8TH SCIENTIFIC ADVISORY COMMITTEE MEETING

13/12/2018

KRISHI VIGYAN KENDRA, GANJAM-II

ODISHA UNIVERSITY OF AGRICULTURE AND TECHNOLOGY

BHUBANESWAR

Contents

1.0 INTRODUCTION

Krishi Vigyan Kendra, Ganjam-II was established by ICAR in June 2012 under the control of OUAT at Ratanpur farm. At present this institution is operating in its new location at Golanthara, Block Rangeilunda. It is surrounded by Kandhamal in the North-West, Nayagarh in the North, Khurda in the North-East, Gajapati district in the West and Bay of Bengal in the South-East. On its Southern periphery the district borders the state of Andhra Pradesh. Ganjam district is broadly divided into two divisions spreading over an area of 8206.0 Sq.km. The plains lies between the Eastern Ghats and the Bay of Bengal. Since the hills are close to the sea, the rivers flowing from hills are not very long and are subject to sudden floods. The plains are narrow because of the absence of big rivers. The coastal plains in the east contain more fertile and irrigated lands. The south eastern portion is fertile. Ganjam economy is predominantly agrarian. Around 80 percentage of the population depends on agriculture and allied activities. The long sea and Chilika coast line is a source of rich marine products and lime shells. Ganjam is a major salt producing district in the state.

KVK serves as the knowledge hub and resource centre of agricultural technologies for the farmers of the district. It operates as per mandates of ICAR for the upliftment of socio-economic condition of the farming community. Ganjam-II is the 2ndKrishi Vigyan Kendra of Ganjam district and lies between 19^{0}4' to 20^{0}17' Latitude and 84^{0}7' to 85^{0}12' Longitude.

2.0 MANDATE

Assessment, refinement and demonstration of proven technologies/products under different 'micro farming' situations.

3.0 K.V.K ACTIVITIES

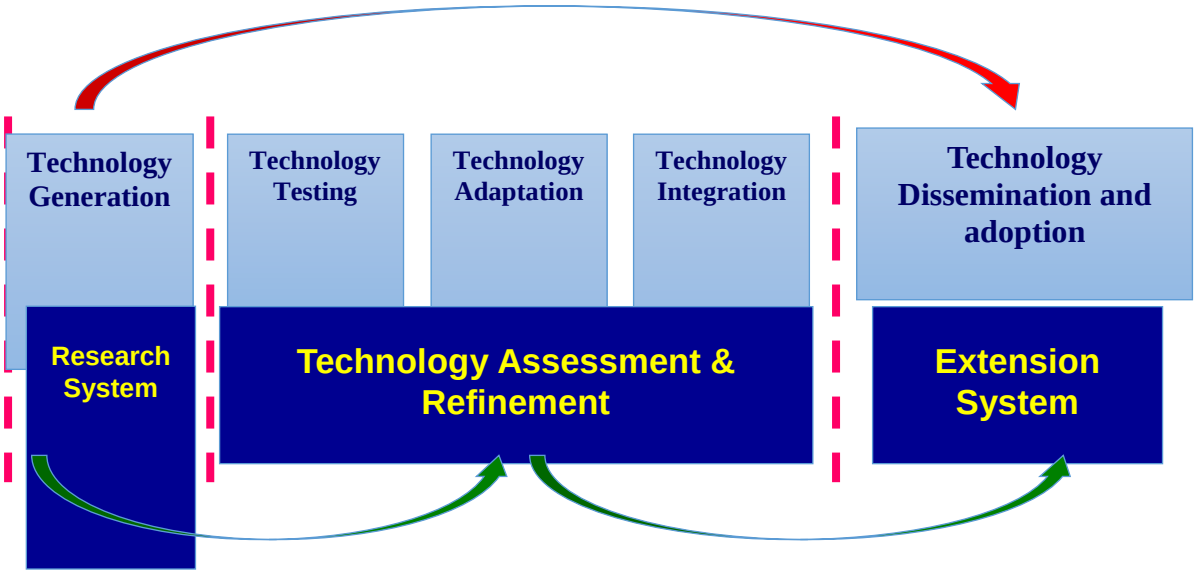
The specific activities to carry out this mandate are:

- Conducting on-farm testing to identify the location specificity of agricultural technologies under various farming systems
- Organizing frontline demonstrations to establish its production potentials of various technologies on the farmers' fields
- Conducting need based training of farmers to update their knowledge and skills in modern agricultural technologies
- Conducting training of extension personnel to orient them in the frontier areas of technology development
- Work as knowledge and resource centre of agricultural technology for supporting initiatives of public, private and voluntary sector for improving the agricultural economy of the district
- In addition, in order to speed up the process of dissemination of technology, a large number of various extension activities and production of seeds and planting materials, livestock, poultry and fisheries breeds and various bio-products are taken up by the KVKs.

4.0 Uniqueness……

- Creation of valuable resources in terms of manpower and assets
- Confirmation of technologies to suit local specificity
- Showcasing the frontier technologies
- Capacity building among stakeholders
- Front runner in technological application, information and inputs
- Participatory approaches in planning, implementing, executing & evaluation

Uptake pathways for research output …….



5.0 ORGANISATIONAL SETUP AND STAFF POSITION

Organizational set up, as sanctioned by ICAR consists of one Programme Coordinator, who is being assisted by six Subject Matter Specialists (Crop Production, Plant protection, Soil science, Fishery science, Horticulture & Extension Education), one Programme Assistant, one Farm Manager , one Computer Programmer and six other office supporting staffs.

Sl. No	Name	Designation	Qualification	Date of joining
1	Dr Susmita Mohanty	Sr. Scientist and Head	Ph.D, Home Sc.	17.05.18
2	Sri Sasanka Lenka	Scientist (Agril.Extn.)	M.Sc. (Ag.), MBA (Agri.Busi.) PGDRD	04.07.2016
3	Sri Debasis Sarangi	Scientist (Soil Sc.)	M.Sc. (Ag.)	01.09.2012
4	Smt Sushree Choudhury	Scientist (Hort.)	M.Sc. (Ag.)	13.06.2012
5	Sri Sidhartha Sankar Das	Scientist (Fishery)	M.F.Sc	23.06.2012
6	Smt Kabita Mishra	Scientist (Agronomy)	M.Sc. (Ag.)	12.05.2015
7	Mrs Sandeep Mohanty	Scientist (Plant Protection)	M.Sc. (Pathology)	12.06.18
8	Sri Bhakti Ranjan Palai	Prog. Asst.(Comp.)	M.Tech (Comp. Sc)	18.06.2012
9	Sri Saubhagya Ranajan Das	Steno–cum-Comp. Operator	B.A	14.02.2014
10	Sri Simanchal Sahu	Driver-cum-Mechanic	B.A	04.07.2012
11	Sri Rabi Narayan Mohapatra	Driver-cum-Mechanic	12th	29.05.2018
12	Sri Bisia Pradhan	Peon-cum- Watchman	7th	07.10.2013
13	Sri Gajendra Pradhan	Peon-cum- Watchman	7th	14.07.2014

6.0 MODE OF ACTION

Before execution of any programme, survey is conducted in different potential villages by using PRA tools to know the socio-economic profile, problems and intervention action points selected for executing the programmes either through training, On-Farm Testing and Frontline Demonstration. After execution of works, impact study is conducted to know the changes in knowledge, skill and attitude, adoption of appropriate technology, increase in productivity, income and ultimately improvement in socio-economic status of farmers and village community.

7.0 DEMO UNITS DEVELOPED

To achieve the most important mandates of KVK, vocational training and campus farm units have been developed where the skill oriented trainings are imparted on the principle of **"Learning by doing" and "Seeing is believing".**

- Seed production units of Paddy
- Newly developed mango progeny orchard
- Medicinal plant unit
- Vermi-compost unit
- Fishery demo unit
- Crop cafeteria
- Nursery of vegetables

8.0 MAJOR BOTTLENECKS OF GANJAM DISTRICT

- Improper Nutrient Management in crops
- Poor Commercial Horticulture
- Low Productivity of Diary, Goatery, Poultry, Pisciculture
- Low family income
- Deforestation and less availability of fuel wood & fodder
- More infestation Weed
- Severe attack of crop diseases and pests
- Erratic rainfall
- Poor irrigation facility
- Poor availability of agri-inputs
- Lack of up to date farming and weather based information
- Poor risk bearing capacity of farmer
- Shortage of labour
- Seasonal Migration
- Small size of land holding
- Poor soil & water conservation measures
- Soil Acidity

9.0 THURST AREAS OF KVK

- Crop diversification
- Integrated Nutrient Management practices in crops
- Integrated Disease and Pest Management Practices in crops
- Improving productivity of horticultural crops
- Nutritional Garden
- Farm mechanization, post-harvest and soil and water conservation
- Agro-forestry
- Scientific management of Goatery, Fishery, Dairy
- Organic farming
- Value addition in seasonal vegetables and fruits
- Drudgery reduction & Farm mechanization in agriculture

10.0 BASIC INFORMATION OFGANJAM DISTRICT

Agro-climatic Zone	East and South East Coastal Plain Zone
Geographical Area	8,71,000 ha
Cultivated Area	4,06,000 ha
High Land	1,90,820 ha (47% of cultivated area)
Medium Land	1,13,680 ha (28% of cultivated area)
Low land	1,01,500 ha (25% of cultivated area)
Irrigation Potential	
*Kharif*Area Irrigated	3,13,038 ha
*Rabi*Area Irrigated	69,781 ha
Soil Type	Laterite soil, Black cotton soil, Red
Average annual rainfall	1276.2mm
Cropping Intensity	202 %
Major crops grown	Paddy, maize, ragi, greengram, blackgram, groundnut, vegetables, sugarcane, chilly, ginger, cotton etc.

SCIENTIFIC ADVISORY COMMITTEE (SAC)

As per the guidelines of Indian Council of Agricultural Research (ICAR), New Delhi and after obtaining the administrative approval of the Hon'ble Vice-Chancellor, Orissa University of Agriculture and Technology, the Scientific Advisory Committee has been formed. Hon'ble Vice-Chancellor, OUAT acts as the chairman and the Dean, Extension Education, OUAT, acts as the Co-chairman of the SAC committee. Zonal Project Director, Zone-VII, ICAR; Deputy Director of Agriculture, District Agriculture Officer, Horticulturist, Soil Conservation Officer, District Fishery Officer, Chief District Veterinary Officer, Lead Bank Manager, Director All India Radio; Director, Doordarshan; District Manager, OAIC; General Manager, DIC; District Social Welfare Officer, two progressive farmers, two progressive farm women and heads of two NGO are the esteemed members of the committee. Sr. Scientist and Head of K.V.K. acts as the member secretary of the committee and the Collector and District Magistrate of the District as invited chief guest. The main objective of the SAC meeting is to assess the activities of KVK achieved during last year and to finalize the action plan for the next year.

7th SAC RECOMMENDATION

Recommendation	Action taken
Emphasis should be given for use of biofertiliser, weed management in rice, maize etc, varietal evaluation and fodder production.	• Demonstration of herbicide (Bensulfuron methyl + pretilachlor (Londax power) @ 60+600g/ha at 3 DAT) in Rice has been taken up during Kharif 2018 • Assessment of integrated weed management in groundnut will be conducted during Rabi 2018-19 • Use of Biofertlizer in CFLD ,Greengram in Rabi 2018-19 (5kg/acre after 15 DAS) • Demonstration of ragi variety- Arjun in Kharif 2018 • Assessment of chilli varieties in Rabi 2018-19
Floriculture (Tuberose, Gladioli) and offseason vegetable cultivation and new systems of vegetable propagation like trails system should be popularised.	• Demonstration on Growth regulator (GA3) in Tuberose has been taken up in Kharif 2018 • Need based training on Scientific cultivation of ornamental flower is being taken up from time to time. • Under offseason cultivation varieties of Tomato and brinjal has been demonstrated. • Different type of trails system will be demonstrated in the KVK instructional farm
As per the suggestion of the CDVO, the Chairman suggested to conduct some trial on crop based IFS for better resource utilisation and additional income.	• Demonstration on pond based farming system with Animal + Horti. + Agri. components has been demonstrated
Bio-intensive based pest management practices in vegetables like brinjal, cabbage, tomato, okra and IPM on field crops like paddy and pigeon pea should be given priority.	• No of training has been conducted on Bio pest management practices • Assessment of IDM measures against *Phomopsis blight* in Brinjal has been taken in Kharif 2018 • Assessment of IPM against *Spodoptera litura* in Groundnut will be conducted during Rabi 2018-19

Impact study of the technology demonstrated by the KVK will be undertaken and the data on horizontal spread of different technology may be estimated.	• For APR we are documenting the impact of demonstration technologies and it is discussed during the Monthly R-E meeting at District level .
Existing marketing network has to be studied by one of the farmers' club representative and the benefit of information regarding this may be extended to the farmers to get proper price for their produce.	• Study on marketing network through value chain analysis has been conducted in general operation of FPO in Hinjilicut block in specific.
Value addition of locally available fruits, vegetables and oyster mushrooms should be taken up on entrepreneurship developing mode focusing on women and marginal farmers.	• Post harvest management and value addition as the major concern for income generation, Training and FLD has been conducted.
Backyard poultry should be promoted by introducing new breed and a brooding unit should be established by SHG in adopted village of KVK.	• KVK is coordinating with Line dept. for introduction of new breed (I.e Giriraja, Palishree, and Kadaknath) in the Backyard poultry
Steps to be taken for selection of appropriate variety in pisciculture including scientific feed management and water quality management for sustainability. Further beside value addition in marine fish, programmes with respect to gear and crafts management should be included in the Action plan and importance should be given for awareness about small indigenous fish species like mola, chela etc. By KVK.	• On farm feed management using locally available ingredients at a reduced cost [(Mustard Oil cake (35%), Sesamum Oil cake (35%), Mahua oil cake 20%, Maize powder (10%) & Vit-min premix (2%)] and Two no. of training • Introduction of new varieties of fish species - Assessment of incorporation of Amur carp in composite carp culture for maximizing fish production during Rabi 2018-19 • Water quality management : Plankton production through application sea weed extract and mineral mixture in nursery pond has been taken of through OFT and as well as training • Value addition by use of use of Calcium propionate [$Ca(C_2H_5COO)_2$] in preservation of salt dried fish has been demonstrated under FLD and training.

ACHIEVEMENTS OF THE MANDATORY ACTIVITIES (2017 to 2018 & Kharif 2018)

Intervention	**Target**			**Achievements**	**No of farmers**
	2017-18	**Kharif 2018**	**Total**		
OFT	12	5	17	15	169 + 60 = 229
FLD	20	10	30	28	110 + 70 = 180

Detail of On –Farm Testing

Crop/ Component	Technology Assessed	Technology option	Details of technologies	Yield (q/ha)	Cost of cultivation (Rs./ha)	Gross return (Rs/ha)	Net return (Rs./ha)	BC ratio
Ragi	Assessment of ragi variety	TO_1	Bhairabi- Duration of the variety is 105 days and the yield potential 23-24 q/ha, resistant to blast diseases	23.35	18738	30355	11617	1.61
		TO_2	Arjun- Duration of the variety is 110 days and the yield potential 23-25 q/ha, resistant to blast diseases	24.53	19095	31889	12794	1.67
Tuberose	Assessment of fungicides for management of leaf blight in tuberose	TO_1	Difenoconazole @ 0.1 % at the time of appearance (15 days interval) (It is a broad-spectrum systemic fungicide. It has preventive and curative action can be applied as a foliar spray or a soil-treatment prior to planting)	5.50	171248	490378	319130	2.86
		TO_2	Azoxystrobin @ 0.1% at the time of appearance (15 days interval) (it is a systemic fungicide, can be applied as a foliar spray or a soil-treatment prior to planting	6.25	179435	556250	376815	3.10
Tomato	Assessment of tomato varieties	TO_1	Tomato variety - Arka Samrat- Fruits oblate to high round, large (90-110 g), Deep red, firm fruits, Yields 80-85 t/ha. in 140 days	497	135328	447300	311972	3.3
		TO_2	Tomato variety: Arka Rakshak - Fruits square round, large (80-100 g), fruits Suitable for fresh market and processing. Yield 75-80 t/ha. in 140 days	515	132428	463500	331072	3.5
Blackgram	Assessment of biofertiliser in blackgram	TO_1	RDF+ Seed Treatment with biofertilizer (rhizobium and PSB @ 25g each/1kg of seed)	6.2	20800	37200	16400	1.79
		TO_2	Application of 75% RDF of N & P + Seed Treatment with biofertilizer (rhizobium and PSB @25g each/1kg of seed)+ 100% K	6.0	20600	36000	15400	1.74
Brinjal	Assessment of target yield equation in brinjal	TO_1	Fertilizer recommendation based on STCR target yield concept increases the yield by31.08%	312.2	117920	312200	194280	1.79
Mushroom	Assessment of management competitor moulds and diseases in straw mushroom	TO_1	Spraying of Streptocycline @0.01% during early bottom stage	1.3	70	156	86	2.2
		TO_2	Application of lime @ 2% during soaking of straw.	1.5	70	180	110	2.5

Fish -	Assessment of Seaweed extract on growth and survivability of IMC in grow-out culture system	TO_1	Application of SWE@ 1 Kg/Ac/month +Mineral Mixture@1kg/Ac/month	29.61	94800	237940	143060	2.51
		TO_2	Application of SWE@ 0.5 Kg/Ac/month+Mineral Mixture 1kg/Ac/month	18.28	93700	209900	116285	2.24
Fish	Assessment of shelf life of cured fish using Calcium Propionate [$Ca(C_2H_5COO)_2$]as preservative	TO_1	Dip treatment in saturated brine containing 3% $Ca(C_2H_5COO)_2$ for 30 minutes just after salting	-	4500	7500	3000	1.67
		TO_2	Sprinkling cured fish with 3% $Ca(C_2H_5COO)_2$] in refined salt	-	4430	7000	2500	1.58
-	Assessment of drudgery in hanging type grain cleaner	TO_1	Cleaning by metallic sieve	102.5 Average of WHR beats/min	7.57 Energy expenditure	26.32 Saving cardiac cost (%)	7.5 % of reduction of drudgery	13.37 % of increase efficiency
		TO_2	Cleaning by using hanging type grain cleaner	96.5 Average of WHR beats/min	6.64 Energy expenditure	20.59 Saving cardiac cost (%)	17.94 % of reduction of drudgery	60.66 % of increase efficiency
Chilli	Assessment of various channel for marketing rabi chilli	TO_1	Through middleman	1200/- per q 66.6% Comparative market price of Chilli (Market price)			66.6% Producers share in consumer price	
		TO_2	Through society/Rural Haat	1700/- per q			95%	
Kharif 2018								
Rice	Assessment of rice varieties tolerant to BPH/WBPH	TO_1	**TO1-DRR- 44-**Early duration, high yielding, long slender grain up to 110 cm tall and the average yield 4-5 t/ha with long slender grains. Drought tolerant and having resistant to BPH/WBPH	37.2	36098	52080	21342	1.44
		TO_2	**HASANTA-** Small bold grains, white kernel, straw colour hull. Moderately resistance to leaf folder, leaf blast, sheath blight & Bacterial leaf blast. Avg. yield-4.5 to 5 t/ha	41.7	38546	58380	23453	1.51

Marigold	Assessment of INM practices in African marigold	TO_1	Application of 100 % RDF ((100 kg N, 100 kg P2O5 and 100 kg K2O/ha) + azatobacter 5 kg/ha	104.6	63 No of flower/plant	28.57 % increase	305368	2.74
		TO_2	Application of 75 % RDF of NPK (75 kg N, 75 kg P2O5 and 75 kg K2O/ ha) + vermicompost 25 q/ ha + azatobacter 5 kg /ha	118.7	75	53.06	354158	2.87
Brinjal	Assessment of INM in brinjal	TO_1	Soil test based fertilizer (STBF	246.5	163.6 Fruit weight	17.3 % increase	180050	2.55
		TO_2	STBF+ Borax-10kg/ha+ Bio-fertilizer 4 kg each per ha (Azotobacter+ Azospirillum + PSB)	265.9	176.8	26.8	201380	2.71
Brinjal	Assessment of IDM measures against Phomopsis blight in Brinjal	TO_1	Application of lime @2q/ha, Seed treatment with Thiram + Carboxyn @ 2.5g/kg seed + alternate spraying of Metalaxyl + Mancozeb 72 WP @ 1kg/ha and Copper oxychloride @1.5 kg/ha	220	27% Percentage of infestation	330000	215000	2.86
		TO_2	Application of lime @2q/ha, Seed treatment with Thiram + Carboxyn @ 2.5g/kg seed + alternate spraying of Metalaxyl + Mancozeb 72 WP @ 1kg/ha and Clorothalonyl @ 1l/ha	265	24.3%	397500	267500	3.05
Fish	Assessment of Seaweed extract on growth and survivability of carp Fry in Nursery	TO_1	Application of SWE@ 1 Kg/Ac/month+ Mineral Mixture 1kg/Ac/month	89 cm length	30.00 %	204900	92970	1.83
		TO_2	Application of SWE@0.5Kg/Ac/month+Mineral Mixture 1kg/Ac /month	82 cm length	23.30	193000	84375	1.78

Details of FLD

Technology demonstrated	Name of Crop/ Enterprise	Name of Variety/ Technology/Enterprises	Crop- Area (ha)/Entrep - No.	Results (q/ha)		% increase in Yield
				FP (T_1)	RP (T_2)	
Kharif 2017 & Rabi 2017-18						
Demonstration of rice variety manaswini	Rice	Manaswini	1	38.5	46.80	21.7
Demonstration of weed management in rice.	Rice	-	1	32.5	38.5	18.4
Management of Early blight of Tomato	Tomato	Laxmi	1ha	261	350	34.09
Demonstration of brinjal variety- Arka annand	Brinjal	Arka annand	1ha	280.2	340.6	21.55%
Demonstration on pointed gourd var. Swarna Alaukik	Pointed gourd	Swarna Alaukik	1ha	175	225	28.57%
Management of Leaf Curl in Chilli	Chilli	Suryamukhi	1ha	78.3	93.4	19.28%
Demonstration on nutrient management in Hybrid rice	Hybrid rice	Rajalaxmi/Ajay	1 ha	48.45	61.80	27.5
Demonstration on application of Zn in rice	Rice	Swarna	1 ha	39.4	44.7	13.45
Demonstration on INM in groundnut	Groundnut	Devi	1 ha	18.6	24.2	30.1
Demonstration on application Boron in cabbage	Cabbage	Pride of India	1 ha	276.5	324.9	17.50
Demonstration of blended Ragi malt for income generation and nutrition securities	Ragi		-	30 Cost of cultivation	65 Cost of cultivation	Rs. 55 net income
Demonstration of Twin Wheel Hoe Weeder in Vegetable Cultivation	Vegetable			58 weeding	120 weeding	53.95 efficiency
Demonstration of Value addition of Chilli	Chilli		-	-	1kg	100
Demonstration of blue oyster mushroom for income generation	Mushroom		100 bed	1.8 kg	2.2 kg	22.22
Performance of java punti (*Puntius gonionatus*) in mixed carp culture in community pond	Fish	*IMC and Minor carp*	6 ha	23.45	27.20	156800 net return
Demonstration on composite carp culture in village community ponds	Fish	*Major Carps (Catla catla , Labeo rohita, Cirhinnus mrigala, Cyprinus carpio, Ctenopharyngodon idella)*	5	20.75	22.25	90200 net return

Performance of farm made feed from locally available ingredients in grow-out culture of carps	Fish	*IMC*	3	22.70	34.38	33.38
Demonstration on growth promoter Raafres AQ in increasing growth and survival of IMC in grow out culture	Fish	*IMC*	3	26.70	34.43	28.95
Kharif 2018						
Demonstration of ragi variety ARJUN	Ragi	ARJUN	1	12.2	18.6	52.4
Demonstration of weed management in rice	Rice	Pooja	1	35.2	41.3	17.33
Demonstration of Arka Microbial Consortium in brinjal	Brinjal	Akshita	1	244.0	283.04	16
Demonstration on Growth regulator (GA3) in tuberose	Tuberose	Calcutta Single	1	4.98	6.02	20.88
Demonstration of INM in Hybrid rice	Rice	Rajalaxmi	1	48.66	60.90	25.15
Demonstration on application of Zn in rice	Rice	Pooja	1	38.8	43.9	13.1
Demonstration on sheath blight in rice	Rice	pooja	2	33.2	41.3	24.3
Demonstration on gall midge in rice	Rice	Swarna	2	3.1	42.7	18.2
Demonstration on optimum species combination in mixed carp culture	Fish	-	2	Cont.		
Demonstration on pond based farming system	Fish	-	1	Cont.		

Frontline demonstration on cluster oilseed & pulse

Sl No.	Name of crop	Variety	Location Village/Block	Area (ha) / No.	No. of beneficiary
1	Greengram	IPM 02-14	Rajanapalli	20	50
2	Groundnut	K-6	Badakharida Giria	30	75
3	Sesamum	GT-10	Chandipadar Hugulapata	20	50

Crop	Intervention	FLD yield (q/ha)	Local yield (q/ha)	% increase in yield over local
Green gram	1.Seed inoculation with Rhizobium culture 2.weed management through application of Imazethapyr @ 300 ml /ac 3.Line sowing behind the plough, 4.Soil test based fertilizer application, 5.Plant protection chemical thiamethoxam@5gm/15 lt of water for control of sucking pests.	7.1	5.5	29 %
Groun dnut	1. Seed treatment with Vitavax power @2gm/kg of seed 2. Soil test based fertilizer application 3. Required Plant protection chemicals	23.7	18.5	28.10 %
Sesam um	Variety GT-10 -Seed treatment with Vitavax power @2gm/kg of seed -Soil test based fertiliser application -Micronutrient application -Plant protection chemicals	6.2	5.2	19.23 %

1. TRAININGS

Kharif 2017 & Rabi 2017-18

Type	Target			Achievement (Up to March 18)		
	No.	Duration (in Days)	No of Farmers	No.	Duration (in Days)	No of Farmers
Farmers & Farm Women	72	72	1800	62	62	1550
Rural Youths	12	24	180	10	20	150
In-Service Personnel	6	12	90	6	12	90
Vocational training	6	32	90	4	20	60
Total	**96**	**140**	**2160**	**82**	**114**	**1870**

Kharif-18

Type	Target			Achievement (Up to December 18)		
	No.	Duration (in Days)	Participants	No.	Duration (in Days)	Participants
Farmers & Farm Women	84	84	2100	55	55	1375
Rural Youths	12	24	180	10	20	150
In-Service Personnel	12	24	180	-	-	-
Vocational training	6	30	90	-	-	-
Total	114			65	75	1525

2. OTHER EXTENSION ACTIVITIES

Extension Activities	**Target**		**Achievement (Up to March 18)**	
	No	**Participants**	**No**	**Participants**
Field Days	15	450	8	400
Kisan Mela	2	2000	3	1200
Diagnostic visit	55	780	48	790
Group Meeting	5	125	12	390
Scientific Visit to farmers Fields	150	1200	110	1230
Farmers Visits	300	1000	245	960
Lecture Delivered by KVK Scientists	20	700	20	700
Exhibitions	6	Mass	2	Mass
Film Shows	2	100	1	Mass
Radio Programmes	12	Mass	6	Mass
TV Shows (News-18- Annadata & DD-Oriya-Palishri	6	Mass	39	Mass
SAC Meeting	1	40	01	40
Animal health camp	2	100	1	120
Soil Test Campaigns	4	50	3	178
KMA	52	20900	52	20900

3. Publication

Sl.No.	Item	No.	No. of copies printed
1	Book/ Booklet	6	3000
2	Leaflets	02	2000
3	Poster/Flex	18	18
4	News letter	2	2000
5	News paper Coverage	25	-
6	Popular Articles	10	5000
7	Technical bulletins	14	14

8	Technical report	06	30
9	Training material	06	12
10	Year planner	01	100
11	CDs/ DVDs	01	200
	Total	**91**	**12374**

4. REVOLVING FUND

(i) Achievement Paddy seed

KVK	Variety	Category	Area (ha)	Production (q)
Kharif 2017	Swarna Sub-1	FS	4.0	123.60 (After Processing)
Kharif 2018	Swarna Sub-1	FS	4.0	180 bags

(ii) Quality planting material production

Name of plant	Variety	No. produced
Papaya	Red lady	2000nos
Drumstick	PKM-1	1000nos
Tomato	Utkalraja	20000nos
Chilli	Utkalrashmi	20000
Capsicum	California wonder	2000

(iii) Publication

Sl.No.	Item	No.	No. of copies printed
1	Book/ Booklet	6	4000
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3	Poster/Flex	25	25
4	News letter	3	1500
5	News paper Coverage	27	-
6	Popular Articles	7	-
7	Technical bulletins	4	4
8	Technical report	12	60
9	Training material	4	-
10	Year planner	1	50
11	CDs/ DVDs	**6**	**12**
	Total	**97**	**6651**

ACTION PLAN (Rabi 2018-19)

1.0 ON FARM TESTING (OFT)

Thematic area	Title	Treatments	No. of farmers
IWM	Assessment of integrated weed management in groundnut	TO1 -Oxyflluorofen 200ml/ha + Hand weeding at 20 DAS TO2 : Imazethapyr (Di Namaz) 10% SL @ 750 ml/ha as post emergence spray + Intercultural operation at 45 DAS	7
varietal performance	Assessment of chilli varieties	TO1- *Arka meghana*, Plants medium tall (81.3 cm) & spreading 69.5 cm. fruit length (10.6 cm) with width of 1.2 cm. very early, taking 24 days for 50% flowering. fresh yield of 33.5 t/ ha and dry yield of 5 t/ ha in 140-150 days TO2- *Arka harita*, Plant height (1m) spreading (90cm.). fruits. medium long (10 cm) with width 1 cm. fresh yield 31 t/ hectare and dry yield 6 t/ ha in 150-160 days. fruits are dark green and turn red on ripe	7
INM	Assessment of sulphur application on yield enhancement of Sesame	TO1- STV NPK + 40 kg S /ha (Gypsum) TO2- STV NPK + 40 kg S /ha (Elemental Sulphur)	7
Drudgery Reduction	Assessment of groundnut decorticator for drudgery reduction	TO1- Shelling by Groundnut decorticator (Sitting Type) Sitting type groundnut decorticator is an oscillatory type device having cast iron shoes with projection. it consists frame, handle oscillating arm and sieve with oblong hole TO2- Shelling by Groundnut decorticator (Standing Type) Standing type groundnut decorticator is similar to sitting type groundnut decorticator and having long handle. Women operate in standing posture	7
Production and management	Assessment of incorporation of Amur carp in composite carp culture for maximizing fish production	TO1- Stocking ratio catla: rohu : mrigal :Amur carp : 30:40:20:10 TO2- Stocking ratio catla: rohu : mrigal :Amur carp : 30:40:15:15 T03- Stocking ratio catla: rohu : mrigal :Amur carp : 30:40:10:20	7
ICT	Assessment marketing channel of rabi chilli	TO1- Rural Haat TO2- Marketing through middlemen / Agent	50
IPM	Assessment of IPM against *Spodopteralitura* in Groundnut	TO-1- Installation bird perches@ 20-25nos./ha+ pheromone trap @ 20 nos./ha+ Alternate spraying of NSKE 5% & Indoxacarb 14.5 SL@ 500 ml/ha TO-2- Installation bird perches@ 20-25nos./ha+ pheromone trap @ 20 nos./ha+ Alternate spraying of NSKE 5% & Emmamectin benzoate 5SG @ 200g/ha	7

2.FRONT LINE DEMONSTRATION

Crop	Title	Technology	No. of demo	Area (ha)
Greengram	Demonstration of Seed inoculation of Green Gram with Molybdenum	Green gram seed should be treated with 3g sodium molybddate per 10 kg seed and inoculated with Rhizobium strain before sowing the crop	5	1ha
Sesamum	Demonstration of Integrated nutrient management in Sesamum	25% RDF through the FYM + 75% RDF of chemical fertilizers (30:20:20 kg/ha)	5	1ha
Tomato	Demonstration on tomato variety *Arka rakshak*	Cultivation of tomato variety- *Arka rakshak*	5	1 ha
Pointed gourd	Demonstration on integrated nutrient management in pointed gourd	Application of fertilizer in an integrated manner. (Lime as PMS @ 2.5 t/ha + biofertiliser(azotobacter+azospirillum+PSB 4kg each per ha) + 75% RDF(90:60:60kg NPK/ha)	5	0.2 ha
Groundnut	Demonstration on INM in groundnut	Application STV based NPK + FYM 2 t/ha + sulphur 40 kg /ha + boron as borax @ 10kg/ha as basal application	5	1ha
Greengram	Demonstration on INM in greengram	RDF+Rhizobium@20g/kg of seed+ 2% soluble fertliser19:19:19 as foliar spray at 30 DAS	5	1ha
Fish	Performance of farm made feed in grow-out carp culture	Feeding with farm made feed utilizing locally available ingredients [(Mustard Oil cake (35%), Sesamum Oil cake (35%), Mahua oil cake 20%, Maize powder (10%) & Vit-min premix (2%)] Feeding rate: 5-2% body wt.	5	1.4 ha
Fish	Demonstration on use ofCalcium propionate [$Ca(C_2H_5COO)_2$] in preservation of salt dried fish	Dip treatment of fish in saturated brine containing 3% $Ca(C_2H_5COO)_2$] for 30 minutes after salting	5	-
Greengram	Demonstration on Chemical Management of YMV in Greengram	Seed treatment with Imidacloprid /Thiamethoxam 70 WS @ 5gm/kg of seed, Installation of yellow sticky trap@20 nos. per acre, Application of Neem oil 0.15% or 1500 PPM @ 600 ml/ac 3 times at 15 days interval and need based Spraying of Thiamethoxam 25% WG@ 50gm/ac for Chemical Management of YMV in Greengram	5	2 ha
Chilli	Demonstration on sucking pest management in Chilli	Seed treatment with Imidachloropid, spraying neem based pesticides@2.5ml/lt water, installation of yellow sticky traps@25/ha and alternate spraying of Imidachloropid@3ml/lt of water and Dichlorovos 70% EC@0.7ml/lt.	5	2 ha

Enterprise

Enterprise	Season	Title	Technology	No. of demo	No. of animal/ area (ha)
Tomato	Rabi 2018-19	Demonstration of Value addition of Tomato	Value addition of tomato by preparing tomato puree	10	-
Poultry	Rabi 2018-19	Demonstration on Chhabro poultry bird	Chhabro dual purpose meat type bird, multicolor plumage,60days body weight 1.5kg ,easily adoptable to adverse climatic situations with egg laying capacity 150 nos/annum	10	100 birds

3.0 FRONT LINE DEMONSTRATIONS (OILSEEDS AND PULSES)
Rabi 2018-19

Name of the crop	Variety	Demonstrated area	No. of. Demo
Pulse			
Greengram	TARM-1	20 ha	50

4.0 TRAININGS:

Type	Target		
	No.	Duration in Days	Participants
Farmers & Farm Women	29	29	725
Rural Youths	2	4	30
In-Service Personnel	12	24	180
Vocational training	6	30	90
Total	49	87	1025

5.0 OTHER EXTENSION ACTIVITIES:

Extension Activities	Target		Achievement (Up to Nov 17)	
	No	Participants	No	Participants
Field Days	15	450	5	150
Kisan Mela	2	2000	2	600
Diagnostic visit	55	780	23	245
Group Meeting	5	125	03	75
Scientific Visit to farmers Fields	150	1200	59	470
Farmers Visits	300	200	78	
Lecture Delivers by KVK Scientists	20	700	-	-
Exhibitions	6	Mass	2	Mass
Film Shows	2	100	1	Mass
Radio Programmes	12	Mass	6	Mass
TV Shows	6	Mass	19	Mass

SAC Meeting	2	50	-	-
Animal health camp	2	100	-	-
Soil Test Campaigns	4	50	3	178
KMA	52	20900	36	20900

6.0 PLANTING MATERIALS

Name of the crop	Details of production		
	Variety	Type of Produce	Qty.
Papaya	Red lady	PM	2000nos
Drumstick	PKM-1	PM	2000nos
Tomato	Utkalraja	PM	20000nos
Chilli	Ukalrashmi	PM	20000
Capsicum	California wonder	PM	2000

7.0 MAJOR CONSTRAINTS

- No office vehicle
- Farm implements , Nine Teeth Harrow & MB Plough
- Section officer is required for accounts & establishment work.
- Administrative building and farmers' hostel are required.

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