha at 3-7 DAT effectively controls the most of the weeds during early stages of transplanted paddy with higher net return

KVK name	Year	Season	Problem diagnose	Title of OFT	Category of technology (Assessment/ Refinement)	Thematic Area	Crop/ enterprise	Farming Situations	No. of trials	Results (q/ha)			Net Returns (Rs./ha)			Recommendations
										FP (T_1)	RP (T_2)	T3	FP (T_1)	RP (T_2)	T3	
Angul	2015	Kharif	Low yield due to heavy weed infestation at early stage and scarcity of labour	Assessment of weed management in *kharif* maize	Assessment	Integrated Weed Management	Maize	Rainfed upland	10	38.52	48.35		25539	37404		Pre-emergence application of Atrazine @ 1.0 kg/ha at 0-3 DAS followed by one mechanical weeding by wheel finger weeder at 20-25 DAS effectively controls the most of the weeds with weed control efficiency 78.5% and higher B:C ratio in comparison to the farmers practices of hand weeding .
Angul	2015 -16	Rabi	Low yield due to improper nutrient management	Assessment of Integrated Nutrient Management in sesamum	Assessment	Integrated Nutrient Management	Sesamum	Irrigated medium land	10	5.87	8.56		8000	15852		Application of 75% STDF+ Azospirillum, Azotobacter & PSB @ 4 kg each incubated with 300 kg FYM/ha + Sulphur @ 30kg/ha in sesamum increases the grain yield by 45 % & 18 % over farmers practices and soil test based recommended fertiliser application respectively.
Angul	20 15	Kharif	Yield loss due to heavy infestation of fruit and shoot borer.	Assessment of Bio intensive pest managemen t of brinjal shoot & fruit borer	Assessment	IPM	Brinjal	Rainfed Upland	10	262.4	283.9	321.5	197750	203450	235700	Basal application of neem cake @2.5g/ha,Removal of affected shoot, use of pheromone trap @ 20 traps /ha, 6 times release of egg parasitoid T.chillonis @ 50,000/ha effectively control brinjal fruit and shoot borer.

KVK name	Year	Season	Problem diagnose	Title of OFT	Category of technology (Assessment/ Refinement)	Thematic Area	Crop/ enterprise	Farming Situations	No. of trials	Results (q/ha)			Net Returns (Rs./ha)			Recommendations
										FP (T_1)	RP (T_2)	T3	FP (T_1)	RP (T_2)	T3	
Angul	2015	Kharif	Yeild loss due to leaf blast in paddy.	Assessment of IDM practice for management of blast in paddy	Assessment	IDM	Paddy	Rainfed Medium land	10	44.6	48.4	43.8	20980	24020	30440	Seed treatment with Trichoderma viridae @ 4gm/kg of seed & two spraying of Tricyclazole 75%wp @ 300gm/ha successfully controls the blast disease in paddy.
Angul	2015 -16	Rabi	Yeild loss due to heavy infestation of spodoptera.	Assessment of IPM practice for management of Spodoptera in cauliflower	Assessment	IPM	Cauli-flower	Rainfed Medium land	10	171.8	233.2	252.3	10170	18180	20245	Use of pheromone trap @20traps/ha, spraying of Bt @ 1kg/ha & spraying of neem based pesticide @ 2 lt/ha is the best recommendation for the control of spodoptera larva.
Angul	2015 -16	Rabi	Loss of yield due to infestation of thrips	Assessment of IPM practice for management of leaf curl in chilli	Assessment	IPM	Chilli	Rainfed Medium land	10	128.7	171.1	263.5	10816	46528	58758	Basal application of neem cake @ 100kg/ac, seedling root dip in imidacloprid solution & spraying of Spinosad 45EC @ 50ml/ac effectively controlled thripes population.
Angul	2015	Kharif	Low milk production	Assessment of probiotics on milk yield of crossbred cows	Assessment	Livestock production and management	Dairy farmiing	Grazing and concentrate feeding	10	7.45 lt./ day/ animal	8.03 lt./ day/ animal		2962.5	4452		Quality and quanty of milk increased
Angul	2015 -16	Rabi	Low body weight gain	Assessment of bypass protein and fat supplementation on weight gain of goats	Assessment	Livestock production and management	Goatery	Grazing	30 goats/6 trial	8.2kg/ 90days	11.23		8247.5	11590		Weight gain was faster and more, followed by improved reproductive performance in female goats
Angul	2015 -16	Rabi	Under developed duckery sector, rearing of deshi	Assessment of duck breed White Pekin in backyard	Assessment	Livestock production and management	Duckery	Rearing of deshi duck breed	100ducks/ 5 trial	2.00kg/ 90 days						continuing

KVK name	Year	Season	Problem diagnose	Title of OFT	Category of technology (Assessment/ Refinement)	Thematic Area	Crop/ enterprise	Farming Situations	No. of trials	Results (q/ha)			Net Returns (Rs./ha)			Recommendations
										FP (T_1)	RP (T_2)	T3	FP (T_1)	RP (T_2)	T3	
Angul	2015	Kharif	High cost, labour and time in manual transplanting	Assessment of direct seeding of rice by tractor operated seed cum fertilizer drill	Assessment	Farm Mechani-sation	Paddy	Rainfed, Medium land	13	28	30		11200	17000		Recommended for medium land condition
Angul	2015	Kharif	Low yield in case of manual broadcasting of seed	Assessment of tractor operated seed cum fertilizer drill for sowing of sesamum	Assessment	Farm Mechani-sation	Sesamum	Rainfed, Up land	13	4.2	5.1		17800	23900		Cont….
Angul	2015 -16	Rabi	More cost, labour and time in broadcasting green gram seed after harvesting of paddy with land preparation	Assessment of tractor operated zero till drill for sowing of green gram	Assessment	Farm Mechani-sation	Greengram	Medium land	13	5.1	5.6		18800	24800		Cont….
Angul	2015 -16	Rabi	Low yield, more cost, labour and time in furrow irrigation	Assessment of drip irrigation system in onion.	Assessment	Micro-irrigation	Onion	Irrigated medium land	1	120	145		46000	61000		Cont….
Angul	2015	Kharif	Farmers not getting information timely and regularly	Assessing the effectiveness of (KMAs) in disseminating technology to paddy growers	Assessment	ICT			60							Cont….
Angul	2015 -16	Rabi	Lack of visible profitability from onion production	Assessment of existing market led approaches of onion	Assessment	Market-led-Extension			50							Cont….

KVK name	Year	Season	Problem diagnose	Title of OFT	Category of technology (Assessment/ Refinement)	Thematic Area	Crop/ enterprise	Farming Situations	No. of trials	Results (q/ha)			Net Returns (Rs./ha)			Recommendations
										FP (T_1)	RP (T_2)	T3	FP (T_1)	RP (T_2)	T3	
Angul	2015	Kharif	Less yield and income due to traditional method of stocking of fingerlings	Assessment of maximization of fish production by using stunted yearlings	Assessment	Production management	Enterprise	Pond based	3	23.8	32.4	-	104500	167900		Stunted yearlings should be stocked to enhance the fish production in place of fingerlings.
Angul	2015	Kharif	Less yield and income due to traditional method of IMC culture	Assessment of Jayanti rohu with IMC in culture pond	Assessment	Production management	Enterprise	Pond based	3	21.9	27.4		88000	162400		Though Jayanti rohu showed 25% more growth rate as compared to normal rohu, so it should be used to increase the yield and income.
Angul	2015	Kharif	Low fish production due to lack of awareness of the farmers regarding use of probiotics as feed additive	Assessment of probiotic feed additive in growth enhancement of carp in composite pisciculture	Assessment	Feed management	Enterprise	Pond based	13	16.9	23.1		116200	218100		Use of probiotics should be encouraged for better growth of carps in composite pisciculture
Angul	2015	Rabi	Less yield and income due to lack of knowledge regarding the use of Prawn with mixed carp culture	Assessment of Fresh water Prawn in mixed Carp culture	Assessment	Production management	Enterprise	Pond based	3	15 fish	18 fish+ 5 prawn		34000	95800		Monoculture of freshwater prawn should be practiced to get more profit.

2.2 Economic Performance

KVK name	OFT Title	Parameters			Average Cost of cultivation (Rs/ha)			Average Gross Return (Rs/ha)			Average Net Return (Rs/ha)			Benefit-Cost Ratio (Gross Return / Gross Cost)		
		Name and unit of Parameter	FP (T_1)	RP (T_2)	FP (T_1)	RP (T_2)	Refined Practice, if any (T_3)	FP (T_1)	RP (T_2)	Refined Practice, if any (T_3)	FP (T_1)	RP(T_2)	Refined Practice, if any (T_3)	FP (T_1)	RP (T_2)	Refined Practice, if any (T_3)
Angul	Assessment of fodder Maize and Stylo(1:1) intercropping	GFY(q/ha)	162.38	240.54	21109	19243		32476	48108		11367	28865		1.5	2.5	
		Dry Matter yield(q/ha)	55.42	66.25												

KVK name	OFT Title	Parameters			Average Cost of cultivation (Rs/ha)			Average Gross Return (Rs/ha)			Average Net Return (Rs/ha)			Benefit-Cost Ratio (Gross Return / Gross Cost)		
		Name and unit of Parameter	FP (T_1)	RP (T_2)	FP (T_1)	RP (T_2)	Refined Practice, if any (T_3)	FP (T_1)	RP (T_2)	Refined Practice, if any (T_3)	FP (T_1)	RP(T_2)	Refined Practice, if any (T_3)	FP (T_1)	RP (T_2)	Refined Practice, if any (T_3)
Angul	Assessment of weed management in rainfed transplanted rice	Weed intensity/m^2 at 60 DAS Weed dry weight/m^2(g) at 60 DAS WCE(%) at 60 DAS	11.63 38.87 77.3	12.4 43.34 75.8	42750	40062		75309	73021		32559	32959		1.76	1.82	
Angul	Assessment of weed management in kharif maize	Weed intensity/m^2 at 60 DAS Weed dry weight/m^2(g) at 60 DAS WCE(%) at 60 DAS	11.64 38.87 76.5	14.10 48.63 70.6	42750	40412		75309	66991		32559	26579		1.76	1.67	
Angul	Assessment of INM in sesamum	Plant height(cm) Pr branches/ Plant No of capsules/plant No of seeds/capsules	89.23 3.56 16.25 40.62	91.45 4.76 20.46 49.57	20325	25328		28325	41180		8000	15852		1.39	1.63	
Angul	Assessment of Bio intensive pest management of brinjal shoot & fruit borer	% of fruit damage,	26.8	7.6	77650	80400	85800	263400	283900	321500	197750	203450	235700	3.3	3.5	3.7
Angul	Assessment of IDM practice for management of blast in paddy	% of leaf blast	7.6	2.8	37000	38900	38200	57980	62920	68640	20980	24020	30440	1.57	1.62	1.80

KVK name	OFT Title	Parameters			Average Cost of cultivation (Rs/ha)			Average Gross Return (Rs/ha)			Average Net Return (Rs/ha)			Benefit-Cost Ratio (Gross Return / Gross Cost)		
		Name and unit of Parameter	FP (T_1)	RP (T_2)	FP (T_1)	RP (T_2)	Refined Practice, if any (T_3)	FP (T_1)	RP (T_2)	Refined Practice, if any (T_3)	FP (T_1)	RP(T_2)	Refined Practice, if any (T_3)	FP (T_1)	RP (T_2)	Refined Practice, if any (T_3)
Angul	Assessment of IPM practice for management of Spodoptera in cauliflower	% damage by Spodoptera	17.11	7.87	15600	16800	17600	25770	34980	37845	10170	18180	20245	1.65	2.08	2-15
Angul	Assessment of IPM practice for management of leaf curl in chilli	% of Leaf curl	17.11	7.87	20700	21900	22650	51516	68428	81408	10816	46528	58758	2.49	3.12	3.59
Angul	Assessment of probiotics on milk yield of crossbred cows	Avg. daily milk yield/day (lt.)	7.45	8.03	2625/ cow/ 30 day	2775/ cow/ 30 day		5587.5/ month	7227/ month		2962.5	4452		2.12	2.60	
Angul	Assessment of bypass protein and fat supple-mentation on weight gain of goats	Weight gain/ 90days (kg.)	8.20	11.23	1900/ 5 goats	2270/5 goats		10147.5/ 5 goats	13860/ 5 goats		8247.5	11590		5.34	6.10	
Angul	Assessment of duck breed White Pekin in backyard	Weight gain/90 days (kg/bird)	0.9	2.00	Continuing											
Angul	Assessment of direct seeding of rice by tractor operated seed cum fertilizer drill	Cost of transplanting (Rs/ha)	8000	2000	28000	25000		39200	42000		11200	17000		1.40	1.68	
Angul	Assessment of tractor operated seed cum fertilizer drill for sowing of sesamum	No. of capsules / plant (No.)	18	23	20000	22000		37800	45900		17800	23900		1.89	2.09	
Angul	Assessment of tractor operated zero till drill for sowing of green gram	Cost of field preparation and sowing (Rs/ha)	4000	2000	22000	20000		40800	44800		18800	24800		1.85	2.24	
Angul	Assessment of drip irrigation system in onion.	Irrigation cost (Rs/ha)	7500	6250	50000	55000		96000	116000		46000	61000		1.92	2.11	

KVK name	OFT Title	Parameters			Average Cost of cultivation (Rs/ha)			Average Gross Return (Rs/ha)			Average Net Return (Rs/ha)			Benefit-Cost Ratio (Gross Return / Gross Cost)		
		Name and unit of Parameter	FP (T_1)	RP (T_2)	FP (T_1)	RP (T_2)	Refined Practice, if any (T_3)	FP (T_1)	RP (T_2)	Refined Practice, if any (T_3)	FP (T_1)	RP(T_2)	Refined Practice, if any (T_3)	FP (T_1)	RP (T_2)	Refined Practice, if any (T_3)
Angul	Assessing the effectiveness of (KMAs) in disseminating technology to paddy growers	Cont…														
Angul	Assessment of existing market led approaches of onion	Cont…														
Angul	Assessment of maximization of fish production by using stunted yearlings	Weight (gm) Catla Rohu Mrigal Common Carp Duration (month)	 200 150 120 150 3	 600 400 450 500 3	110000	150000		214500	317900		104500	167900		1.95	2.12	
Angul	Assessment of Jayanti rohu with IMC in culture pond	Weight (gm) Catla Jayanti Rohu Mrigal Duration (month)	 500 320 300 6	 700 500 450 6	115000	132000		203000	294400		88000	162400		1.76	2.23	
Angul	Assessment of probiotic feed additive in growth enhancement of carp in composite pisciculture	Weight(gm) Catla Rohu Mrigal Grass Carp Common Carp Duration(month)	 420 200 240 300 350 4	 580 350 400 430 480 4	96200	148100		212400	366200		116200	218100		2.20	2.47	
Angul	Assessment of Fresh water Prawn in mixed Carp culture	Prawn Weight(gm) Catla Rohu Mrigal Duration(month)	- 450 230 260 5	45 560 370 420 5	118000	178800		152000	274600		34000	95800		1.29	1.53	

2.3 Information about Home Science OFT:

KVK Name	Year	Season	Problem diagnose	Title of OFT	Category of technology (Assessment/ Refinement)	Thematic Area	Details of Technology Selected for Assessment	Characteristics of Technology / Variety / Product / Enterprise	Farming / Enterprise Situation	No. of trials	Recomme-ndations
Angul	2015	Kharif	Lack of knowledge and skill on preparation of value addition product of peanut least to low income.	Assessment of preparation of Peanut Butter for income generation	Assessment	Value addition	Roasting of kernel, grinding and addition of Hydrogenated fat containing vitamin A (5%) and Sodium chloride (2%) level. The mixture is ground to a smooth paste and packed in bottles	Peanut butter is a low calorie high protein food with fair sources of calcium, iron, thiamine, riboflavin and excellent source of niacin.	Homestead	13	Good nutritive value and can be stored for 5 months
Angul	2015	Kharif	Low income and nutritional quality degradation due to store grain pest management	Assessment of TNAU insect trap in controlling store grain pest in pulses	Assessment	Storage Technique	T_2-Treatment with 5ml Mustard oil/1 kg of seed T_3-Use of 2 or 3 traps which can be placed at 15 to 20 cm depth in a bin of 30 to 45 cm diameter of 25 kg capacity	Eco-friendly and effective for management of Pulse Beetle.	Homestead	10	TNAU trap decrease pest without any chemical use
Angul	2015-16	Rabi	Winnowing in traditional practice is a drudgery prone activity	Assessment of hand operated paddy winnower for drudgery reduction	Assessment	Drudgery Reduction	Use of Hand operated paddy winnower for cleaning grain after harvesting	Easy to operate, Less drudgery, cost and time. Field Capacity-242kg/hr.	NA	13	Time, money and labour can be saved with less drudgery

KVK Name	Year	Season	Problem diagnose	Title of OFT	Category of technology (Assessment/	Thematic Area	Details of Technology Selected for	Characteristics of Technology / Variety /	Farming / Enterprise Situation	No. of trials	Recomme-ndations
Angul	2015-16	Rabi	Deterioration of mushroom immediately within one day after the harvest due to its high moisture content	Assessment of Low Cost Technology of Drying of Oyster Mushroom	Assessment	Value addition	T_2-Sun drying of Blanched mushrooms for 3 consecutive days. T_3-Soaking of Mushrooms for 6-7 hours in preservatives (0.6g potassium meta- bisulphide and 10g citric acid /Kg fresh mushroom diluted in one liter normal water) dried under sunlight for 3 consecutive days	Improved Colour, Better flavour and increased storage life (12 months)	Homestead	13	Chemically treated dried mushroom I good in colour and have more self life

2.4 Economic Performance Home Science OFT:

KVK name	OFT Title	Performance Indicator / Parameter																				
		Output m2/h		Est. Energy Expenditure kj/min.		WHR beat/ min		% reduction in drudgery		% increase in efficiency		Production per unit		Cost of input		Incremental income		Yield (Kg/ha)		Net Return		Saving in Rs	BC ratio
		T1	T2	T1	T2	T1	T2	T1	T2	T1	T2	T1	T2	T1	T2	T1	T2	T1	T2	T1	T2		
Angul	Assessment of preparation of Peanut Butter for income generation	0	0	0	0	0	0	0	0	0	0	10kg	9.1kg	200	1050	500	3640	0	0	300	2590	2290	T1= 2.5 T2= 3.46
Angul	Assessment of TNAU insect trap in controlling store grain pest in pulses	0	0	0	0	0	0	0	0	0	0	632kg	T2= 706kg T3= 770kg	15,130	T2= 15,530 T3= 16154	25280	T2= 28240 T3= 30800	8.1	T2= 8.1 T3= 8.1	10,150	T2= 12,710 T3= 14646	T2= 2,560 T3= 4496	T1= 1.67 T2= 1.81 T3= 1.90

KVK name	OFT Title	Performance Indicator / Parameter																					
		Output m2/h		Est. Energy Expenditure kj/min.		WHR beat/ min		% reduction in drudgery		% increase in efficiency		Production per unit		Cost of input		Incremental income		Yield (Kg/ha)		Net Return		Saving in Rs	BC ratio
		T1	T2	T1	T2	T1	T2	T1	T2	T1	T2	T1	T2	T1	T2	T1	T2	T1	T2	T1	T2		
Angul	Assessment of hand operated paddy winnower for drudgery reduction	86.6 kg/hr	231.4 kg/hr	16.75kj/ min/kg	2.97kj/ min/kg	116	127	0	82	0	167	0	0	18550	11020	40550	40550	0	0	22000	29530	7530	T1= 1.51 T2= 1.65
Angul	Assessment of Low Cost Technology of Drying of Oyster Mushroom		0	0	0	0	0	0	0	0	0	51gm/1kg fresh mushroom	T_2 = 64gm/ 1kg T_3 = 70gm/ 1kg	100	T2=78 T3=70	150	T2=160 T3=170	0	0	50	T2=82 T3=90	T2=32 T3=40	T1= 1.5 T2= 2.05 T3= 2.57

Feedback from KVK to Research System

Name of KVK	Feedback
Angul	Cultivation of fodder maize and stylo(1:1) intercropping produced 48% higher GFY and net return with availability of fodder through the year.
Angul	Pre-emergence application of Bensulfuron methyl(0.6%)+ Pretilachlor(6%) @ 660g/ha at 3-7 DAT effectively controls the most of the weeds during early stages of transplanted paddy with weed control efficiency 73.8 % at 60 DAT had higher B:C ratio in comparison to the farmers practices of hand weeding and post-emergence application of Bispyribac sodium
Angul	Pre-emergence application of Atrazine @ 1.0 kg/ha at 0-3 DAS followed by one mechanical weeding by wheel finger weeder at 20-25 DAS effectively controls the most of the weeds during early stages of kharif maize with weed control efficiency 78.5% and higher B:C ratio in comparison to the farmers practices of hand weeding
Angul	Application of 75% STDF+ Azospirillum, Azotobacter & PSB @ 4 kg each incubated with 300 kg FYM/ha + Sulphur @ 30kg/ha in sesamum increases the grain yield by 45 % & 18 % over farmers practices and soil test based recommended fertiliser application respectively. Thus can be adopted in the mid central table land zone of Odisha for sustainability and profit maximization.
Angul	Seed treatment with Trichoderma viridae @ 4gm/kg of seed & two spraying of Tricyclazole 75%wp @ 300gm/ha effectively controls blast in paddy.
Angul	Basal application of neem cake @2.5g/ha,mb Removal of affected shoot, use of pheromone trap @ 20 traps /ha, 6 times release of egg parasitoid T.chillonis @ 50,000/ha effective in controlling brinjal fruit and shoot borer.
Angul	Basal application of neem cake @ 100kg/ac, seedling root dip in imidacloprid solution & spraying of Spinosad 45EC @ 50ml/ac effectively controls leaf curl in chilli.
Angul	Use of pheromone trap @20traps/ha, spraying of Bt @ 1kg/ha & spraying of neem based pesticide @ 2 lt/ha effective in controlling spodoptera in cauliflower.
Angul	Peanut butter is rich in proteins and hence is a useful part of any diet, especially for vegetarians in rural areas
Angul	Infestation 20% in traditional practice and 5% in trial. Quality of grain is also better in trial than traditional practice
Angul	82% reduction in drudgery with increase in efficiency of167% than traditional practice
Angul	Preserved mushroom treated with chemicals is well accepted and high self life than only sun drying

3. Achievements of Frontline Demonstrations

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

List of technologies demonstrated and popularized during previous years and recommended for large scale adoption in the district

KVK Name	Crop/ Enterprise	Thematic Area	Technology demonstrated	Details of popularization methods suggested to the Extension system	Horizontal spread of technology		
					No. of villages	No. of farmers	Area in ha
Angul	Rice	Varietal Evaluation	Demonstration of HYV upland paddy(Sahabhagi dhan) with improved agronomic practices	Large scale demonstrations, Campaign for popularization of production technology, Use of mass media	90	140	48
Angul	Rice	INM	Sowing of Dhanicha seed @15 kg/ha at 3 DAS of rice and application of 2,4-D Ethyl Easter @ 1.0 kg/ha. at 30 DAS in direct seeded rice.	Large scale demonstrations, Campaign for popularization of production technology, Use of mass media	30	65	10
Angul	Rice, Cattle, Vermi compost, Azolla, Mushroom, Apiary	IFS	Crop based integrated farming system with inclusion of vermicompost, Azolla, Mushroom, Apiary	Large scale demonstrations, Campaign for popularization of production technology, Use of mass media	5	10	6
Angul	Groundnut	IWM	Post-emergence application of Quizalofop-ethyl @0.05 kg a.i/ha at 15 DAS and one hand weeding at 25 DAS	Large scale demonstrations, Campaign for popularization of production technology, Use of mass media	25	80	12
Angul	Groundnut	ICM	Improved variety(ICGV 91114),RDF, Seed treatment,Plant protection measures	Large scale demonstration in convergence mode and massive seed treatment campaigns	05	55	20
Angul	Post hole digger	Farm Mechanization	Digging of pits by tractor drawn post-hole digger	Large scale demonstrations, Campaign for popularization of production technology, Use of mass media	5	25	25
Angul	Power weeder	Farm Mechanization	Weeding by power weeder	Large scale demonstrations, Campaign for popularization of production technology, Use of mass media	6	10	4

KVK Name	Crop/ Enterprise	Thematic Area	Technology demonstrated	Details of popularization methods suggested to the Extension system	Horizontal spread of technology		
					No. of villages	No. of farmers	Area in ha
Angul	Rotavator	Farm Mechanization	Secondary tillage by tractor drawn rotavator	Large scale demonstrations, Campaign for popularization of production technology, Use of mass media	13	62	30
Angul	Power sprayer	Farm Mechanization	Spraying by power sprayer	Large scale demonstrations, Campaign for popularization of production technology, Use of mass media	6	32	12
Angul	Cow	Nutritional security	Multiplication of Azolla (Variety. *Azolla caroliniana)*in low cost tank /pit of size 2mX1.5mX20cm and feeding 1-1.5kg Azolla per cow per day	Large scale demonstrations, Campaign for popularization of production technology, Use of mass media	08	112	-
Angul	Mushroom	Mushroom production	Cultivation of *Hypsizygous ulmarius* following bagging method	Large scale demonstrations, Campaign for popularization of production technology, Use of mass media	25	305	-

Note-

*** Thematic area should be spelled correct and follow standard pattern i.e. Integrated Nutrient Management in place of INM or Inte. Nutrient Mngt. Etc.**

***Crop name should be spelled correct and standard English name should be i.e Chick pea in place of gram, Paddy in place of Rice, brinjal in place of egg plant etc.**

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3.2 Details of FLDs implemented

KVK Name	year	Season	Thematic area	Technology demonstrated	Name of Crop/ Enterprise	Name of Variety/ Technology/ Entreprizes	Crop-Area (ha) / Entrep - No.	Results (q/ha)		% change	No. of farmers				
								FP (T_1)	RP (T_2)		SC	ST	Others	General	Total
Angul	2015	Kharif	Varietal Evaluation	Demonstration of HYV upland paddy (Satyabhama)	Rice	Satyabhama	1.0	28.6	39.5	38.1	0	0	5	0	5
Angul	2015	Kharif	Integrated Nutrient Management	Sowing of Dhanicha seed @15 kg/ha at 3 DAS of rice and application of 2,4-D Ethyl Easter @ 1.0 kg/ha. at 30 DAS in direct seeded rice.	Rice	Sowing of Dhaincha seed @15 kg/ha at 3 DAS after paddy sowing and application of 2,4-D EE @1.0 kg/ha at 30 DAS for knocking down of Dhaincha	1.0	24.7	28.6	15.8	0	0	5	0	5
Angul	2015-16	Rabi	Varietal Evaluation	Demonstration of HYV Toria (Sushree)	Toria	Sushree	1.0	8.2	11.8	45	2	0	3	0	5
Angul	2015-16	Rabi	Integrated Nutrient Management	Demonstration of Molybdenom inoculation for nitrogen fixation in greengram	Greengram	Seed inoculation with 20g Rhizobium culture and 100 ml Sodium molybdate per 1 kg of seed	1.0	8.42	12.4	47	0	0	5	0	5
Angul	’2015	Kharif	IPM	Use of Pheromone Trap @ 20 Traps /ha 6time release of egg parasitoid and spraying of neem based pesticide	Paddy	Pooja	2.0	40.5	48.1	18	1	0	0	5	5
Angul	2015	Kharif	IPM	Use of Pheromone Trap @ 20 Traps /ha and alternate spraying of neem based pesticide and Spinosad 45 EC	Pigeon pea	Asha	2.0	9.3	14.7	58	0	0	0	5	5
Angul	2015-16	Rabi	IPM	Basal application of neem cake @1q/ac , alternate spraying of neem based pesticide and Imidacloprid 17SL	Onion	Agri found light red	0.4	212.1	239.5	12.9	0	0	0	0	5

KVK Name	year	Season	Thematic area	Technology demonstrated	Name of Crop/ Enterprise	Name of Variety/ Technology/ Entreprizes	Crop-Area (ha) / Entrep - No.	Results (q/ha)		% change	No. of farmers				
								FP (T_1)	RP (T_2)		SC	ST	Others	General	Total
Angul	2015-16	Rabi	IDM	Use of Yellow Sticky Trap @50 Trap/ha alternate spraying of neem based pesticide and Thiomethoxam 25WG @125gm/ha	Okra	Arka Anamika	0.4	34.4	46.5	35.17	0	0	0	0	5
Angul	2015-16	Rabi	Varietal evaluation	Demonstration of high yielding var.Utkala Ragini	Chilli	Utkal Ragini	0.4	143.6	248.3	72	0	0	0	0	5
Angul	2015-16	Rabi	Varietal evaluation	Demonstration of improved marigold var.Ceracola	Marigold	Ceracola	0.4	92.6	128.9	39	0	0	0	5	5
Angul	2015	Kharif	Farm Mechanisation	Demonstration of tractor operated rotavator for tillage	Blackgram	PDM-32	2.0	5.5	6.2		0	0	5	0	5
Angul	2015	Kharif	Farm Mechanisation	Demonstration of tractor operated post hole digger for digging of pits.	Banana	Champa	2.0	Continuing			0	0	5	0	5
Angul	2015-16	Rabi	Farm Mechanisation	Demonstration of tractor operated seed cum fertilizer drill for sowing of green gram	Greengram	SML-668	2.0	5.1	5.6	9.8	0	0	5	0	5
Angul	2015-16	Rabi	Farm Mechanisation	Demonstration of tractor operated seed cum fertilizer drill for sowing of mustard	Mustard	M-27	2.0	4.0	4.6	15.0	0	0	5	0	5
Angul	2015-16	Rabi	Oilseed	Demonstration of toria with improved package of practice	Toria	M-27	20	4.3	6.8	58	4	0	55	0	59
Angul	2015-16	Rabi	Oilseed	Demonstration of groundnut with improved package of practice	Groundnut	Kadri-6	44	19.5	23.5	20.5	23	0	0	87	110
Angul	2015-16	Rabi	Oilseed	Demonstration of sesamum with improved package of practice	Sesamum	Amrit	16	4.2	6.5	54.8	5	0	39	1	45

KVK Name	year	Season	Thematic area	Technology demonstrated	Name of Crop/ Enterprise	Name of Variety/ Technology/ Entreprizes	Crop-Area (ha) / Entrep - No.	Results (q/ha)		% change	No. of farmers				
								FP (T_1)	RP (T_2)		SC	ST	Others	General	Total
Angul	2015-16	Rabi	Pulse	Demonstration of greengram with improved package of practice	Greengram	SML-668	40	4.5	7.2	60	2	1	135	0	138
Angul	2015-16	Kharif & Rabi	Integrated farming system	Demonstration of pond based farming system with addition of poultry and papaya in embarkment plantation	Pisciculture, Fruit crop (papaya), Poultry	Fingerlings, chicks, Papaya variety (FS-1) for bund plantation	1	Continuing							1
Angul	2015	Kharif	Integrated crop management	Improved variety ICGV 91114, seed treatment with rhizobium culture@20 gm/kg of seed, Gypsum application @250kg/ha	Groundnut	ICGV-91114	5	13.86	19.76	42.5	3			10	13
Angul	2015	Kharif	ICM	Improved variety Prasad, Seed inoculation, RDF, pp measures	Black gram	Prasad	5	5.38	7.77	44.4				15	15
Angul	2015	Rabi	Livestock production and management	Demonstration of backyard rearing of poultry breed Black Rock	Poultry	Black Rock variety was reared in backyard system with proper vaccination	200 birds	0.4 kg/49 days	1.2 kg /49 days		5	0	5	0	10
Angul	2015	Rabi	Livestock production and management	Demonstration of Guinea grass cultivation for feed management in cattle.	Fodder crop	Continuing	0.4				0	0	0	5	5
Angul	2015	Kharif	Feed management	Demonstration of supplementary feeding, Manures and fertilizers for sufficient natural fish food organisms production	Enterprise	Supplementary feeding, Manures and fertilizers	1ha. / 3no.	18.8	27.4	5.74	0	0	2	1	3
Angul	2015	Kharif	Feed management	Demonstration of both floating and sinking feed in carp polyculture	Enterprise	Floating and sinking feed	1ha. / 2 no.	21.6	29.1	34.72	0	0	2	0	2

KVK Name	year	Season	Thematic area	Technology demonstrated	Name of Crop/ Enterprise	Name of Variety/ Technology/ Entreprizes	Crop-Area (ha) / Entrep - No.	Results (q/ha)		% change	No. of farmers				
								FP (T_1)	RP (T_2)		SC	ST	Others	General	Total
Angul	2015	Rabi	Production management	Demonstration of Ornamental fish rearing in cement tank system	Enterprise	Ornamental fishes (livebearers)	300 sq.ft / 3 no)	0	17600	100	0	0	3	0	3
Angul	2015	Rabi	Disease management	Demonstration of management module for EUS in carps	Enterprise	CIFAX and Lime	1ha. / 5 no.	21.2	26.8	26.41	0	0	4	1	5

3.3 Economic Impact of FLD

KVK Name	Technology demonstrated	Name of Crop/ Enterprise	Parameters			Cost of cultivation (Rs/ha)		Gross Return (Rs/ha)		Average Net Return (Rs/ha)		Benefit-Cost Ratio (Gross Return / Gross Cost)	
			Name and unit of Parameter	FP (T_1)	RP (T_2)	FP (T_1)	RP (T_2)	FP (T_1)	RP (T_2)	FP (T_1)	RP (T_2)	FP (T_1)	RP (T_2)
Angul	Demonstration of HYV upland paddy (Satyabhama)	Rice	Plant height(cm) No of EBT/hill No of filled grains/panicle	85.7 7.5 119.5	105.2 15.8 138.1	30245	31430	44066	60265	13821	28835	1.46	1.92
Angul	Sowing of Dhanicha seed @15 kg/ha at 3 DAS of rice and application of 2,4-D Ethyl Easter @ 1.0 kg/ha. at 30 DAS in direct seeded rice.	Rice	Organic Carbon content(%) Available Nitrogen (Kg/ha) No of EBT/hill	0.58 285.3 11.7	0.71 324.6 15.9	30125	31130	37767	43644	7642	12514	1.25	1.40
Angul	Demonstration of HYV Toria (Sushree)	Toria	No of branches/plant No of siliquae/plant No of seeds/siliquea	3.95 135.6 10.52	4.52 168.2 11.46	20950	21250	26089	37696	5139	16447	1.25	1.77
Angul	Demonstration of Molybdenom inoculation for nitrogen fixation in greengram	Greengram	No of branches/ plant No of pods/plant No of seeds/pod	5.4 15.3 6.4	6.3 26.5 9.2	17850	19250	41406	60313	23556	41036	2.32	3.13

KVK Name	Technology demonstrated	Name of Crop/ Enterprise	Parameters			Cost of cultivation (Rs/ha)		Gross Return (Rs/ha)		Average Net Return (Rs/ha)		Benefit-Cost Ratio (Gross Return / Gross Cost)	
			Name and unit of Parameter	FP (T_1)	RP (T_2)	FP (T_1)	RP (T_2)	FP (T_1)	RP (T_2)	FP (T_1)	RP (T_2)	FP (T_1)	RP (T_2)
Angul	Use of Pheromone Trap @ 20 Traps /ha 6time release of egg parasitoid and spraying of neem based pesticide	Paddy	Dead heart (%) White earhead(%)	7.5 8.0	3.8 2.2	34000	36000	52650	62630	18650	26530	1.55	1.74
Angul	Use of Pheromone Trap @ 20 Traps /ha and alternate spraying of neem based pesticide and Spinosad 45 EC	Pigeon pea	Pod damage (%) Grain damage (%)	32.5 18.2	10.4 6.8	26300	3000	55800	88200	29500	57200	2.12	2.84
Angul	Basal application of neem cake @1q/ac , alternate spraying of neem based pesticide and Imidacloprid 17SL	Onion	Thrips/leaf	22.0	8.66	72800	75400	212100	239500	139300	164100	2.91	3.18
Angul	Use of Yellow Sticky Trap @50 Trap/ha alternate spraying of neem based pesticide and Thiomethoxam 25WG @125gm/ha	Okra	YMV infected plant(%)	15.1	2.4	17500	18750	34400	46500	16900	27750	1.96	2.48
Angul	Demonstration of high yielding var.Utkala Ragini	Chilli	No. of fruits/plant	75	98	21500	25750	57440	97520	35940	71770	2.67	3.78
Angul	Demonstration of improved marigold var.Ceracola	Marigold	No. of flowers/plant	150	180	32000	37000	92600	128900	60600	91900	2.9	3.5
Angul	Demonstration of tractor operated rotavator for tillage	Blackgram	Cost of tillage (Rs/ha)	2500	2000	22000	20000	44000	49600	22000	29600	2.00	2.48
Angul	Demonstration of tractor operated post hole digger for digging of pits.	Banana (not harvested)	Cost of digging (Rs/pit)	15	11.90								
Angul	Demonstration of tractor operated seed cum fertilizer drill for sowing of green gram	Greengram	No. of pods / plant	22	25	22000	22000	40800	44800	18800	22800	1.85	2.04
Angul	Demonstration of tractor operated seed cum fertilizer drill for sowing of mustard	Mustard	No. of siliqua / plant	135	152	15000	17000	24000	27600	9000	10600	1.60	1.62
Angul	Demonstration of toria with improved package of practice	Toria	No. of siliqua / plant	135	188	17500	20000	25800	40800	8300	20800	1.5	2.0
Angul	Demonstration of groundnut with improved package of practice	Groundnut	No. of pods / plant	20	25	40000	45000	78000	94000	38000	49000	1.95	2.09

KVK Name	Technology demonstrated	Name of Crop/ Enterprise	Parameters			Cost of cultivation (Rs/ha)		Gross Return (Rs/ha)		Average Net Return (Rs/ha)		Benefit-Cost Ratio (Gross Return / Gross Cost)	
			Name and unit of Parameter	FP (T_1)	RP (T_2)	FP (T_1)	RP (T_2)	FP (T_1)	RP (T_2)	FP (T_1)	RP (T_2)	FP (T_1)	RP (T_2)
Angul	Demonstration of sesamum with improved package of practice	Sesamum	No. of capsules / plant	18	26	17000	20000	33600	52000	16600	32000	1.98	2.6
Angul	Demonstration of greengram with improved package of practice	Greengram	No. of pods / plant	17	28	20000	25000	36000	57600	16000	32600	1.8	2.3
Angul	Demonstration of pond based farming system with addition of poultry and papaya in embarkment plantation	Pisciculture, Fruit crop(papaya), Poultry	Cont…										
Angul	Improved variety ICGV 91114, seed treatment with rhizobium culture@20 gm/kg of seed, Gypsum application @250kg/ha	Groundnut	Grain yield, No. of pods/plant	13.86 18.0	19.76 26.0	32400	38800	60100	70900	27700	40100	1.85	2.08
Angul	Improved variety Prasad, Seed inoculation, RDF, pp measures	Black gram	Grain yield, No.of pods/plant, No. of seeds/pod, 1000 seed wt.(gm)	5.38 9.07 4 38.3	7.77 18.1 5 40.3	12850	16500	20600	32000	7750	15500	1.60	1.93
Angul	Demonstration of backyard rearing of poultry breed Black Rock	poultry	Body weight gain/7 wks d(kg.)	0.4	1.2	726/20 bird							
Angul	Demonstration of Guinea grass cultivation for feed management in cattle	Fodder	Greenfodder yield/cut										
Angul	Demonstration of supplementary feeding, Manures and fertilizers for sufficient natural fish food organisms production	Enterprise	Weight(gm) Catla Rohu Mrigal Duration(month)	 450 270 250 4	 620 410 400 4	99500	157000	143500	266000	44000	109000	1.44	1.69
Angul	Demonstration of both floating and sinking feed in carp polyculture	Enterprise	Weight(gm) Catla Rohu & Mrigal Grass Carp Common Carp Duration(month)	 400 250 300 320 4	 600 400 450 470 4	98300	155600	182700	342700	84400	187100	1.85	2.20

KVK Name	Technology demonstrated	Name of Crop/ Enterprise	Parameters			Cost of cultivation (Rs/ha)		Gross Return (Rs/ha)		Average Net Return (Rs/ha)		Benefit-Cost Ratio (Gross Return / Gross Cost)	
			Name and unit of Parameter	FP (T_1)	RP (T_2)	FP (T_1)	RP (T_2)	FP (T_1)	RP (T_2)	FP (T_1)	RP (T_2)	FP (T_1)	RP (T_2)
Angul	Demonstration of Ornamental fish rearing in cement tank system	Enterprise	Ornamental fishes (livebearers) Avg. length(mm) Avg. weight(gm)	 25 3	 35 4	-	22200	-	55400	-	33200	-	2.49
Angul	Demonstration of management module for EUS in carps	Enterprise	Disease reduction(%)	75	95	89000	91000	118400	164700	29400	73700	1.33	1.81

3.4 Information about Home Science FLDs

KVK name	Year	Season	Thematic Area	Problem Identified	Technology to be Demonstrated as Solution to the Identified Problem	Crop/ Enterprise (In which crop Enterprise or Farming Activity)	Name of Variety/ Technology/ Entreprizes	Farming Situation	Proposed area (ha)	No. of Beneficiaries
Angul	2015	Kharif	Nutritional Security	Non availability of green fodder and excess cost of commercial feed	Multiplication of Azolla (Variety. *Azolla caroliniana)*in low cost tank /pit of size 2mX1.5mX20cm and feeding 1-1.5kg Azolla per cow per day	Cow	*Azolla caroliniana*	Homestead	10 cows	10
Angul	2015	Kharif	Income Generation	Low meat and egg production in Banaraja birds and high mortality due to disease incidence	Dual purpose high yielding backyard poultry rearing with recommended practices	Poultry	*Rhode Island Red*	Backyard	200 birds	10
Angul	2015-16	Rabi	Mushroom cultivation	Low yield of *P. sajarcaju* in extreme cold climatic condition	Cultivation of oyster mushroom var. Hypsizygous ulmarius	Mushroom	*Hypsizygous ulmarius*	Homestead	400 Bags	10

3.5 Economic Performance Home Science FLDs:

KVK name	Technology to be Demonstrated	Performance Indicator / Parameter																				
		Output m2/h		Est. Energy Expenditure kj/min.		WHR beat/ min		% reduction in drudgery		% increase in efficiency		Production per unit		Cost of input		Incremental income		Yield (Kg/ ha)		Net Return		Saving in Rs	BC ratio
		T 1	T 2	T1	T2	T1	T2	T1	T2	T1	T2	T1	T2	T1	T2	T1	T2	T1	T2	T1	T2		
Angul	Multiplication of Azolla for milch cow	0	0	0	0	0	0	0	0	0	0	297.3 lt/ cow/ month	332.1 lt/ cow/ month	3378	3002	8027	9927	0	0	4649	6925	2276	T1= 2.37 T2= 3.30
Angul	Dual purpose high yielding backyard poultry.Var.RIR	0	0	0	0	0	0	0	0	0	0	3.0kg/ bird 148 eggs/ bird	2.2kg/ bird 192 eggs/ bird	270/ bird	255/ bird	1040/ bird	1180/ bird	0	0	770/ bird	925/ bird	155/ bird	T1= 3.85 T2= 4.62
Angul	Cultivation of oyster mushroom var. *Hypsizygous ulmarius*	0	0	0	0	0	0	0	0	0	0	1.8kg/ bag	2.36kg / bag	Rs.41/ bag	Rs.41/ bag	Rs.90/ bag	Rs.118 / bag	0	0	Rs.53/ bag	Rs.76.50 / bag	Rs.23.50	T1= 2.28 T2= 2.87

3.6 Training and Extension activities under FLD

KVK Name	Crop	Activity	No. of activities organized	Number of participants	Remarks
Angul	Rice	Field days			
		Farmers Training	1	25	
		Media coverage			
		Training for extension functionaries			
Angul	Rice	Field days			
		Farmers Training	1	25	
		Media coverage			
		Training for extension functionaries			
Angul	Toria	Field days			
		Farmers Training	1	25	
		Media coverage			
		Training for extension functionaries			
Angul	Greengram	Field days			
		Farmers Training	1	25	
		Media coverage			
		Training for extension functionaries			
Angul	Paddy	Field days			
		Farmers Training	1	25	

KVK Name	Crop	Activity	No. of activities organized	Number of participants	Remarks
		Media coverage	1	Mass	
		Training for extension functionaries			
Angul	Pegionpea	Field days			
		Farmers Training	1	25	
		Media coverage			
		Training for extension functionaries			
Angul		Field days			
		Farmers Training			
		Media coverage			
		Training for extension functionaries			
Angul	Toria	Field days	1	40	
		Farmers Training			
		Media coverage			
		Training for extension functionaries			
Angul	Groundnut	Field days	1	60	
		Farmers Training			
		Media coverage	1	Mass	
		Training for extension functionaries			
Angul	Sesamum	Field days	1	32	
		Farmers Training			
		Media coverage	1	Mass	
		Training for extension functionaries			
Angul	Greengram	Field days	1	80	
		Farmers Training			
		Media coverage			
		Training for extension functionaries			
Angul	Groundnut	Field days	1	35	Horizontal expansion is assured
		Farmers Training	1	25	
		Media coverage			
		Training for extension functionaries			
Angul	Blackgram	Field days	1	35	Horizontal expansion is assured
		Farmers Training	1	25	
		Media coverage			
		Training for extension functionaries			
Angul	Cow	Field days	0	0	Horizontal expansion is assured
		Farmers Training	1	25	
		Media coverage	1	Mass	
		Training for extension functionaries	0	0	
Angul	Poultry(RIR)	Field days	0	0	Horizontal

KVK Name	Crop	Activity	No. of activities organized	Number of participants	Remarks
		Farmers Training	1	25	expansion is assured
		Media coverage	1	Mass	
		Training for extension functionaries	0	0	
Angul	Mushroom	Field days	1	35	Horizontal expansion is assured due to high biological efficiency
		Farmers Training	1	25	
		Media coverage	1	Mass	
		Training for extension functionaries	0	0	
Angul	Poultry(Black Rock)	Field days			Horizontal expansion is assured
		Farmers Training	1	25	
		Media coverage			
		Training for extension functionaries			
Angul		Field days			
		Farmers Training			
		Media coverage			
		Training for extension functionaries			

3.7 Details of FLD on crop hybrids

S. No.	Name of the KVK	Name of the Crop	Name of the Hybrids	Source of Hybrid (Institute/ Firm)	No. of farmers	Area in ha.

4. Feedback System

4.1. Feedback of the Farmers to KVK

Name of KVK	Feedback			
	Technology appropriations	Methodology used	Benefits of OFT/FLD	Future Adoption
Angul	Cultivation of HYV rice (Satyabhana)	Demonstration of HYV upland rice (Satyabhama)	Farmers appreciated the HYV paddy Satyabhama as it produced 38 % higher yield in comparison to existing age old variety Khandagiri and higher tiller with drought tolerant capacity and non lodging.	Farmers were convinced with for its adoption and decided to cultivate in large scale in next Kharif' 2016. They are also in regular contact with KVK for the source and availability of HYV Rice (Satyabhama)

Name of KVK	Feedback			
	Technology appropriations	**Methodology used**	**Benefits of OFT/FLD**	**Future Adoption**
Angul	Brown mannuring in rice	Sowing of Dhanicha seed @15 kg/ha at 3 DAS of rice and application of 2,4-D Ethyl Easter @ 1.0 kg/ha. at 30 DAS in direct seeded rice.	Farmers appreciated the Brown manuring in direct sown rice as it produced 4.0 q/ha higher yield with increase in organic carbon content 0.13% and available Nitrogen 39.2 kg/ha for the next crop.	Farmers were convinced with for its adoption of this practice and decided to cultivate the direct sown paddy through brown manuring practice in large scale in next Kharif' 2016.
Angul	Cultivation of HYV Toria(Sushree)	Demonstration of HYV Toria (Sushree)	The high yielding variety of Toria (Sushree) is non shattering, suitable to late sown condition and produces 45 % over traditional local variety(Rai shoriso) . Thus, can be profitably substituted in the existing farming situation in rice-toria sequence for higher productivity and income.	Farmers were convinced with for its adoption and decided to cultivate in large scale in next Kharif' 2016. They are also in regular contact with KVK for the source and availability of HYV Toria (Sushree)
Angul	INM in greengram	Seed inoculation with 20g Rhizobium culture and 100 ml Sodium molybdate per 1 kg of seed	Farmers appreciated the technology as it increases the nodules upto 70 % for efficient nitrogen fixation and get 47% higher grain yield in comparison to the traditional practice of nutrient management.	Farmers were convinced with the technology as they get higher yield with additional net return and decided to use the nutrient management practice in large scale in next Kharif' 2016.
Angul	IPM practice for management of yellow stem borer in paddy.	Use of Pheromone Trap @ 20 Traps /ha 6time release of egg parasitoid and spraying of neem based pesticide	There are fewer incidences of %dead heart and % white earhead so ultimately farmers get higher yield due to recommended practice.	Farmers adopted need based use rather than indiscriminate use of pesticide
Angul	IPM practice for management of pod borer in pigeon pea	Use of Pheromone Trap @ 20 Traps /ha and alternate spraying of neem based pesticide and Spinosad 45 EC	Less % seed and pod damage in recommended practice results in higher yield.	Farmers adopted the most efficient recommended insecticide application.
Angul	IPM practice for management of yellow stem borer in paddy.	Use of Pheromone Trap @ 20 Traps /ha 6time release of egg parasitoid and spraying of neem based pesticide	There is less incidence of %dead heart and % white earhead so ultimately farmers get higher yield due to recommended practice.	Farmers adopted need based use rather than indiscriminate use of pesticide

Name of KVK	Feedback			
	Technology appropriations	**Methodology used**	**Benefits of OFT/FLD**	**Future Adoption**
Angul	IPM practice for management of pod borer in pigeon pea	Use of Pheromone Trap @ 20 Traps /ha and alternate spraying of neem based pesticide and Spinosad 45 EC	Less % seed and pod damage in recommended practice results in higher yield.	Farmers adopted the most efficient recommended insecticide application.
Angul	IPM practice for management of thrips in onion	Basal application of neem cake @1q/ac , alternate spraying of neem based pesticide and Imidacloprid 17SL	Reduction in thrips population leads to increase in yield.	Farmers adopted need based use rather than indiscriminate use of pesticide
Angul	IDM practice for management of YMV in okra	Use of Yellow Sticky Trap @50 Trap/ha alternate spraying of neem based pesticide and Thiomethoxam 2500wg @125gm/ha	Control of whitefly population leads to reduction of %YMV results in higher yield.	Farmers adopted the most efficient recommended insecticide application.
Angul	Cultivation techniques of Azolla and feeding management of cows	Method demonstration, group Discussion, Training	Farmer can easily get fodder throughout the year.	Farmers of nearby 7 villages are interested to grow Azolla.
Angul	Blue Oyster cultivation techniques	Method demonstration, group Discussion, Training and field day	Farmers can get high yield	Commercial mushroom farmers are interested to cultivate blue oyster for its self life.
Angul	Rearing of Backyard poultry provides ready cash to farm women and nutritional security to the family	Personal interview & interaction during field visits	There is an average net income of Rs. 925/- to the farm women per bird	Other SHGs of the village have plans to rear improved breeds
Angul	Use of supplimentary feeding, Manures and fertilizers for sufficient plankton production	Method demonstration, group Discussion, Training	Farmers can able to get high yield & income through plankton production	Farmers are motivated to adopt this type of practice.
Angul	Application of both floating and sinking feed in carp polyculture to minimize the size difference between species	Method demonstration, group Discussion, Training & field day	Farmers can get more profit by using varieties of feed for different sizes of fish species in a culture system	Farmers of nearby 5 villages are interested to apply feed in composite pisciculture

Name of KVK	Feedback			
	Technology appropriations	**Methodology used**	**Benefits of OFT/FLD**	**Future Adoption**
Angul	Culture and rearing of Ornamental fishes in cement tank system to generate more income from a limited area	Personal interview & discussion during field visits	Farmers can get high yield by adopting the ornamental fish rearing practice within a short time period and with less expenditure	Women SHG Groups are interested to rear ornamental fishes though it is one of the best income generating enterprise within a less time period.
Angul	management of EUS in carps through application of CIFAX	Method demonstration, Personal discussion during field visits	More profit can be get by reducing the occurrence of disease and mortality of fishes	Farmers are motivated to adopt this disease management practice.

4.2. Feedback from KVK to Research System.

Name of KVK	Feedback basic of OFT on Technology Tested
Angul	Cultivation of fodder maize and stylo(1:1) intercropping produced 48% higher GFY, and net return with availability of fodder through the year.
Angul	Pre-emergence application of Bensulfuron methyl(0.6%)+ Pretilachlor(6%) @ 660g/ha at 3-7 DAT effectively controls the most of the weeds during early stages of transplanted paddy with weed control efficiency 73.8 % at 60 DAT had higher B:C ratio in comparison to the farmers practices of hand weeding and post-emergence application of Bispyribac sodium .
Angul	Pre-emergence application of Atrazine @ 1.0 kg/ha at 0-3 DAS followed by one mechanical weeding by wheel finger weeder at 20-25 DAS effectively controls the most of the weeds during early stages of kharif maize with weed control efficiency 78.5% with higher B:C ratio in comparison to the farmers practices of hand weeding .
Angul	Application of 75% STDF+ Azospirillum, Azotobacter & PSB @ 4 kg each incubated with 300 kg FYM/ha + Sulphur @ 30kg/ha in rabi sesamum increases the grain yield by 45 % & 18 % over farmers practices and soil test based recommended fertiliser application respectively. Thus can be adopted in the mid central table land zone of Odisha for sustainability and profit maximization.
Angul	Seed treatment with Trichoderma viridae @ 4gm/kg of seed & two spraying of Tricyclazole 75%wp @ 300gm/ha
Angul	Basal application of neem cake @2.5g/ha,Removal of affected shoot, use of pheromone trap @ 20 traps /ha, 6 times release of egg parasitoid T.chillonis @ 50,000/ha ,
Angul	Basal application of neem cake @ 100kg/ac, seedling root dip in imidacloprid solution & spraying of Spinosad 45EC @ 50ml/ac
Angul	Use of pheromone trap @20traps/ha, spraying of Bt @ 1kg/ha & spraying of neem based pesticide @ 2 lt/ha
Angul	Use of TNAU trap without any use of chemical can manage stored grain and environment friendly.
Angul	Time, money and labour can be saved through CRRI made paddy winnower for cleaning of paddy grains without waiting for air flow as required in traditional practice.
Angul	Good nutritive value with better keeping quality to eradicate malnutrition in rural areas.
Angul	Farm women and mushroom growers can preserve and get additional income by following drying of mushroom using chemicals.
Angul	Unavailability of other duck breed to farmers

Name of KVK	Feedback basic of OFT on Technology Tested
Angul	Stocking of Stunted yearlings is a prerequisite for enhancement of fish production in place of fingerlings.
Angul	25% more growth rate can be achieved by culturing Jayanti rohu as compared to normal rohu though it is a disease resistant species and having better feed conversion efficiency
Angul	Use of probiotics should be encouraged for better growth of carps in composite pisciculture
Angul	Farmers can get profit by adopting Monoculture of freshwater prawn

4.3. Documentation of the need assessment conducted by the KVK for the training programme

Name of KVK	Category of the training	Methods of need assessment	Date and place	No. of participants involved
Angul	Farmers and Farm women	PRA tools	Kantiapasi (April), Sandhapal, Thelkonali, Bouligarh, Ragudiapada	58
Angul	Rural Youth	Group discussion, Meeting	Ragudiapada, Kanteipasi, Sandhapal (December, February)	28
Angul	Farmers and Farm women	Feedback(Ex-trainee meet)	O/O DAO, January, Sandhapal	38
Angul	Inservice	Stakeholders Meet	All line department officials	85
Angul	Farmers and Farm women	Interaction with Line department	O/O DAO,(Oct.), Dhobapal (Talcher)	18
Angul	Rural Youth	PRA Tools	Kantiapasi, Kumunda, Bauligada, (April.)	180
Angul	Inservice	Group discussion	Sandhapal (Angul), Kumunda (Nov.)	55
Angul	Farmers and Farm women	Discussion in Review meeting	O/O Horticulturist(Feb.),DAO office	15
Angul	Rural Youth	PRA Tools	Federation monthly meeting	150
Angul	Inservice	PRA and group meeting	Horticulture department (January)	10
Angul	Rural Youth	Feedback	O/O DAO(Oct.)	15
Angul	Inservice	PRA Group discussion	ON Campus(September)	10
Angul	Inservice	Stakeholders meet	ON Campus(March)	10

Abbreviation Used

FW	(A) Farmers & Farm Women
RY	(B) Rural Youths
IS	(C) Extension Personnel
ONC	On Campus Training Programme
OFC	Off Campus Training Programme
M	Male
F	Female
T	Total
Thematic Areas for Training	
CRP	Crop Production
HOV	Horticulture – Vegetable Crops
HOF	Horticulture-Fruits
HOO	Horticulture- Ornamental Plants
HOP	Horticulture- Plantation crops
HOT	Horticulture- Tuber crops
HOS	Horticulture- Spices
HOM	Horticulture- Medicinal and Aromatic Plants
SFM	Soil Health and Fertility Management
LPM	Livestock Production and Management
WOE	Home Science/Women empowerment
AEG	Agril. Engineering
PLP	Plant Protection
FIS	Fisheries
PIS	Production of Inputs at site
CBD	Capacity Building and Group Dynamics
AGF	Agro-forestry
OTH	Others
RYH	Rural Youth
EXP	Extension Personnel

5. TRAINING PROGRAMMES

1. Training programmes should be strictly covered under above mentioned thematic areas only,

2. For category, training type and thematic area, mention code/abbreviations only

Table 5.1. Details of Training programmes conducted by the KVKs

Name of KVK	Cate-gory	Training Type	Thematic area	Training Title	No. of Courses	Duration (Days)	Participants							
							Gen		SC		ST		Others	
							M	F	M	F	M	F	M	F
1	2	3	4	5	7	8	9	10	11	12	13	14	15	16
Angul	FW	ONC	CRP	Crop diversification and crop intensification under rainfed ecosystem in rice based cropping system	1	2	5	0	3	0	0	0	17	0
Angul	FW	ONC	CRP	Crop contingent measures for different types of drought situation	1	2	4	0	2	0	0	1	14	4
Angul	FW	ONC	CRP	Technology for successful production of direct seeded rice	1	2	25	0	0	0	0	0	0	0
Angul	FW	ONC	CRP	Water management in major oilseed crops	1	2	20	5	0	0	0	0	0	0
Angul	FW	OFC	CRP	Improved Agronomic practices in rainfed upland paddy	1	1	0	0	0	0	0	0	18	7
Angul	FW	OFC	CRP	Integrated nutrient management in direct sown paddy	1	1	0	0	0	0	0	0	25	0
Angul	FW	OFC	CRP	Weed management in transplanted rice in rainfed medium land ecosystem	1	1	0	0	0	0	0	0	20	5
Angul	FW	OFC	CRP	Weed management in kharif maize	1	1	0	0	0	0	0	0	18	7
Angul	FW	OFC	CRP	Maize and stylo intercropping system for sustained productivity and forage supply	1	1	0	0	0	0	0	0	19	6
Angul	FW	OFC	CRP	Improved Agronomic practices in irrigated toria	1	1	22	3	0	0	0	0	0	0
Angul	FW	OFC	CRP	Integrated nutrient management in greengram	1	1	0	0	0	0	0	0	20	5
Angul	FW	OFC	CRP	Integrated nutrient management in sesamum	1	1	0	0	0	0	0	0	19	6
Angul	RY	ONC	CRP	Fodder utilization and conservation for Silage and Hey making	1	2	0	0	0	0	0	0	15	0
Angul	RY	ONC	CRP	Bio fertilisers and their use in agriculture	1	2	3	0	0	0	0	0	12	0
Angul	IS	ONC	CRP	Resource Conservation Technologies for sustainable crop production in rice based cropping system	1	2	8	2	0	0	0	0	0	0
Angul	IS	ONC	CRP	Characterization and Sustainable Management of Acid soils for increasing crop production	1	2	8	2	0	0	0	0	0	0
Angul	FW	ONC	PLP	Integrated pest management in kharif Paddy	1	2	25	0	0	0	0	0	0	0
Angul	FW	ONC	PLP	Management of insect pest of kharif vegetables	1	2	24	1	0	0	0	0	0	0
Angul	FW	ONC	PLP	Management of insect pest of cole crops	1	2	24	1	0	0	0	0	0	0
Angul	FW	ONC	PLP	Integrated pest and disease management in onion	1	2	25	0	0	0	0	0	0	0
Angul	FW	OFC	PLP	Integrated disease management of Kharif paddy	1	1	20	4	0	1	0	0	0	0
Angul	FW	OFC	PLP	Management of pod borers in pigeon pea	1	1	11	14	0	0	0	0	0	0
Angul	FW	OFC	PLP	Wilt management in solanaceous vegetables	1	1	22	3	0	0	0	0	0	0
Angul	FW	OFC	PLP	Scientific storage of food grain	1	1	16	9	0	0	0	0	0	0

Name of KVK	Cate-gory	Training Type	Thematic area	Training Title	No. of Courses	Duration (Days)	Participants							
							Gen		SC		ST		Others	
							M	F	M	F	M	F	M	F
1	2	3	4	5	7	8	9	10	11	12	13	14	15	16
Angul	FW	ONC	WOE	Semi intensive management practices for backyard poultry	1	2	0	0	0	3	0	22	0	0
Angul	FW	ONC	WOE	Location specific women friendly drudgery reducing tools	1	2	0	25	0	0	0	0	0	0
Angul	FW	ONC	WOE	Kitchen garden for nutritional security of farm family	1	2	0	25	0	0	0	0	0	0
Angul	FW	OFC	WOE	Use of hand operated paddy winnower for drudgery reduction	1	1	0	25	0	0	0	0	0	0
Angul	FW	OFC	WOE	Use of TNAU insect trap in controlling store grain pests in pulses	1	1	0	25	0	0	0	0	0	0
Angul	FW	OFC	WOE	Tomato Sauce preparation for income generation	1	1	0	21	0	0	0	4	0	0
Angul	FW	OFC	WOE	Use of Okra Plucker for drudgery reduction	1	1	0	25	0	0	0	0	0	0
Angul	FW	OFC	WOE	Azolla cultivation for milch cow	1	1	0	25	0	0	0	0	0	0
Angul	RY	ONC	WOE	Value addition in Mushroom	1	2	0	15	0	0	0	0	0	0
Angul	RY	ONC	WOE	Paddy straw mushroom cultivation	1	2	15	0	10	0	5	0	0	0
Angul	RY	ONC	WOE	Oyster mushroom cultivation	1	2	15	0	10	0	0	0	5	0
Angul	RY	ONC	WOE	Value addition in Ground nut	1	2	25	0	05	0	05	0	05	0
Angul	FW	OFC	LPM	Diagnosis and prevention of production diseases in dairy cattle	1	1	25	0	0	0	0	0	25	0
Angul	FW	OFC	LPM	Care and management of pregnant cows	1	1	17	8	0	0	0	0	0	0
Angul	FW	OFC	LPM	Backyard poultry farming	1	1	9	0	0	0	14	2	0	0
Angul	FW	OFC	LPM	Backyard duckery as a suitable income generating programme	1	1	25	0	25	0	0	0	0	0
Angul	FW	OFC	LPM	Important diseases of goats and its preventive measures	1	1	20	5	0	0	0	0	0	0
Angul	FW	ONC	CBD	Empowering Communities through Market led Development: Community Agro-enterprise	1	2	13	12	0	0	0	0	0	0
Angul	FW	OFC	CBD	Use of traditional knowledge base for attaining food security	1	1	17	8	0	0	0	0	0	0
Angul	RY	ONC	CBD	Planning and management of sustainable agriculture livelihood	1	2	15	0	0	0	0	0	0	0
Angul	RY	ONC	CBD	Contract Farming in India-Opportunities and Challenges	1	2	15	0	0	0	0	0	0	0
Angul	RY	ONC	CBD	Linking pro-poor farmers to market	1	2	15	0	0	0	0	0	0	0
Angul	RY	ONC	CBD	Entrepreneurship development-Theory & Practice	1	2	15	0	0	0	0	0	0	0
Angul	IS	ONC	CBD	Participatory Impact Assessment (PIMA) of technological interventions	1	2	10	0	0	0	0	0	0	0
Angul	IS	ONC	CBD	Rural ICT penetration, integration and exploration for rural development	1	2	10	0	0	0	0	0	0	0
Angul	FW	OFC	AEG	Value addition of greengram	1	1	0	0	1	0	0	0	21	0
Angul	IS	ONC	AEG	Micro-irrigation system for horticultural crops	1	1	0	0	0	0	1	0	9	0
Angul	FW	OFC	AGF	Agroforestry management in teak plantation	1	1	0	0	0	0	0	0	25	0
Angul	FW	OFC	AGF	Management of horti-silvi agro-forestry model	1	1	0	0	5	0	0	0	20	0
Angul	FW	OFC	AGF	Propagation techniques of bamboos	1	1	0	0	0	0	0	0	25	0
Angul	FW	OFC	AGF	Plantation of forest trees in industry and their management	1	1	0	0	6	0	0	0	19	0

Name of KVK	Cate-gory	Training Type	Thematic area	Training Title	No. of Courses	Duration (Days)	Participants							
							Gen		SC		ST		Others	
							M	F	M	F	M	F	M	F
1	2	3	4	5	7	8	9	10	11	12	13	14	15	16
Angul	FW	OFC	AGF	Plantation of tree borne oilseeds in homesteads	1	1	0	0	0	0	0	0	25	0
Angul	FW	OFC	FIS	Preparation methods of Fish feeds and its use	1	1	17	3	3	0	2	0	0	0
Angul	RY	ONC	FIS	Basics in culture of Jayanti rohu with IMC	1	2	4	1	5	0	4	1	0	0
Angul	FW	OFC	FIS	Maintenance of stocking density in composite Pisciculture	1	1	16	2	5	0	0	0	2	0
Angul	FW	OFC	FIS	Ornamental Fish Farming for Entrepreneurship development	1	1	20	0	2	0	3	0	0	0
Angul	RY	ONC	FIS	Breeding, seed production and culture of Fresh Water Prawn	1	2	0	0	0	0	0	0	14	1
Angul	FW	OFC	FIS	Fish Disease diagnosis and management	1	1	0	1	0	0	0	0	6	18
Angul	FW	ONC	FIS	Desi Magur culture	1	2	0	0	0	0	0	0	18	7

Table 5.2. Details of Vocational training programmes for Rural Youth conducted by the KVKs

Name of KVK	Training title	Crop / Enterprise	Identified Thrust Area	Duration of training (days)	Number of Beneficiaries							
					Gen		SC		ST		Others	
					M	F	M	F	M	F	M	F
Angul	Seed production & certification in sesamum	Sesamum	Seed production	6	10	0	0	0	0	0	0	0
Angul	Motor winding	Enterprise	Self employment	10	0	0	0	0	0	0	10	0
Angul	Repair of diesel pumpsets	Enterprise	Self employment	10	0	0	0	0	0	0	10	0
Angul	Spawn production technology of mushroom	Enterprise	Skill development avenue Self employment	5	5	5	0	0	0	0	0	0

Table 5.3. Details of training programme conducted for livelihood security in rural areas by the KVKs

Name of KVK	Training title	Self employed after training			Number of persons employed else where
		Type of units	Number of units	Number of persons employed	
Angul	Mushroom cultivation throughout the year	Commercial	112	346	-
Angul	Backyard poultry	Commercial	32	45	-

Table 5.4. Sponsored Training Programmes

Name of KVK	Title	Thematic area (as given in abbreviation table)	Sub-theme (as per column no 5 of Table T1)	Client (FW/ RY/ IS)	Dura-tion (days)	No. of courses	No. of Participants								Sponsoring Agency	Fund received for training (Rs.)
							Gen		Others		SC		ST			
							M	F	M	F	M	F	M	F		
Angul	Fodder production and livestock feeding management			RY	30	90	3	0	17	3	3	0	4	0	OSWDM	439500

Table 5.5 Training Programmes for Panchayatiraj Institutions Office-bearers & members

Name of KVK	Title	Thematic area (as given in abbreviation table)	Sub-theme (as per column no 5 of Table T1)	Client (FW/ RY/ IS)	Dura-tion (days)	No. of courses	No. of Participants								Sponsoring Agency	Fund received for training (Rs.)
							Gen		Others		SC		ST			
							M	F	M	F	M	F	M	F		

Table 5.6 Evaluation/Follow up & Impact of the training programmes conducted by the KVK (all types of trainings)

Name of KVK	Title of the training	No. of trainees	Change in knowledge (Score)		Change in Production (q/ha)		Change in Income (Rs)		Impact on 1. Area expanded (ha) 2. No. of farmers adopted (no.) 3. % change in knowledge, production & Income
			Before	After	Before	After	Before	After	
Angul	Weed management in kharif maize	25	23	54	24	32	24000	32000	Area expanded (ha):-26 No. of farmers adopted (no.): 15 % change in knowledge: 129.1 % change in production- 25 % change in Income 25
Angul	Integrated nutrient management in direct sown paddy	25	35	68			20980	30440	Area expanded (ha):-23 No. of farmers adopted (no.): 18 % change in knowledge:94.2 % change in production % change in Income
Angul	Integrated nutrient management in greengram	25	31.2	65.5			41406	60313	Area expanded (ha):-28 No. of farmers adopted (no.): 24 % change in knowledge:109.9 % change in production % change in Income
Angul	Integrated nutrient management in sesamum	25	23.8	45.6			8000	15852	Area expanded (ha):- 32 No. of farmers adopted (no.): 18 % change in knowledge:29.1 % change in production % change in Income
Angul	Wilt management in solanaceous vegetables	25	31	58	206	296	103000	147000	Area expanded (ha):-38 No. of farmers adopted (no.): 14 % change in knowledge:87.09 % change in production:43.69 % change in Income:42.71
Angul	Management of insect pest of cole crops	25	39	64	204	298	61200	89400	Area expanded (ha):-79 No. of farmers adopted (no.): 19 % change in knowledge:64.10 % change in production:46.08 % change in Income:46.07

Name of KVK	Title of the training	No. of trainees	Change in knowledge (Score)		Change in Production (q/ha)		Change in Income (Rs)		Impact on 1. Area expanded (ha) 2. No. of farmers adopted (no.) 3. % change in knowledge, production & Income
			Before	After	Before	After	Before	After	
Angul	Integrated pest and disease management in onion	25	37	58			212100	239500	Area expanded (ha):-45 No. of farmers adopted (no.): 10 % change in knowledge:56.75 % change in production % change in Income
Angul	Integrated pest management in kharif Paddy	25	29	53	28.6	42.8	28600	51360	Area expanded (ha):-27 No. of farmers adopted (no.):13 % change in knowledge:82.75 % change in production:49.65 % change in Income:79.58
Angul	Cultivation practices of paddy straw mushroom	25	27.8	32.1	0.6/bed	0.9kg/bed	9,000	13,800	No. of farmers adopted (12): 15 % change in knowledge:50 % change in production. % change in Income 53.33
Angul	Cultivation practices of oyster mushroom	25	20.5	34.5	1.6kg/bag	2.0kg/bag	17,400	22,700	Area expanded (ha):-12 No. of farmers adopted (no.):68 % change in knowledge:25 % change in production % change in Income:30.45
Angul	Reduction r of drudgery by Paddy winnower.	25	26.8	55.5					Area expanded (ha):- No. of farmers adopted (no.): 17 % change in knowledge:85.7 % change in production % change in Income-35.4
Angul	Value addition of Tomato	25	44.7	79.7			7,400	10,700	Area expanded (ha): No. of farmers adopted (no.):13 % change in knowledge:-47.9 % change in production : % change in Income-44.59
Angul	Value addition of oyster mushroom	15	25	61.7			17,400	22,700	Area expanded (ha) No. of farmers adopted (no.): 17 % change in knowledge:58.2 % change in production % change in Income:30.45
Angul	Azolla cultivation	25	15.5	57.4			15,600	18,300	Area expanded (ha):- No. of farmers adopted (no.):13 % change in knowledge:61.6 % change in production-32.3 % change in Income-17.30

Name of KVK	Title of the training	No. of trainees	Change in knowledge (Score)		Change in Production (q/ha)		Change in Income (Rs)		Impact on 1. Area expanded (ha) 2. No. of farmers adopted (no.) 3. % change in knowledge, production & Income
			Before	After	Before	After	Before	After	
Angul	Semi intensive Backyard poultry	25	21.8	61.2			17,400	22,700	Area expanded (ha):- No. of farmers adopted (no.):17 % change in knowledge:180 % change in production % change in Income-30.45
Angul	Goatry Management	15	18.5	43.9			14,000	18,300	Area expanded (ha):- No. of farmers adopted (no.): 9 % change in knowledge:50.3 % change in production :21.7 % change in Income: 30.71
Angul	Maintenance of stocking density in composite Pisciculture	25	33.1	65.6	6.5	6.6	2500	2760	Area expanded (ha):- 4.8 No. of farmers adopted (no.): 13 % change in knowledge:56.3 % change in production:16.9 % change in Income:10.5

6. Extension Activities

Name of the KVK	Activity	No. of activities (Targeted)	No. of activities (Achieved)	Detail of Participants						Remarks		
				Farmers (Others)		SC/ST (Farmers)		Extension Officials		Purpose	Topic s	Crop Stages
				M	F	M	F	M	F			
Angul	Field Day	8	8	244	60	16	5	8	2	Wider dissemination	Oyster Mushroom, Cluster demonstration oilseed & pulses, Fish production, IPM	Harvesting, Crop maturity stage
Angul	Kisan Mela	1	1	132	28	20	20	4	2	Farmer Awareness	Rabi oilseeds & Pulses,	
Angul	Kisan Ghosthi	4	4	76	32	9	5	2	1	Group approach	Mushroom, mango	
Angul	Exhibition	3	3	445	102	21	19	20	5	showing latest technologies	-	
Angul	Film Show	6	6	44	12	16	11	2	1	Increasing awareness	Agriculture and allied subjects	
Angul	Method Demonstrations	5	5	74	26	15	5	5		Wider adoption	Mechanization, Small implements for drudgery reduction, Mushroom production, Value addition	
Angul	Farmers Seminar											
Angul	Workshop											
Angul	Group meetings	6	6	69	13	18	20			Discussion	Management practices	
Angul	Lectures delivered as resource persons	42	42	Mass						Capacity building		
Angul	Newspaper coverage	10	10	Mass						Popularization ,Farmer Sensitization	SAC(2), World Soil Day, Women in Agriculture Day, PMFBY, Skill Training	
Angul	Radio talks	4	4	Mass						Educating farming community	Women friendly drudgery reducing implements,	
Angul	TV talks											
Angul	Popular Articles	8	8	Mass						Creating awareness		

Name of the KVK	Activity	No. of activities (Targeted)	No. of activities (Achieved)	Detail of Participants						Remarks		
				Farmers (Others)		SC/ST (Farmers)		Extension Officials		Purpose	Topic s	Crop Stages
				M	F	M	F	M	F			
Angul	Extension Literature	3	3							Knowledge transmission	Climate change, Duckery in backyard, PMFBY	
Angul	Farm Advisory Services	42	42	160	12	21	8	1	1	To help farmers for sorting out their problems	Agriculture and allied subjects	All stages
Angul	Scientific visit to farmers field	30	30	119	53	31	12	4	1	Advisory service	Agriculture and allied subjects	All stages
Angul	Farmers Visit to KVK	1	1	2251	326	32	18	20	8		Agriculture and allied subjects	All stages
Angul	Diagnostic Visits	29	29	120	33	21	7	2	1	Problems in farmer's field		All stages
Angul	Exposure Visits	3	3	27	3						Livestock management, fodder cultivation	
Angul	Ex-trainees Sammelan	1	1	15	10			2		Assessment of knowledge	Impact assessment	
Angul	Soil Health Camp											
Angul	Animal Health Camp	1	1	20	5					Animal health check	Control disease of livestock	
Angul	Agri Mobile Clinic											
Angul	Soil Test Campaigns											
Angul	Farm Science Club conveners meet	8	8	320	21	8	8	10	2	Awareness		
Angul	Self Help Group conveners meetings	6	6	26	61	12	3		3	Awareness		
Angul	Mahila Mandals conveners meetings	5	5		80		20		2	Awareness		
Angul	Celebration of important days (World environment day)	5	5	280	20	8	6	8	2	Awareness	World Food Day, Women in Agriculture Day, Vanamahostav, International women's day, International Soil day	

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

7.1 KVK Newsletters

KVK Name	Date of start	Periodicity	Number of copies printed	Number of copies distributed
Angul	2007	Quarterly	2000	1600

7.2 Literature Developed / Published

KVK Name	Type	Title	Author's name	Number of copies
Angul	Research paper	System productivity, profitability, sustainability and soil health as influenced by rice based cropping systems under Mid-central table land zone of Odisha	T.K. Samanta *(International Journal of Agriculture Sciences* 7(11):746-749,2015)	1
Angul	Research paper	Effect of weed management practices on weed control, growth attributes, yield and economics in *rabi* groundnut *(Arachis hypogaea*)	T.K. Samanta *(International Journal of Plant Protection* 8(2): 312-317, 2015)	1
Angul	Research paper	Effect of weed management practices on weed dynamics and growth, yield, economics of pigeonpea *(Cajanus cajan* L. Millspaugh) under rainfed condition	T.K. Samanta *(Advance Research Journal of Crop Improvement* 6(2): 1-4, 2015)	1
Angul	Research paper	On farm assessment of toria (Brassica campestris L.) variety Sushree under mid central table land zone of Odisha	T.K. Samanta(*International Journal of Applied Research* **1**(8):731-733, 2015)	1
Angul	Research paper	Integrated nutrient management and fertilizer recommendation for major crops	T.K. Samanta *(Journal of Agricultural Research and Innovative Technologies)*	1
Angul	Research paper	Evaluation of different bio pesticides against the aphid in Okra at Bhubaneswar	MohanishaJanghel,Ipsita Mishra and B.K.Mishra	1
Angul	Leaflet	Climate change and Impact on Agriculture	T.K. Samanta, G. Sahoo, I. Mishra, B. Mohanty	500
Angul	Leaflet	Bataka palana aka labhajanaka byabasaya	B. Satapathy, M. Behera, S. Acharya, R.P. Mishra,	500
Angul	Leaflet	Prime Minist Fasala Bima Yojana	-	2050
Angul	Research Paper	Women based horticultural livelihood & household food security – A case study on Angul district of Odisha (Accepted)	S. Acharya, B. Satapathy(Journal of Social research vol.XVIII No.1)	1
Angul	Research Paper	Incidense of malnutrition among pre-school childred in slum areas of Berhampur, Ganjam district of Odisha (Accepted)	S. Acharya, P.Samantray(Food science & research)	1
Angul	Research paper	Assessment of feed conversion ratio of slow sinking crumbled feed in fingerling production in Angul district of Odisha, India	R.P.Mishra, N. Kumar, M.Kumari, J. P. Mishra, B.Mohanty, C.K.Mishra	1
Angul	Research paper	Empowerment of fish farmers in Angul District, Odisha by assessing the Technology of Composite Pisciculture with "Jayanti rohu"	R.P. Mishra , N. Kumar , J.P. Mishra , B. Satpathy	1
Angul	Research paper	"Strengthening the livelihoods of fish farmers of Angul district of Odisha through demonstration of stocking density".	R.P. Mishra , N. Kumar , J.P. Mishra, S. Acharya	1
Angul	Research paper	Enhancement of yield and income of farmers through demonstration of Freshwater Prawn farming with Indian Major Carps within a pond environment	R.P. Mishra , N. Kumar, M. Kumari, J.P. Mishra, B. Satpathy, C.K. Mishra	1
Angul	Research paper	Evaluation of disease reduction percentage and yield through application of CIFAX in fish pond	R.P. Mishra , N. Kumar, M. Kumari, J.P. Mishra , B.C. Dhir , C.K. Mishra	1
Angul	Research paper	Assessment of suitability of Processing Effluent discharged from Quality Indian Seafood Exporter: Shimpo Exports, West Bengal.	R.P.Mishra, S.K.Rout, N.Kumar, A.Panigrahi, C.K.Mishra, J.P.Mishra	1

KVK Name	Type	Title	Author's name	Number of copies
Angul	Research paper	Limnochemistry of river Pagladia (a major tributary of the Brahmaputra river), Assam.	U. K. Das, S. K. Rout, N. Kumar, R. P. Mishra, B. K. Bhattacharjya, Pranab Gagoi.	1
Angul	Research paper	Pesticidal Activities of Commercial Bleaching Powder in Pisciculture	Mamata Kumari, Rashmi Prabha, Navin Kumar	1
Angul	Research paper	Toxicological effects of Potassium Permanganate on fingerlings of African catfish (*c. gariepinus)*	N. Kumar, R.P.Mishra, B. K. Das, M. kumari, J. P. Mishra, C. K. Mishra	1
Angul	Research paper	A study on assessment of changes in physico-chemical parameters with response to Tabacco Leaf Dust with Quick Lime	N. Kumar, R.P.Mishra, B. K. Das, M. kumari, J. P. Mishra, C. K. Mishra	1
Angul	Research paper	A study on impacts of lethal concentrations of Potassium Permanganate on hydrological parameters of water	N. Kumar, B. K. Das, R. P. Mishra, M. kumari, J. P. Mishra and C. K. Mishra	1
Angul	Research paper	A Study on Physical Characteristics of Fresh Rumen Content and Yield with Relation to Different Age Groups of Goat	Mishra J.P. , Abraham J.J., Mishra R.P. , Sarangi N.R. , Kumar N. , Kumari M.	1
Angul	Research paper	Immunological Responses in *Labeo rohita* Exposed to Fish Processing Plant Effluents	R.P.Mishra, N. Kumar, S. K. Rout, U. K. Das, P. K. Rath, J. P. Mishra	1
Angul	Research paper	Effect of sub lethal concentrations of processing waste on blood parameters of *Labeo rohita* fingerlings.	R.P.Mishra, N. Kumar, S. K. Rout, J. P. Mishra, A.Panigrahi, C.K.Mishra	1
Angul	Popular paper	Tika karana- prani sampada ra unnarti digare upajukta padakhyepa	Dr Jyotiprabha Mishra, Dr Nihar Ranjan Sarangi, Mrs. Rashmi Prabha Mishra and Mr. Navin Kumar.	1
Angul	Popular paper	Barsa Ruture poultry ra urnnati digare kichi mulyabana tathya	Dr Jyotiprabha Mishra, Mrs. Rashmi Prabha Mishra, Dr Nihar Ranjan Sarangi, and Mr. Navin Kumar.	1
Angul	Popular paper	Pre-slaughter care for food animals	Jyotiprabha Mishra, Nihar Ranjan Sarangi, Rashmi Prabha Mishra, N Kumar and Chandrakanta Mishra	1
Angul	Popular paper	Qualitative egg production through packaging technique	Jyotiprabha Mishra, Nihar Ranjan Sarangi, Rashmi Prabha Mishra, N Kumar, Chandrakanta Mishra and Bidyut Prava Mishra	1
Angul	Leaflet	Lac Cultivation	B. Satapathy, G. R. Sahoo, T.K.. Samanta	500
Angul	Leaflet	Bee keeping	B. Satapathy, I. Mishra, S. Acharya, B.Mohanty	500
Angul	Leaflet	Floriculture	B. Satapathy, I. Mishra, S. Acharya	500
Angul	Leaflet	ITK	B. Satapathy, S. Acharya, T.K Samanta	500

7.3 Details of Electronic Media Produced

KVK Name	Type of media (CD / VCD / DVD / Audio-Cassette)	Title of the programme	Number
Angul	CD	Exposure visit	1
Angul	CD	PMFBY	1
Angul	CD	Fodder production & Livestock feeding management	1

8. Production and Supply of Technological Products

8.1 Seed Production

KVK Name	Major group/class	Crop	Variety	Quantity (qt.)	Value (Rs.)	Provided to No. of Farmers	Expected area coverage (ha.)
Angul	Cereal	Paddy	Mandakini	9.8	23860	-	0.6
Angul	Cereal	Paddy	Prateekhya	20.2	49200	-	0.8

8.2 Planting Material production

KVK Name	Major group/class	Crop	Variety	Nos.	Value (Rs.)	Provided to No. of Farmers	Expected area coverage (ha.)
Angul	Vegetables	Tomato	Bhagyaban, Surakhya, Laxmi ,Tokita	8000	16000	47	0.2
Angul		Brinjal	JK Brinjal, Utkal Green, Tarini	8370	16740	59	0.2
Angul		Chilly	Kanchi, VNR,Utkal Ragini, Mohini	17000	18800	36	0.5
Angul		Cabbage	Rare ball	700	1400	10	0.05
Angul		Cauliflower	Snowball, Dawn	2680	5360	22	0.1
Angul		Papaya	Honeydew	311	3110	23	1.0
Angul	Flower	Marigorld	Ceracola	5400	5400	10	0.4

8.3 Production Units (bio-agents / bio pesticides/ bio fertilizers etc.) * Name of product should follow same pattern and spelled correct

KVK Name	Major Group Bio agent/ Bio fertilizers/ Bio Pesticides	Name of the Product	Qty (In Kg)	Qty (In No)	Value (Rs.)	Provided to No. of Farmers	Expected area coverage (ha.)
	Bio Agents						
Angul	Bio Fertilizer	Vermi-compost	16000		8000	35	10
Angul	Bio Fertilizer	Azolla	30kg		1200	16	
Angul	Others	Paddy straw mushroom	86		6020	12	
Angul	Others	Oystr Mushroom	188		9400	27	
Angul	Others	Mushroom spawn		2600	31200	56	
Angul	Vegetables	Tomato, Brinjal, Onion, Pea, Bitter Gourd, Cucumber, Chilli	152	-	2050	22	

8.4 Livestock and fisheries production

KVK Name	Name of the animal / bird / aquatics	Breed	Type of Produce	Qty. (kg/qt./litre)	Value (Rs.)	No. of Beneficiaries
Angul	Ornamental fish	Moly	Fingerling	170 nos.	2550	12

9. Activities of Soil and Water Testing Laboratory

9.1 Details of soil samples analyzed so far :

KVK Name	Status of establishment of Lab	Year of establishment	Details	No. of Samples	No. of Farmers	No. of Villages	Amount realized	Soil report distributed to the farmers (Nos)
Angul	Functioning	`2009	GPS based soil sample analysis	673	1901	45	3365	1901

9.2 Details of water samples analyzed so far :

KVK Name	Status of establishment of Lab	Year of establishment	Details	No. of Samples	No. of Farmers	No. of Villages	Amount realized	Water report distributed to the farmers (Nos)
		`						

10. Rainwater Harvesting

Training programmes conducted by using Rainwater Harvesting Demonstration Unit

Name of KVK	Date	Title of the training course	Client (PF/RY/EF)	No. of Courses	No. of Participants including SC/ST			No. of SC/ST Participants		
					Male	Female	Total	Male	Female	Total

11. Utilization of Farmers Hostel facilities

KVK Name	Months	Year	Title of the training course	Duration of training	No. of trainees stayed	Trainee days (days stayed)	Reason for short fall (if any)	Accommodation available (No. of beds)
Angul	April	2015-16	Crop diversification and crop intensification under rainfed ecosystem in rice based cropping system	2	25	1		25
Angul	May	2015-16	Crop contingent measures for different types of drought situation	2	25	1		25
Angul	February	2015-16	Technology for successful production of direct seeded rice	2	25	1		25
Angul	March	2015-16	Water management in major oilseed crops	2	25	1		25
Angul	September	2015-16	Fodder utilization and conservation for Silage and Hey making	2	15	1		15
Angul	January	2015-16	Bio fertilisers and their use in agriculture	2	15	1		15
Angul	June	2015-16	Integrated pest management in kharif Paddy	2	25	1		25
Angul		2015-16	Management of insect pest of kharif vegetables	2	25	1		25
Angul	August	2015-16	Management of insect pest of cole crops	2	25	1		25
Angul	November	2015-16	Integrated pest and disease management in onion	2	25	1		25

KVK Name	Months	Year	Title of the training course	Duration of training	No. of trainees stayed	Trainee days (days stayed)	Reason for short fall (if any)	Accommodation available (No. of beds)
Angul	February	2015-16	Motor winding	10	10	9		25
Angul	March	2015-16	Repair of diesel pumpsets	10	10	9		25
Angul	July	2015-16	Semi intensive management practices for backyard poultry	2	25	1		25
Angul	June	2015-16	Location specific women friendly drudgery reducing tools	2	25	1		25
Angul	May	2015-16	Kitchen garden for nutritional security of farm family	2	25	1		25
Angul	November	2015-16	Value addition in Mushroom	2	15	1		15
Angul	June	2015-16	Paddy straw mushroom cultivation	2	15	1		15
Angul	October	2015-16	Oyster mushroom cultivation	2	15	1		15
Angul	September	2015-16	Value addition in Ground nut	2	15	1		15
Angul	December	2015-16	Desi magur culture	2	25	1		25
Angul	October	2015-16	Breeding seed production and culture of fresh water prawn	2	15	1		15
	July	2015-16	Basics in culture of Jayanti rohu with IMC	2	15	1		15
Angul	December	2015-16	Seed production & certification in sesamum	6	10	5		10
Angul	January	2015-16	Spawn production technology of mushroom	5	10	4		10
Angul	February-March	2015-16	Fodder production and livestock feeding managament	30	30	29		30

12. Utilization of Staff Quarters facilities

KVK Name	Year of construction	Year of allotment	No. of quarters occupied	No. of quarters vacant	Reasons for vacant quarters, if any
Angul	2010	2010-11	2	1	---

13. Details of SAC Meeting

KVK Name	Date of SAC meeting	No. of SAC members attended	Major recommendations
Angul	31.07.2015	24	• Number of copies for any extension literature published should be more so as to reach a large no. of farmers'. • For any FLD/OFT programmes field days must be conducted involving line department officers / workers, farmers for better & greater adoption of the technology in the district. • Ten nos. of IFS models should be developed in KVK adopted villages. • During rabi season a large area (around 60%) remains fallow which is a major concern and steps to cover the area under suitable alternative crops like fodder crops. • The existing marketing network has to be studied and the benefit of information regarding this may be extended to the farmers to get proper price for their produce. • Training on animal science sector should emphasize on feed management and awareness programme relating to different management practices like stress management during summer season may be conducted. • Steps should be taken for up gradation of indigenous cattle/goat • Value addition of locally available fruits/vegetables should be taken up on entrepreneurship developing mode. • Impact study may be conducted and data on horizontal spread of different technology may be presented. • One literature should be developed on the recommendations of KVK for the benefit of farmers / extension personnel. • Awareness programme on farm mechanization may be organized for better adoption of improved agricultural implements. • Steps should be taken to ensure the availability of organic inputs in the district so that organic farming may be practiced by farmers. • The farmers may be aware about collection & use of neem seeds for pest control measures. • Convergence of different line departments in programme implementation may be stressed upon for greater visibility & adoption by farmers • One adopted village may have thematic area on animal resources where all sorts of technologies relating to animal resource development would be demonstrated. • Steps may be taken up to study whether sweet orange cultivation is feasible in the district.

KVK Name	Date of SAC meeting	No. of SAC members attended	Major recommendations
Angul	29.12.2015	25	• Preparatory Action plan workshop should be done with farmers and line department members. • Emphasis should be given for weed management in rice, maize etc, varietal evaluation and fodder production. • As per the suggestion of the CDVO, the Chairman suggested to conduct some trial in hospitals instead of adopted village as per the requirement. • Emphasis should be given for bio-intensive based pest management practices in vegetables like brinjal, cabbage, tomato, okra and IPM on field crops like paddy and pigeon pea • Cluster approach of all flowers like Rose, Gladioli, and Marigold should be done with support from Horticulture department. • High value crops like capsicum, broccoli and floriculture in protected structures should be promoted in convergence mode with ATMA and Horticulture department. • Specific proposal should be given to expertise few nos.of rural youth to repair the farm machineries in agro service centre. • Steps need to be taken to for conducting FLD on bamboo verities. • Distance villages should be visited by scientists of KVK and concerned line department in every 2-3 months at the same time. • Steps should be taken for conservation of local varieties of paddy and green gram • Use of improved – implements for line sowing paddy/ oilseed and pulse crops may be included in the action plan. • Active farmers club should be identified and motivated to do work in a direction to achieve the entrepreneurial level. • Impact study may be conducted and data on horizontal spread of different technology may be estimated. • Existing marketing network has to be studied by one representative of farmers' club and the benefit of information regarding this may be extended to the farmers to get proper price for their produce • Value addition of locally available fruits, vegetables and oyster mushrooms should be taken up on entrepreneurship developing mode focusing on women and marginal farmers. • Oyster mushroom var. *Hypsizygous ulmarius* demonstration should be continued for better result. • Backyard poultry should be promoted by introducing new breed and a brooding unit should be established by SHG in adopted village of KVK. • Steps to be taken to develop one successful farmer in one sector of fishery.

14. Status of Kisan Mobile Advisory (KVK-KMA)

KVK Name	No. of messages sent	No. of beneficiary		Sponsoring agency (NIC, Farmers Portal, etc.)	Major recommendations
		Farmers	Ext. Pers.		
Angul	50	12700	58	Farmers Portal / Reliance Foundation	Crop management, Pest management, Awareness, Marketing, Enterprise development

15. Status of Convergence with various agricultural schemes (Central & State sponsored)

KVK Name	Name of scheme	Name of Agency (Central/state)	Funds received (Rs.)	Activities organized	Operational Area	Remarks
Angul	NFSM	State	60000	Farmers Federation meeting	KVK campus	
Angul	Watershed	State	439000	Skill Training	Angul district	
Angul	ATMA (RKVY)	State	5000	Field visit	Athamalik, Kaniha, Chhendipada, Angul, Banarpal	

16. Status of Revolving Funds (Rs.)

KVK Name	Account No.	Opening balance (Rs.)	Closing balance (Rs.)	Current status (Rs.)
Angul	30160005025	82743	300121	200964

17. Awards & Recognitions

KVK Name	Name of award / awardee	Type of award (Ind./ Group/ Inst./ Farmer)	Awarding Organizations	Amount received
Angul	Best farmer	Farmer	OUAT	

18. Details of KVK Agro-technological Park

a) Have you prepared layout plan, where sent?

S .No.	Name of KVK	Technology park proposal developed(yes/no)	If yes, where sent ? (ZPD/DES/any other, pl. sp.)

b) Details about Technology Park

Name of KVK	Name of Component of Park	Detail Information (If established)
Angul	Crop Cafeteria	
Angul	Technology Desk	
Angul	Visitors Gallery	
Angul	Technology Exhibition	
Angul	Technology Gate-Valve	

c). Crop Cafeteria-

Sr. No.	Theme of Crop Cafeteria	No. of Crop Cafeteria

19. Farm Innovators- list of 10 Farm Innovators from the District

Sr. No.	Name of KVK	Name of Farm Innovator	Name of the Innovation	Address of the farmer with Mobile No.
1	Angul	Khirod Swain	Manual sprayer	Mahidharpur, Banarpal, 9853513385
2	Angul	Srinibas Behera	Organic cultivation of cucumber & Bittergourd	Golabandha, Banarpal, 7894599421
3	Angul	Ranjan Behera	Cauliflower throughout the year	Baragaunia, Angul, 8260797342
4	Angul	Duryodhan Sahoo	Control white fly in vegetable crops	Baragaunia, Angul, 9556191818

20. KVK interaction with progressive farmers

Sr. No.	Date and month of interaction programme with progressive farmers	No. of progressive farmers to be participated
1	18th of every month	360

21. Outreach of KVK

Name of KVK	Number of Blocks		Number of Villages	
	Intensive	Extensive	Intensive	Extensive
Angul	8	8	37	168

Intensive- OFTS, FLDS etc
Extensive- Literatures, Publications, Awareness programmes etc.

22. Technology Demonstration under Tribal Sub Plan on Pulses/ Programme on Harnessing Pulses/ Quality Protein Maize, if applicable: **Not operational**

Sr. No.	Name of crop under Technology demonstration	Area under the programme	No. of Extension Activities	Remarks / Lessons learnt

23. KVK Ring

Sr. No.	Name of Ring Partner	Sharing Activity	Lessons learnt/ Experiences gained.
1	Dhenkanal	Knowledge sharing	Dissemination process varies from situation to situation
2	Deogarh	Knowledge sharing	Dissemination process varies from situation to situation

24. Important visitors to KVK

Name of KVK	Name of Visitor	Date of Visit	ICAR	SAUs	Others	Remarks
Angul	Dr. P.K. Banerjee,	31.7.2015		Y		Kharif SAC
Angul	Dr. P.K. Sarangi, ADR,RRTTS, Dhenkanal	31.7.2015		Y		Kharif SAC

Name of KVK	Name of Visitor	Date of Visit	ICAR	SAUs	Others	Remarks
Angul	M.R. Mohapatra, PC, KVK, Dhenkanal	31.7.2015		Y		Kharif SAC
Angul	Dr. M Kar, Vice-Chancellor, OUAT	28.12.2015		Y		Entrepreneurs Meet
Angul	Prof. S.K. Rout, Dean, Extension Education, OUAT	28.12.2015		Y		Entrepreneurs Meet
Angul	Mr. P.K. Pradhan, Director, Physical Plant, OUAT	28.12.2015		Y		Entrepreneurs Meet
Angul	Dr. R.K. Das, Director, Agro-Polytechnic, OUAT	28.12.2015		Y		Entrepreneurs Meet
Angul	Sj. S. Behera, ADM, Angul	29.12.2015		Y		Rabi SAC
Angul	Dr. M.P. Nayak	29.12.2015		Y		Rabi SAC

25. Status of KVK Website:

Sr. No.	Name of KVK	Date of start of website	No. of updates since inception	No. of visitors
1	Angul	02.05.11	51	32967

26. E-CONNECTIVITY: Not Available

Name of KVK	Number and Date of Lecture delivered from KVK Hub				No. of lectors organized by KVK	Brief achievements	Remarks
	Date	No. of Staff attended	No. of call received from Hub	No. of Call mate to Hub by KVK			

27. Status of RTI

Sr. No.	Name of KVK	No. of RTI applications received	No. of RTI appeals	Remarks
1	Angul	0	0	

28. Status of Citizen Charter

Sr. No.	Name of KVK	Query received(Nos)	Query Disposed(Nos)	Remarks
1	Angul			

29. Attended HRD Programmes organized by ZPD

Name of KVK	Name of Staff	Post held	Programme attended (Nos)	Remarks
Angul	Dr. S. Acharya	Scientist (Home Sc.)	1	Workshop on APR & AP of Home Science at Ujjain organized by ZPD
Angul	T.K Samanta	Scientist (Agronomy)	1	Review-cum-Action Plan Workshop on Weed Management organized by ZPD, Jabalpur during 19th May, 2015 to 20th May, 2015
Angul	Dr. Bineeta Satpathy	Sr. Scientist & Head	1	SLEC meeting at OUAT, Bhubaneswar from 4th to 6th June 2015
Angul	Dr. Bineeta Satpathy	Sr. Scientist & Head	1	HRD meeting at DEE, OUAT, Bhubaneswar on XII Extension Plan from 13th to146th Aug 2015
Angul	Dr. Bineeta Satpathy, all scientists	Sr. Scientist & Head	6	Zonal Consultation workshop on BGREI and NFSM for mid central Table land zone at Dhenkanal on 04.1.2016

Name of KVK	Name of Staff	Post held	Programme attended (Nos)	Remarks
Angul	Dr. Bineeta Satpathy	Sr. Scientist & Head	1	Zonal Workshop on cluster Demonstration (Oilseeds and Pulses) at OUAT, Bhubaneswar from 5th to 6th January 2016
Angul	Dr. Bineeta Satpathy	Sr. Scientist & Head	1	ICAR-SAU State Interface at OUAT, Bhubaneswar on 27.01.2016
Angul	Dr. Bineeta Satpathy	Sr. Scientist & Head	1	OUAT_ICAR HRD Programme for Programme Coordinators at OUAT, Bhubaneswar from 29th to 30th January 2016
Angul	Dr. Bineeta Satpathy	Sr. Scientist & Head	1	Review meeting by DEE,OUAT, Bhubaneswar from 2nd to 4th March 2016
Angul	Mr. B.Mohanty	Scientist(Ag.Engg)	1	Review –cum action plan workshop, CIAE, Bhopal -3.3.2016
Angul	Mr. B.Mohanty	Scientist(Ag.Engg)	1	Training on farm Mechanization, CIAE, Bhopal from 4.03.2016 to 5.03.2016

Name of KVK	Total Number of staff Attended HRD Programme organized by ZPD (nos)	Total Number of Programme attended (Nos)
Angul	16	11

30. Attended HRD Programmes organized by DES

Name of KVK	Name of Staff	Post held	Programme attended (Nos)	Remarks
Angul	Dr. Bineeta Satpathy	Sr. Scientist & Head	1	Cluster FLD (Oilseeds and Pulses) and CDAP meeting at OUAT, Bhubaneswar from 6th to 8th October 2015
Angul	Dr. Bineeta Satpathy, Mr.G.R. Sahoo	Sr. Scientist & Head	1	State Level Workshop on Rice-Check – An Extension Approach at DEE, OUAT, Bhubaneswar on 17th Dec'15

Name of KVK	Total Number of staff Attended HRD Programmes organized by DES (nos)	Total Number of Programmes attended (Nos)
Angul	3	2

31. Attended HRD Programmes by KVK Staff (Refresher course, Short course, Training programme etc.)

Name of KVK	Name of Staff	Post held	Programmes attended (Nos)	Remarks
Angul	Dr. S.Acharya	Scientist (Home Science)	1	Short Course on Occupational Health Hazard at CIWA
Angul	Mr.G.R.Sahoo	Scientist (Forestry)	1	Farmers' Scientist interface meet at DEE,OUAT, Bhubaneswar on 28.01.2016
Angul	Mr.B.Mohanty Dr. Bineeta Satpathy, Mr.G.R.Sahoo	Programme Co-ordinator SMS(Ag.Ext.), SMS (Forestry)	3	Seminar on Bioversity and Farmers Fair at KVK, Dhenkanal on 31.10.15
Angul	T.K Samanta	Scientist (Agronomy)	1	Rice production Technology(Workshop) during 26th to 27th April, 2015

Name of KVK	Total Number of staff Attended HRD Programmes by KVK staff (nos)	Total Number of Programmes attended (Nos)
Angul	6	4

32. Agri alert report (Epidemic, high serious nature problem, Cyclone etc. reported first time to ZPD, SAU, Agri. Deptt. and ICAR)

Name of KVK	Alert observed	Particulars	Reported to organization

33. DETAILS OF TECHNOLOGY WEEK CELEBRATIONS

Name of KVK	Types of Activities	No. of Activities	Number of Participants	Related crop/livestock technology
Angul	Method demonstration on Oyster Mushroom	1	25	Mushroom
Angul	Animal Health Camp	1	25	De worming, Health management
Angul	Road show	1	100	Soil health management
Angul	Backyard poultry for Tribals	1	25	Backyard poultry
Angul	Farm Mechanization	1	25	Paddy Reaper
Angul	Breeding seed production of fresh water prawn	1	25	Fresh water Prawn

34. INTERVENTIONS ON DROUGHT MITIGATION

Introduction of alternate crops/ varieties

Name of KVK	Crops/cultivars	Area (ha)	Number of beneficiaries

Major area coverage under alternate crops/varieties

Name of KVK	Crops	Area (ha)	Number of beneficiaries

Farmers-scientists interaction on livestock management

Name of KVK	Livestock components	Number of interactions	No. of participants

Animal health camps organized

Name of KVK	Number of camps	No. of animals	No. of farmers

Seed distribution in drought hit states

Name of KVK	Crops	Quantity (qtl)	Coverage of area (ha)	Number of farmers

Seedlings and Saplings distributed

Name of KVK	Crops	Quantity (No.s)	Coverage of area (ha)	Number of farmers
Seedlings				

Bio-control Agents

Name of KVK	Bio-control Agents	Quantity (q)	Coverage of Area (ha)	No. of farmers

Bio-Fertilizer

Name of KVK	Bio-Fertilizer	Quantity (kg)	Coverage of Area (ha)	No. of farmers

Verms Produced

Name of KVK	Verms Produced	Quantity (q)	Coverage of Area (ha)	No. of Farmers

Large scale adoption of resource conservation technologies

Name of KVK	Crops/cultivars and gist of resource conservation technologies introduced	Area (ha)	Number of farmers

Awareness campaign

Name of KVK	Meetings		Gosthies		Field days		Farmers fair		Exhibition		Film show	
	No.	No. of farmers	No.	No. of farmers	No.	No. of farmers	No.	No. of farmers	No.	No. of farmers	No.	No. of farmers

35. Proposal of NICRA : Not Operational

1. Technologies to be Demonstrated

Name of Technology	Name of Crop	Area (ha.)	Yield	% change in Yield	No. of farmers benefitted

2. Proposed Extension Activities in NICRA Village

Name of Activity	Number of Participants/Beneficiaries to be Covered			
	Farmers	Farm Women	Official	Total

3. Proposed Training Activities in NICRA Village

Name of Activity	Number of Participants/Beneficiaries to be Covered			
	Farmers	Farm Women	Official	Total

4. Proposed Activities for Fodder Bank

Established (Years)	Capacity	Current Status

5. Proposed Activities for Seed Bank

Established (Years)	Capacity	Current Status

6. Public Representative/District Administration Visited in NICRA Village

Name of Representative/Officer	Designation	Date of Visit	Any Special Remark by Visitors

7. Feedback of Farmers for future improvement, if any.

36. Proposed works under NAIP (in NAIP monitoring format) : Not Operational

37. Case study / Success Story to be developed – Two best only in the following format

Name of the KVK, TITLE, Introduction, KVK intervention, Output, Outcome, Impact

Sr. No.	Name of KVK	No. of success stories	No. of case studies
1	Angul	1	1

Success Story I

Integrated farming system along with "Ornamental fish rearing" as a successful enterprise

Introduction:

Sri Lambodar Sahu of Dandasingha Village, Po-Antulia, Block – Angul of Angul district, Odisha was a retired teacher of age Seventy. He was practicing fish farming from 2005 onwards on traditional basis and could not earn that much for his family. He was searching a newer method to earn profit to support his family. This eagerness motivated him to come in contact with KVK, Angul. Accordingly, KVK, Angul provided training on IFS to help him acquire adequate knowledge and skill in this technology.

KVK intervention:

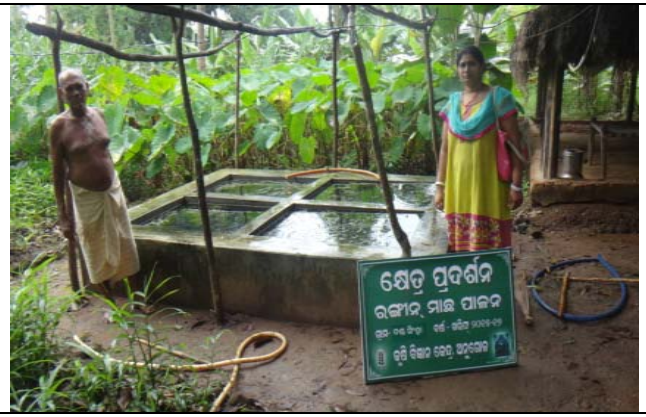
He has 3 acre water area having 4 no. of ponds. He started integrated farming system during 2007 in seven acre consisting of Fishery, Horticultural crops like Papaya, Mango (Amarapalli and Mallika variety), Banana, Lemon, Guava, other spices like Ginger & Turmeric, installation of honey bee box for honey production, raising of Arhar at the pond dyke and rearing of poultry birds, Banaraja (Broiler variety) etc. The KVK scientists supervised all the activities to make it sure that Sri Sahu is successful practice the new technology.

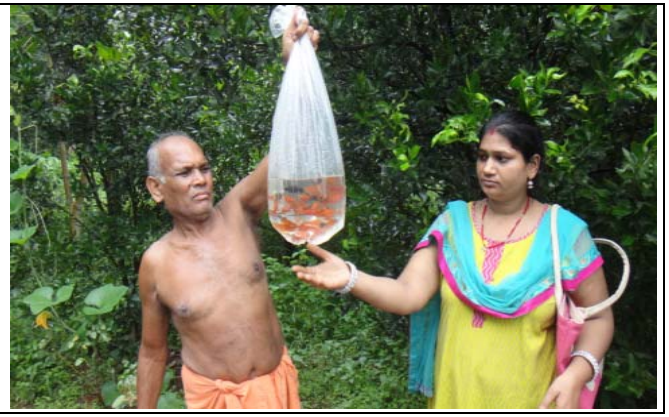
Output & Outcome:

Integrated Farming System approach capable of increasing his income by fivefold and livelihood security. Earlier he earned 30,000 – 40,000 per year. fter starting of IFS Model he is earning 1,50,000 – 2,00,000 approximately per year. Besides this during his visit to KVK in the year 2012, he saw the demonstration unit of "Ornamental fish rearing" at KVK which inspired him to establish colour fish unit. KVK gave training and help him to establish the unit. He also inspired from scientists of KVK through exposure visit to CIFA, Kausalyaganga, Bhubaneswar to rear colour fishes particularly the livebearers i.e. Molly, Guppy, Platy, Sword tail and Gold fishes keeping in view the demand of local market.

Impact:

Now a day, he supplies all the produce to local market and earns money which helps him a lot. As the production increased he faced marketing problem. In the meantime, KVK scientists linking him to different aquashop owners for ease of the sale of his produce. Recently he was also awarded by Directorate of fisheries,Odisha as a successful entrepreneur of this district.





Integrated farming system along with “Ornamental fish rearing” as a successful enterprise

Case Study I

Pond based farming system- A milestone of success

Background Information

Mr. Benudhar Pradhan is a successful farmer of Village Durgapur of Chhendipada block of Angul district. Agriculture is a primary source of income for the farming community of Durgapur village. The existing farming system in the village was agriculture and dairying, where primary source of income was agriculture enterprise particularly from commodities like paddy. After KVK’s intervention the farming systems was transformed to agriculture, horticulture, animal husbandry and pisciculture, Where horticulture crop became a primary source of income *i.e* banana, cauliflower, cucumber, cowpea, brinjal, tomato, etc grown on in commercial basis which adds significant contribution to their income. Above all the members have shown a positive attitude towards change in the existing farming systems.

Description of the Technology:

Looking at the potential of banana cultivation in the village and his interest, KVK Scientists advised him to go for developing a small banana orchard in his 0.2 ha. Banana cultivation (PoP of Tissue culture) with utilization of the interspaces with off season vegetables like tomato, ridge gourd, cowpea, bitter gourd, cucumber etc. Pisciculture, Milk and, Hybrid Paddy cultivation, Dairy with cross breed cows in addition to fish farming, ornamental fish rearing and ducklings.

Dissemination of the Technology :

- Capacity building through Training, FLD, OFT and other extension activities by KVK.
- Diagnostic visit of KVK Scientist time to time
- Exposure visit by KVK and other line department
- Method demonstration showcasing all the package of practices
- Distribution of extension literature on management practices of duck farming, fish farming, banana etc.
- Training was conducted where nearby farmers also participated to notice the benefit out of IFS.
- ATMA (Dept. of Agriculture) and Horticulture (under NHM) and veterinary and fishery deptt. also extended their helping hand to the interested farmers by providing frequent training programmes to update their knowledge level.

Success Point

- Equal emphasis is given to all the component of the farming system.
- All the sound technology has been completed in time.
- Increased in knowledge and exposed to new technologies Adopt IFS model
- Shifted from paddy cultivation to Paddy, Dairying, Horticulture (Fruit & Vegetable) and pisciculture.

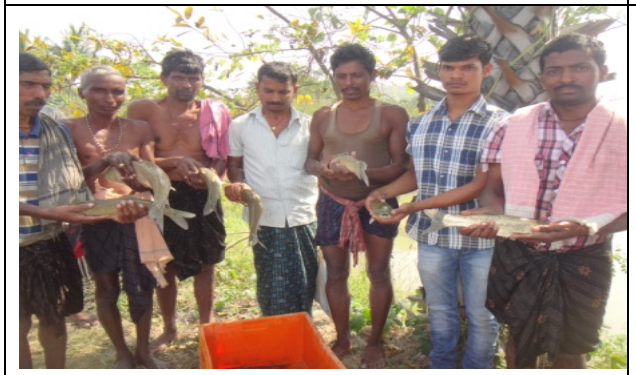
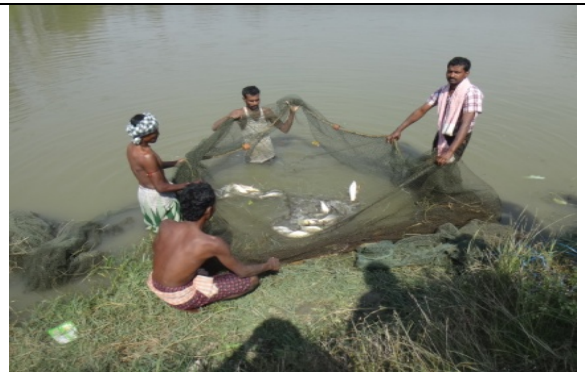
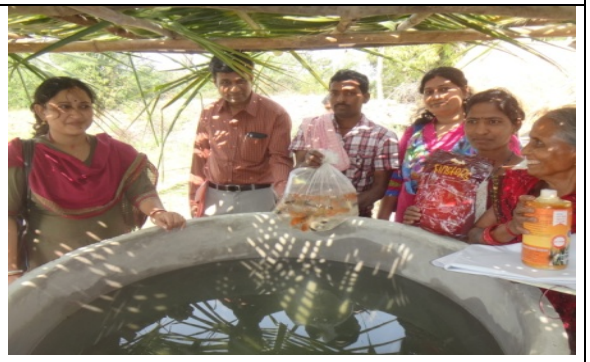
Outcome

Yield and income of the farmer through pond based farming system (2014- 15)

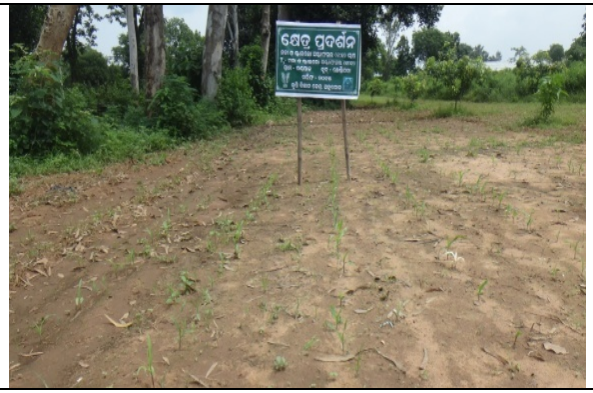
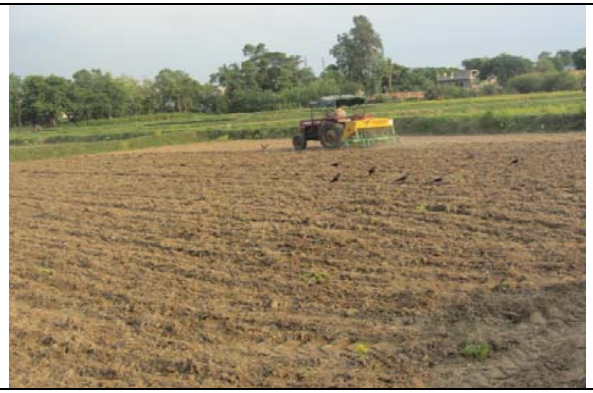
Component	**Area (ha/ unit)**	**Before intervention**		**After intervention**	
		Production(kg)	**Income(Rs.)**	**Production(kg)**	**Income(Rs.)**
Paddy	0.8 ha	1000 kg	23,000	2500 kg	65,000
Arhar	0.4 ha	400 kg	42,000	600 kg	66,000
Groundnut	0.2 ha	300 kg	15,000	800 kg	25,000
Banana	0.2 ha	400 bunches	20,000	1000 bunches	45,000
Cauliflower	0.2 ha	2000 kg	20,000	3500 kg	38,000
Cabbage	0.1 ha	1200 kg	15,000	4000 kg	43,000
Fish farming	0.4 ha	200 kg	24,000/-	1200 kg	1,44,000
Ornamental fish rearing	130 no. livebearers	Nil	Nil	Growing stage	Nil
Ducklings	1 unit (47 no.)	Nil	Nil	1000 eggs & 60 kg meat	11,000
Total	**2.3 ha**				**4,37,000**

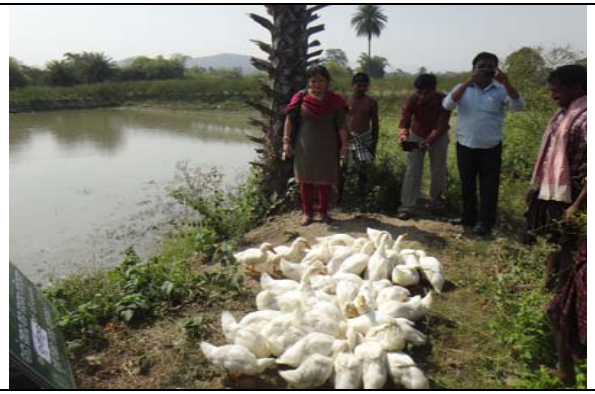
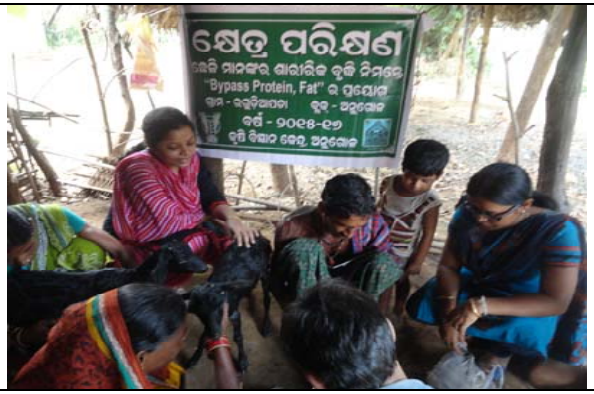
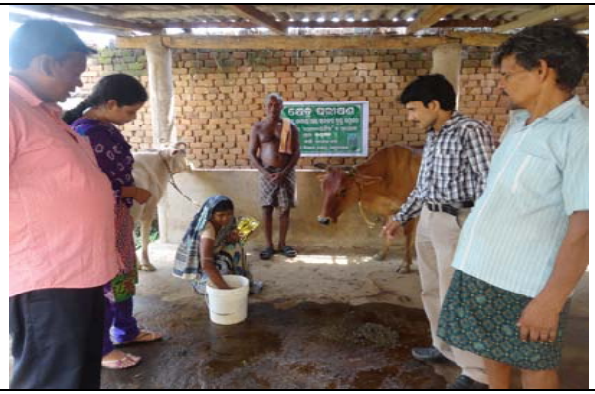
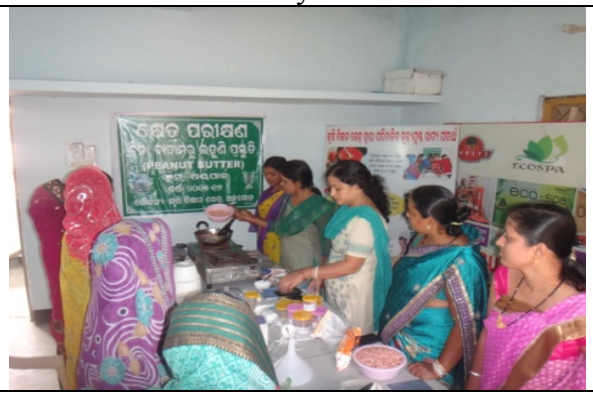
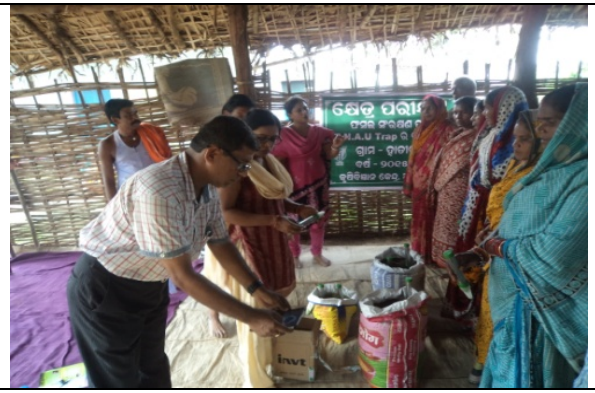
Impact:

By seeing his success farmers are shifting from monoculture paddy cultivation to horticulture based farming system. Farmers also include new enterprise like dairy and poultry with their paddy-paddy farming system. Income substantially increased with technological intervention in sustainable manner. Many farmers of the district have been motivated by his success and some farmers with av. holding size of 2.0 ha.has adopted fruit and vegetable based farming model with input assistance like drip irrigation, bore well, weeders, Poly house etc .from ATMA & NHM schemes of the district. KVK has maintained regular liasoning with them.

		
Banana with Brinjal	Harvesting Brinjal	Duckery in farming system
		
Harvesting Fish	Fish Pond	Ornamental fish Unit

38. Well labeled Photographs for each activity of the KVK (Soft copies as well as hard copy- specially for all OFT along with the problem) –

		
Assessment of fodder Maize and Stylo(1:1) intercropping	Assessment of weed management in rain fed transplanted rice	.Assessment of weed management in *kharif* maize
		
Assessment of Integrated Nutrient Management in sesamum	Assessment of IPM practice for management of Spodoptera in cauliflower	Assessment of IPM practice for management of leaf curl in chilli
		
Direct seeding of rice by tractor operated seed cum fertilizer drill	DSR field 1	DSR field2

		
Assessment of duck breed White Pekin in backyard	Assessment of bypass protein and fat supplementation on weight gain of goats	Assessment of probiotics on milk yield of crossbred cows
		
Assessment of preparation of Peanut Butter for income generation	Assessment of Low Cost Technology of Drying of Oyster Mushroom	Assessment of TNAU insect trap in controlling store grain pest in pulses
		
Assessment of hand operated paddy winnower for drudgery reduction	Assessment of maximization of fish production by using stunted yearlings	Assessment of Jayanti rohu with IMC in culture pond