# 14<sup>TH</sup> SCIENTIFC ADVISORY COMMITTEE MEETING



KRISHI VIGYAN KENDRA, GANJAM-II, BERHAMPUR



ODISHA UNIVERSITY OF AGRICULTURE & TECHNOLOGY BHUBANESWAR



#### **INTRODUCTION**

Krishi Vigyan Kendra, Ganjam-II, Berhampur was established by ICAR under OUAT officially in June 2012. It is operating now from Golanthara farm, block-Rangeilunda of Ganjam district since January 2019. This district is surrounded by Kandhamal district in the North-West, Nayagarh in the North, Khurda in the North-East, Gajapati district in the West and the 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 lie between the Eastern Ghats and the Bay of Bengal. Since the hills are close to the sea, the rivers flowing from the 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 southeastern portion is most fertile. Ganjam's economy is predominantly agrarian. Around 80 percent of the population depends on agriculture and allied activities. The long sea and Chilika's coast line is a source of rich marine products and lime shells. Ganjam is a major salt-producing district of the state. KVK serves as the knowledge hub and resource center 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. KVK, Ganjam-I was established during 1986 in the South East Hill agro-climatic zone. Being the most populated district of the state, another KVK at Berhampur under East and South East Coastal Plain Zone was envisaged. Thus, KVK, Ganjam-II is the 2<sup>nd</sup> Krishi Vigyan Kendra of Ganjam district, lies between 19<sup>0</sup>4' to 20<sup>0</sup>17' Latitude and 84<sup>0</sup>7' to 85<sup>0</sup>12' Longitude.

#### MANDATE

The mandate of KVK is **Technology Assessment and Demonstration** for its **Application** and **Capacity Development**.

#### **K.V.K. ACTIVITIES**

To implement the mandate effectively, the following activities are envisaged for each KVK

- 1. On-farm testing to assess the location specificity of agricultural technologies under various farming systems.
- 2. Frontline demonstrations to establish the production potential of technologies on the farmer's fields.
- 3. Capacity development of farmers and extension personnel to update their knowledge and skills on modern agricultural technologies.
- 4. To work as Knowledge and Resource Centre of agricultural technologies for supporting initiatives of the public, private and voluntary sector in improving the agricultural economy of the district.

5. Provide farm advisories using ICT and other media means on varied subjects of interest to farmers

In addition, KVKs produce quality technological products (seed, planting material, bio-agents, livestock) and make them available to farmers, organize frontline extension activities, identify and document selected farm innovations and converge with ongoing schemes and programs within the mandate of KVK.

#### THRUST AREAS OF KVK

- Increasing productivity of cereals, pulses and oilseed.
- crop diversification in upland area during Kharif .
- Increasing yield and quality of vegetables .
- Promoting organic farming
- Popularization of high valued crops
- Yield enhancement in aquaculture
- Streaming the functioning of the existing FPOs
- Providing suiting IGA of women SHG

#### **BASIC INFORMATION OFGANJAM DISTRICT**

Agro-climatic Zone	East and South East Coastal Plain Zone(Ganjam-II)	
	North Eastern Ghat Zone(Ganjam-I)	
Geographical Area	8,21,000 ha	
Cultivated Area	4,06,000 ha	
High Land	1,89,715 ha (47% of cultivated area)	
Medium Land	1,13,460 ha (28% of cultivated area)	
Low land	1,02,825 ha (25% of cultivated area)	
Irrigation Potential		
KharifArea Irrigated	3,02,109 ha	
RabiArea Irrigated	52,802 ha	
Soil Type	Laterite soil, Black cotton soil, Red	
Average annual rainfall	1276.2mm	
Cropping Intensity	202 %	
Major crops grown	Rice, ragi, greengram, blackgram, sesame, groundnut, vegetables, sugarcane, chilly, ginger, cotton, etc.	

#### **ADOPTED VILLAGES**

Village Name	Year of adoption	Block Name
Raijhol	2012	Kukudakhandi
Padripalli	2012	Kukudakhandi
Dighapada	2012	Hinjilikatu
Bhimpur	2013	Pursotampur
Balrampur	2013	Chhtrapur
Giria	2016	Hinjilikatu
Putipadar(ST)	2017	Rangeilunda
Jharapadar	2017	Ganjam

Rajanapalli	2017	Chhatrapur
Narayanpur(ST)	2019	Patrapur
Panada	2019	Chikit
Sanabiswanathpur	2020	Rangeilunda
Medinipur	2022	Kukudakhandi
Radhamohanpur	2023	Chikiti
Medinipur	2023	Kukudakhandi
Gokanpur	2023	Digapahandi
Bhejiput	2023	khalikote

#### **CROPPING SYSTEM**

Sl. No	Name of the block	Cropping system followed
1	Khalikote	Rice-oilseed/pulse, Rice-vegetable, Vegetable-vegetable
2	Ganjam	Rice-pulse/oilseed, Vegetable-vegetable,
3	Chatrapur	Rice-pulse/oilseed
4	Purushotampur	Rice-pulse/oilseed, Rice-vegetable, Vegetable-vegetable
5	Rangeilunda	Rice-pulse, Rice- vegetable, Vegetable-vegetable
6	Patrapur	Rice-pulse, Rice- vegetable, Rice-fallow
7	Chikiti	Rice-pulse, Rice-vegetable
8	Kukudakhandi	Rice-pulse, Rice-vegetable, Vegetable-vegetable
9	Hinjili	Rice-pulse/oilseed, Rice-vegetable, Vegetable-Vegetable
10	Digapahandi	Rice-pulse,
11	Sanakhemundi	Rice-pulse/vegetable- Sesame, Vegetable-vegetable

#### **FARMERS PROBLEMS**

- ▶ Natural calamities- Drought & Cyclone.
- > Poor irrigation facilities 41.5% (Moisture stress during Rabi pulses and oilseeds).
- Poor crop intensification in rice fallows
- > Severe infestation of diseases and pests in major crops
- Weed problem in major crops
- Improper Nutrient of management in crops
- ➢ Soil acidity- More than 65%.
- > Low productivity of crops, livestock and Pisciculture.
- Small size and fragmented land holding-0.92 ha.
- Lack of income generating avenues from farm women
   Non availability of assured marketing system for agricultural produces

#### **13<sup>TH</sup> SAC RECOMMENDATIONS**

As per the guidelines of the Indian Council of Agricultural Research (ICAR), New Delhi and after obtaining the administrative approval of the Hon'ble Vice-Chancellor, Odisha 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; Chief District Agriculture Officer, District Agriculture Officer, Dy. Director Horticulture, 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 male, 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. KVK always gave theutmost careto SAC recommendations during the formulation of the KVK action plan (Intervention framework) for the district context.

Sl. No	Recommendation	Action taken		
1.	To assess different new	➢ OFT on little millet (CV. Kalinga Suan -217 & OLM-		
	varieties of little millet in	208)has been taken during Kharif 2024		
	the OFT programme	<ul> <li>Villages covered- Tumba, S Badapur, Patrapur</li> </ul>		
	···· · · · · · · · · · · · · · · · · ·	Farmers covered- 10		
		Area-2 ha		
		➢ Training conducted- 2		
		➤ KMAs- 01		
2.	Ragi Variety Shreeratna	> FLD on Ragi( var. Shreeratna) has been taken up in		
	should be included in the	Kharif 2024		
	action plan.	Villages covered- Panada, Patrapur, Kusumi, Santrapur		
	1	Farmers covered- 20		
		> Area- 3 ha		
		Training conducted- 2		
		➢ Field day -1		
		> KMAs- 3		
3.	Drought and Flood	➤ 4 ha of flood resistant variety Swarna sub-1 has been		
	resistant rice variety	taken as seed production programme (FS) under		
	should be included in the	revolving fund		
	action plan.	➢ FLD on drought tolerant rice variety Swarna shreya		
		has been taken in Kharif programme		
		<ul> <li>Villages covered- Radhamohanpur, Kusumi, Bhejiput</li> </ul>		
		➢ No of farmers covered: 30		
		➢ Area covered- 3.8 ha		
		➢ Group discussion conducted- 2		

		Field Day-1
		➢ KMAs- 6
4.	Micro irrigation and crop diversification should be given due priority with inclusion more non-rice crops	<ul> <li>Demonstration of micro-irrigation has made operational for the farmers in the newly developed fruit orchard of KVK under MIDH project</li> <li>FLD on IFS has been taken up comprising suitable crop and non-crop components and guiding more than 40 IFSs</li> <li>Villages covered- Govindanagar, Golanthara, Nandika, Ambagaon, Balipada, Rangailunda-T. Giria, Padripali, Kukudakhandi- Nistipur, Sumandi, Sukunda, Pallinabhapur, Hinjali, Sasanpadar, Dayapalli, Santoshpur</li> <li>No. of farmers covered: 32</li> <li>Area covered- 8.16 ha.</li> <li>Training conducted- 7</li> <li>KMAs- 4</li> </ul>
5.	Programmes on mulching and INM in chilli should be done in Purusottampur block	<ul> <li>FLD on INM in chilli has been taken up with scientific approaches, However mulching in Chilli will be conducted during Rabi 2024-25 in Pursottampur block.</li> <li>Villages covered- Handigarh, Jaleswarkhandi, Bhimpur</li> <li>No of farmers covered: 10</li> <li>Area covered- 01 ha</li> <li>Training conducted- 1</li> <li>KMAs- 1</li> </ul>
6.	Vermi-compost production should be popularised	<ul> <li>FLD on vermicomposting has already been taken under SCSP programme</li> <li>Villages covered- Sanabiswanathpur, Radhamohanpur, Kishorechandrapur, Kadarpali, Barjishpentha</li> <li>No of farmers covered: 10</li> <li>Training conducted- 2</li> <li>KMAs- 1</li> </ul>
7.	Programmes on crab cultivation should be taken extensively	<ul> <li>FLD on crab cultivation has been taken during Kharif 2024</li> <li>Villages covered- Sonapur, Kaitha, Surala</li> <li>No of farmers covered: 20</li> <li>Area covered- 3 ha</li> <li>Training conducted- 2</li> <li>KMAs- 3, Video - 1</li> <li>App developed: 1</li> </ul>

8.	Floriculture programmes	➢ FLD on floriculture has been taken up in SCSP
	should be taken by KVK	programme
	in its demonstration and	<ul> <li>Villages covered- Ralaba, Govindanagar, Golanthara,</li> </ul>
	training programme	Nandika, Jugudi, Chandanpur,
		➢ No of farmers covered: 20
		Area covered- 03 ha.
		Training conducted- 2
		➤ KMAs-4
9	KVK should prepare	> FLD on IFS has been taken up with duckery as a
	technical bulletins for	component in farmers field as well as in KVK
	crab farming especially on	<ul> <li>Villages covered- PPN pur, Satyanarayanpur, Jugudi,</li> </ul>
	Fattening method,	Rangeilunda, Badagumula
	Duckery to be added in	Training conducted- 2
	IFS.	Crab farming App developed : 1

#### ACHIEVEMENTS OF THE MANDATORY ACTIVITIES

## (Rabi 2023-24 to Kharif 2024)

## **Detail of On-Farm Testing**

Crop/	Technology Technol		p/ Technology Technolo Details of technologies	Yield	
Compone	Compone Assessed gy option			(q/ha)	
nt					
Rice	Assessment	FP	Harvesting of Rice in combine	0.43	
	of		harvester and burning of residue in		
	Decomposer		the field		
	for in-situ	TO	NRRI consortia @1 kg /ton of	0.47	
	residue	1	paddy straw $+ 5$ kg urea along with		
	management		0.5% jaggery solution + cow dung		
	in Rice		slurry in 100 lit of water for 1 ha.		
		TO	PUSA decomposer@ 4 capsules in	0.51	
		2	25 lit of water with 2 % jaggery		
			solution and pulse powder for 1 ha.		
Millet	Assessment	FP	Cultivation of local Suan	6.7	
	of Little	TO	Cultivation of little millet Var.	9.1	
	millet	1	OLM 208		
	varieties for	TO	Cultivation of little millet Kalinga	10.2	
	better yield	2	suan -217		
Rice	Assessment	FP	Rice variety- Lalat	40.2	
	of medium	TO	Rice variety- Kalinga Dhan-1203	47.3	
	varieties	TO <sub>2</sub>	Rice variety- Kalinga Dhan-1204	44.0	
	under rainfed	TO <sub>3</sub>	Rice variety- Kalinga Dhan-1205	41.7	
	condition		, , , , , , , , , , , , , , , , , , , ,		
Ridge	Assessment	FP	Application of N-P <sub>2</sub> O <sub>5</sub> -K <sub>2</sub> O	96.4	
gourd	of integrated		(100:50:30)		

	nutrient management in ridge gourd	TO <sub>1</sub> TO <sub>2</sub>	50%STBF (NPK) + 25%STBF N through vermicompost + Azotobacter @4kg/ha and PSB @4 kg/ha STBF (NPK) +FYM@10t/ha+ consortia of azotobacter , azosprillum and PSB @ 4 kg/ha	122.7 127.9	
Kewda	Assessment	FP	each Application of FYM @ 20 kg /pit/	25.21	
	of integrated		year and no application of fertilizer		
	nutrient	TO <sub>1</sub>	STBF + FYM @ 10 kg/ pit twice	29.11	
ma in 1 (Co	in Kewda (Contg)	TO <sub>2</sub>	STBF + FYM @ 10 kg/pit +inoculation of OUAT consortia bio-fertilisers to pre-limed( 5%) 300 Kg FYM/VC(1:25) incubated for 7 days at 30% moisture and applied in the rhizosphere on the day of planting	30.78	
Ridge gourd	Assessment fruit fly	FP	Application of Chloropyriphos @1lt/ha	98.4	
	management in Ridge gourd	management in Ridge gourd	TO	Soil application of Chloropyriphos 1.5 % dust @ 25kg/ha at 30 DAG,application of Jgerry (100gm),Cartap hydrochloride (2gm) & water (1 liter) poison bait,Cue lure @ 20/ha,periodical removal of damaged fruits.	122.1
		TO <sub>2</sub>	Food bait @ 20/ha,100ml(mixture of 1 kg cucumber pulp,50g gur,100ml cow urine,0.5lt of water soaked over night & Spinosad 45% SC @ 20ml/ha at 30,45,60 & 75 DAS.	127.3	
Rice	Assessment of different management practices for	FP	Foliar spray with (Chlorpyriphos + Cypermethrin) 1 l/ha @ or Profenophos @11/ha	38.8	
	YSB and Leaf folder in Rice	TO	Foliar spray of Flubendiamide 20% WG @ 125 g/ha at the vegetative phase and at flowering stage	43.4	
		TO <sub>2</sub>	Foliar spray with Tetraniliprole 20SC @ 250 ml/ha at 25, 45 and 65 DAT	44.5	
		TO <sub>3</sub>	Soil application twice of (Cartap hydrochloride 7.5% + Emamectin benzoate 0.25% G) @ 7.5 kg/ha at 30 DAT and PI stage	45.9	

<b>T</b> <sup>1</sup>	DC						
Fish	Refinement	FP	Application of synthetic pyrethroids		24.75	<sup>a</sup> ±2.14	5
	on control of		like cypermethrin 10%			-	
	Argulosis in		EC/deltamethrin 2.8% EC				
	fish	TO	Ivermectin 2% w/w in feed @250	-	0 68	$^{bc}$ +2.1	5
		I	ppm & fed to the fishes for 4-5 days	4	27.00	±2.1	5
		TO	CIFRI-Argcure		21 10	b	-
		2	(DANAV/TANDAV) @ 40 ml / acre		31.19	$\pm 2.1.$	)
			meter depth, 3 times at interval of 7				
			days				
Fish	Assessment of	FP	Indiscriminate feeding of trash fish		210 <sup>a</sup>	±3.85	
	different wet	ТО	Feeding with Chicken Intestine		b		
	feeds on	101	recaing with chicken intestine		280	$\pm 2.62$	
	growth				1		
	performance	TO <sub>2</sub>	Feeding with low value fish		310	: ±2.55	
	of mud crab	_			010		
	Scylla serrata						
	during						
	fattening.						
Fish	Assessment of	FP	Staaking Vietnem kei @ 100 per m <sup>3</sup>	(	Cont	inuing	)
	economic		Stocking vietnam kor @ 100 per m			C	, , , , , , , , , , , , , , , , , , ,
	performance	ТО	Stocking of all male tilania				
	of different	101	stocking of an inale triapia				
	species in		fingerlings @ 100 per m (Technical				
	Biofloc		Bulletin (NFDB), 2018)				
	System	TO	Stocking of Singhi fingerlings @				
	(Continuing)	2	150 non m (Tashnisal Dullatin				
	(Continuing)		150 per m (Technical Bulletin				
			(NFDB), 2018)				
Marketing	Assessment of	FP	Traditional marketing in local	Price	at loca	al mark	et
strategies	suitable		market /Haat fetching lower return	Low	Med	l Higl	1 SD
On	marketing	TO	Sell to local traders at the farm gate	11	13	6	2.94
sweetcorn	strategies for	TO	Fixing a banner at suitable place,	9	6	15	3.74
	better marketing of	2	preferably at main road indicating	Trad	ers pri	ce	
	high value		the place of production, mentioning	Low	Med	High	I SD
	crops		the special quality of the produce	13	10	7	2.45
	crops		(Fresh / sweetness / organic etc.)	6	15	9	3.74
			with catchy captions and picture to	Gate	sell pr	ice	
			attract the costumers	Low	Med	High	SD
				Q	1/	7	2 9/
				5	8	17	5 10
					<u> </u>	1.1	5.10
				Quar	ntity sc	au	
				Low	Med	High	SD
				14	10	6	3.63
				4	10	16	4.90

## **Details of Front Line Demonstration**

Sl No	Technology		Detail of Technology	Results
	demonstrated	ED		(q/na)
1	Demonstration on weed management	FP	Hand weeding at 40 -45 DAS	13.3
	in maize	RP	Post-emergence application of tembotrione 34.4% SC @ 100 g/ha at 20 DAS (4-5 leaf stage)	3.3
2	Demonstration of foliar nutrition on mung bean	FP	Basal application of 15: 40:0 NPK kg/ha.	39.3
	productivity	RP	Use of NPK (19:19:19) along with application of Boron (20%) @ 2.5 g/ litre of water at flower initiation	47.6
3	Demonstration on	FP	Ragi variety: Budha mandua	13.8
High yielding millet variety- Shreeratna.	RP	Ragi variety: Shreeratna (OEB- 601),Duration-117 days, Average Yield-23.5q/ha, semi-dwarf, light brown colour seed, Resistant to pest and disease like Brown spot, stem borer, aphids, and Grasshopper.	18.2	
4	Demonstration on weed management	FP	Hand weeding at 30 DA	41.9
	in transplanted Rice	RP	Pre-emergence application of pretilachlor 6% + bensulfuron methyl 0.6 % GR( Ready mix) 600g/ha at 3 DAT fb post emergence application of Bispyribac Sodium 10 EC 25g/ha at 20 DAT	47.6
5	Demonstration on integrated nutrient management in	FP	Application of NPK fertilizers only (80:40:40 kg N: P <sub>2</sub> O <sub>5</sub> :K <sub>2</sub> O /ha)	119.6
	chilli	RP	Use of STBF NPK, Nitrogen to be applied in 3 split doses, Soil application of Azospirillum @ 5kg/ha should be mixed with 100 kg FYM	151.8
6	Demonstration on integrated nutrient management in betel	FP	Applicationof $N-P_2O_5-K_2O$ (100:50:50)+MustardOil(MOC)@ 3 q /ha	3.56
	vine	RP	STBF (50%) +MOC @ 1.5 t/ha + Vermicompost (VC) @ 10 t/ha + consortia of azotobacter, azosprillum	4.71

			and PSB @ 4 kg/ha inoculated to 300kg VC, mixed with 15 kg lime incubated at 30 % moisture for a week and applied in the rhizosphere.	
7	Demonstration on integrated nutrient management on	FP	Application of chemical fertilizer NPK(200:200:200g/plant)+FYM@1kg/plant	151.8
	growth and yield of papaya	RP	75% RDF + vermi-compost @ 4 t/ha + Azotobacter@4kg/ha + PSM@4 kg/ha	146.5
8	Demonstration on IPM-Aphid	FP	Spraying of Imidacloprid@ 200ml/ha	89.2
	management in Marigold	RP	Application of neemcake @2.5q/ha at the time of planting, Installation of Yellow sticky trap @ 50/ha & foliar spraying of Flonicamide 50%WG @ 200gm/ha twice at 15 days interval.	122.4
9	Demonstration on chemical	FP	ApplicationofChloropyriphos@1lt/ha	170
	management of fruit borer in pointed gourd	RP	Application of Neemazole @5ml/lt at 15 days interval upto flowering,need base application of Flubendiamide 39.35%M/MS.c @ 125ml/ha and Chlorotraniliprole 18.5% W/WS.c @150ml/ha twice after 15 days interval.	242
10	Demonstration of IDM practices for	FP	Spraying of Carbandazim@ 1kg/ha	122.4
	Die back management in Chilli	RP	Seed treatment with <i>T.viridae</i> @ 2.5g/ kg of seed and application of Pyraclostrobin 20 WG @ 1gm/lt of water from initial disease appearance at 10 days interval	160.2
11	Demonstration on integrated	FP	Spraying of Imidachloprid@ 200ml/ha	Contg
	management of thrips and mite in Chilli	RP	Soil application of neem cake @ 2.5 q/ha, installation of blue sticky traps @ 50 nos/ha, application of Difenthiuron 50WP + Spiromesifen 240 SC @ 500 ml/ha at 10 days interval starting from 30 DAT	
12	Demonstration of Fall Armyworm	FP	Spraying of Chloropyriphos @ 1lt/ha	40.6
	management practices in Maize	RP	• First Window (seedling to early whorl stage): spray 5% NSKE or	48.1

			<ul> <li>Azadirachtin 1500 ppm @ 5 ml/l of water,</li> <li>Second window (mid whorl to late whorl stage): To manage 2<sup>nd</sup> and 3<sup>rd</sup> instar larvae at 10-20% damage spray Spinetoram 11.7% SC @ 0.5 ml/l of water</li> <li>Poison baiting: Poison baiting is recommended for late instar larvae of second window. Keep the mixture of 10 kg rice bran + 2 kg jaggery with 2-3 litres of water for 24 hours to ferment. Add 100g Thiodicarb just half an hour before application in the field. The bait should be applied into the leaf whorl of the plants. Hand</li> </ul>	
13	Demonstration on use of Probiotic for enhanced pond productivity	FP RP	Alternative application of both soil and water probiotic @1kg or lt/Ac at	25.28
14	Demonstration of strengthening of pond based IFS	FP RP	Un-utilized or Under-utilized farm pond bund area Fish-Horticulture-Livestock integrated farming	Yield q/haFishVegetablePoultry $28.20$ $2.1$ q- $320$ $1250$
15	Demonstration on Polyculture of CIFA-GI Scampi with Carps (Continuing)	FP RP	Culture of IMC only (SD @ 7500 nos Fingerlings/ha) in few cases stocking of wild collected Scampi Seed Stocking of CIFA-GI Scampi PL@10,000/ha along with carps@6000/ha (Catla@3000 Nos, Rohu@2000 Nos, Mrigal@500 Nos and Grass carp@500 Nos)	31.70 3.8 q Kg no Cont
16	Demonstration on transfer of technology through harnessing human values in agriculture	FP RP	Progressive farmers under govt. demonstration Progressive farmers designated by an organization as per the domain of specialization serves as an ambassador of change in the process of technology transfer. (Farmer scientist, farmer professor, farm captain, blue farmer of the district, mushroom lady etc.)	Observation         Farmers Practice practice         Demonstrated Practice           (I-3 scole)         MS         Rank         MS         Rank           Dissemination of bissemination of technology         1.21         IV         1.88         V           Horizontal spread         1.24         V         1.88         V           Technology Adoption         1.23         VI         1.49         VI           Increase social         1.75         II         2.14         II           Increase social         1.75         II         2.05         III           Treated as resource         1.74         III         2.32         I

## Training

Туре	Achievement						
	No.	Duration (in Days)	No of Farmers				
Farmers & Farm Women	54	54	1620				
Rural Youths	16	32	240				
In-Service Personnel	10	10	200				
Total	80	96	2060				

#### **Other Extension Activities**

Extension Activities	Achievement			
	No	Participants		
Field Days	10	300		
Kisan Mela	3	mass		
Diagnostic visit	78	1120		
Group Meeting	6	150		
Scientific Visit to farmers Fields	140	1052		
Lecture Delivered by KVK Scientists	16	500		
Exhibitions	3	Mass		
Film Shows	5	Mass		
Radio Programmes	15	Mass		
TV Shows	08	Mass		
KMAs(Portal + Kisan Sarathi)	62	34200		
Soil Testing Campaigns	04	100		
Soil sample testing	545	1240		
Celebration Day	15	1850		

#### Publication

Sl.No	Item	No.	No. of copies printed
1	Book/ Booklet	3	1500
2	Leaflets	3	1500
3	Poster/Flex	20	20
4	News letter	2	1000
5	News paper Coverage	15	-

6	Popular Articles	8	4000
7	Technical bulletins	15	15
8	Technical report	12	24
9	Training material	05	-
10	CDs/ DVDs	01	10

# **Revolving Fund**

## (i) Achievement Paddy seed

Crop	Variety	Class	Area (ha)		Production (q)	
			Target	Achievement	Unprocessed	Processed
Rice	Swarna Sub-1	FS	5.00	5.00	95.00	88.00
Dhanicha	-	TL	3.00	3.00	5.08	4.20

# (ii) Quality planting material production

Name of crop	Variety	No. produced Achievement ( No.)
Drumstick	ODC-3	1670
Рарауа	Red Lady	1520
Tomato	Arka samrat	30,000
Chilli	Royal Bullet	5,000
Marigold	Bidhan Marigold -2	25,000
Brinjal	Akshita	20,000
Onion	Agri found Light red	30000

Other materials					
Name of item	Quantity/No.				
Vermi-compost	20.20 g				
Earthworm(Eisenia Foetida)	8 kg				
Fish	1.50 q				
Ornamental fish	200 pairs				
Yearling	3.00 q				
Fingerlings	40000 nos				
Honey	6 kg				
Poultry (21 days)	500 nos				

# ACTION PLAN 2025-26

## **ON-FARM TESTING (OFT)**

Sl.	Crop	Technology	Deta	ils of technologies	Observation
No.		Assessed			Parameter
1	Rice	Assessment of	FP	Rice variety-Lalat	Effective tillers $/m^2$
		medium duration	TO <sub>1</sub>	Rice Variety: Kalinga Dhan-1203	grains/ panicles, test
		rice varieties	TO <sub>2</sub>	Rice Variety: Kalinga Dhan-1204	weight, yield,
		condition	TO <sub>3</sub>	Rice Variety: Kalinga Dhan-1205	economics
		(Year-II)			
2	Cotton	Assessment of	FP	HW at 30 DAS	Weed count ,WCE,
		weed	ТО		Cotton yield, cost
		management	10	Application of Pyrithiabac addium $6\% \pm 0$ with a first the second seco	saving in weeding,
		practices in cotton		500ml/ha at 20 DAS as post	economics.
				emergence spray.	
			TO <sub>2</sub>	Pre- emergence application of	
			_	pendimethaline@ 3300 ml /ha and	
				post emergence application of	
				Quizalfop-ethyl @ 1000ml/ha at 20	
3	Kewda	Assessment of	FP	DAS. Application of FYM @ 20 kg /pit/	
5	ixe w du	integrated nutrient	11	year and no application of fertilizer	
		management in	TO <sub>1</sub>	STD(NPK) + FYM @ 10 kg/ pit	
		Kewda (Year-II)	1	twice,	
					No. of flower/plant,
					flower, soil testing
			TO <sub>2</sub>	STD(NPK) + FYM @ 10 kg/pit	values.
				twice +inoculation of OUAT	
				limed( 5%) 300 kg FYM/VC(1:25)	
				incubated for 7 days at 30% moisture	
				and applied in the rhizosphere on the	
				day of planting	
			TP	(RDF=50:25:25 g NPK/plant)	
4	Sesame	Assessment of	FP	N: $P_2O_5$ : $K_2O(a)$ 20:20:0	Vield plant height
		and sulphur in	TO <sub>1</sub>	STD(NPK) + Boron@ 0.5kg/ ha+	soil testing values
		sesame (Year-I)	ТО	sulphur @30kg/ha	, č
		()	102	SID(NPK) + Boron(@ 1.0 kg/ ha+	
				surprise wookg/iia	

5	Rice	Assessment of	FP	Foliar spray with (Chlorpyriphos +	DH%, WEH%, leaf
		different		Cypermethrin) 1 1/ha @ or	folder infestation %,
		management		Profenophos @11/ha	egg mass/ hill
		practices for YSB	TO <sub>1</sub>	Foliar spray of Flubendiamide 20%	
		Rice		WG @ 125 g/ha at the vegetative	
				phase and at flowering stage	
			TO <sub>2</sub>	Foliar spray with Tetraniliprole 20SC	
				@ 250 ml/ha at 25, 45 and 65 DAT	
			TO <sub>3</sub>	Soil application twice of (Cartap	
			_	hydrochloride 7.5% + Emamectin	
				benzoate 0.25% G) @ 7.5 kg/ha at 30	
				DAT and PI stage	
6	Brinjal	Assessment on	FP	Spraying of Thiamethoxam 25WG	No .of affected
		IPM modules for		@ 150 gm/ha .	plant/100m2
		management of sucking pests in	$TO_1$	Installation of Yellow sticky trap	
		Brinial (New)		(a)20/ha at 15 DAT, Alternate	
		j (= · · · · · )		spraying of Spiromestien 22.9 SC $@ 400 \text{ m}/\text{ha} \text{ and Neem oil } (300)$	
				(@, 400  min) and recent on (500 ppm) @ 2.5 1/ha at 15 days interval	
				from 30 DAT.	
			TO <sub>2</sub>	Installation of YST @ 20/ha at 15	
				DAT, alternate spraying of	
				(Spirotetramat 11.01 + Imidacloprid 11.01 SC) @ 500 ml/ba and Naam	
				(300  ppm) @ 2.5  l/ha at 15  days	
				interval from 30 DAT.	
7	Crab	Assessment of	FP	Indiscriminate feeding of trash fish	Average body
		wet feeds on	TO <sub>1</sub>	Feeding with Chicken waste (Viscera	weight (BW),
		growth		mass) @10-6 % Body weight	Carapace width
		performance of		(KUFOS, 2023)	(CW) & Weight gain
		mud crab (Scylla	TO <sub>2</sub>	Feeding with low value fish@10-6%	(WG), Survibility
		serrata) fattening	_	B wt. (CIBA, 2022)	(%), Yield (q/ha),
					B:C ratio, Salinity,
					рН, DO2,,
				Alternate application of Ivermectin	Hardness, Alkalinity
				2% (w/v and 2% w/w) in pond in 10	
				days interval	
8	Fish		FP	Stocking Vietnam koi @ 100 per m	
		Assessment of		storing from in the per m	ABW $(gm)$ , Survivobility $(0/)$
		economic	TO <sub>1</sub>	Tilania finanzia (h. 100 m.)	Viold Income D.C.
		performance of	1	Thapia Ingerlings (a) 100 per m	Patio
				(Technical Bulletin (NFDB, 2018)	ιταιιο

		different species in Biofloc system	TO <sub>2</sub>	Singhi fingerlings @ 150 per m <sup>3</sup> (Technical Bulletin (NFDB,2018)	
9	-	Assessment of suitable marketing strategies for better marketing of high value crops	FP TO <sub>1</sub> TO <sub>2</sub>	Sell of produce at local market/haat Sell to local traders at the farm gate Fixing a banner at suitable place, preferably at main road indicating the place of production, mentioning the special quality of the produce (Fresh / sweetness / organic etc.) with catchy captions and picture to attract the costumers	Quantity of produce, price at local market, traders price, gate sale price, Quantity sold by different methods, Feedback of customers on the banner, quality of the produce
10	-	Assessing efficacy of different channels to get appropriate technology from reliable sources	$\frac{\text{FP}}{\text{TO}_1}$ $\frac{\text{TO}_2}{\text{TO}_3}$	F-F extension Print media Mobile message from govt sources Blackboard technology	Timely Availability/ delivery of technology, suitability of technology, ease in handling, Complexity, cost of technology

## FRONT LINE DEMONSTRATION

Sl No.	Crop	Title		Technology	Observation
					Parameter
1	Little millet	Demonstration on little millet varieties Kalinga Suan 217(Converted to FLD from OFT)	FP RP	Local suan var. sana suan Little millet variety-Kalinga suan 217	Effective <sup>2</sup> , No of fingers per ear ,ear weight, no. of grains per ear, 1000 grain weight.
2	Finger millet	Demonstration on High yielding Finger millet variety-Shreeratna (OUAT Kalinga Finger Millet-1) ( Year-II)	FP RP	Ragi variety-Budha mandia Shreeratna (OUAT Kalinga Finger Millet-1)	Effective tillers/ m No of fingers per ear , no. of grains per ear, 1000 grain weight.
3	Toria		FP	M -27	

		Demonstration toria variety- Sushree ( Year-II)	RP	Toria (variety : Sushree)	No. of siliquae/ plant, no. of seeds/ siliquae, seed yield(kg/ha)
4	Groundnut	Demonstration on chemical weed management in groundnut (Year- II)	FP RP	Hand weeding at 20 -35 DAS Pre-emeregence application of pendimethaline 30% + Imazethapyr 2% @ 1kg/ha readymix fb post emergenct application of quizolfop-P- ethyl @ 50gm /ha at 20 DAS	Weeds per meter sq., Weed control efficiency, Yield q/ha.
5	Dragon fruit	Demonstration on Dragon fruit cultivation for income generation of farmers	FP RP	No Cultivation practices in waste land Cultivation of Dragon fruit in upland with pit size of 60x60x60 cm , Single pole system planting is done at 3X3 m distance. four plants in each pole, Vertical height of pole is 1.5m to 2m at which point they are allowed to branch and hang down	No. of fruits/plant, Fruit weight (g), yield(q/ha)
6	Ivy gourd	Demonstration of ivygourd for higher production	FP RP	Planting of locally available Varieties (chota turuda) Cultivation of ivy gourd variety Arka Neelachal Kunkhi, Planted with a spacing of 2 m x 2 m. Fruits are extra-long (8.39 cm), weighing around 15-20g, uniform, cylindrical with attractive stripes .high yield (20-25 t/ha)	No of fruits/plant, Fruit wt (g), Yield (q/ha)
7	Ridge gourd	Demonstration on integrated nutrient management in ridge gourd	FP RP	Application of N-P <sub>2</sub> O <sub>5</sub> -K <sub>2</sub> O (100:50:30) STBF (NPK) +FYM@10t/ha+ consortia of azotobacter , azosprillum and PSB @ 4 kg/ha each	Yield (q/ha), Fruit wt.(g), Fruit length(cm), B:C Ratio
8	Betel vine	Demonstration on integrated nutrient management in betel vine (Year- III)	FP RP	Application of $N-P_2O_5-K_2O_1(100:50:50) + Mustard OilCake (MOC) @ 3 q /haSTBF (50%) +MOC @ 1.5t/ha + Vermicompost (VC) @10 t/ha + consortia ofazotobacter, azosprillum andPSB @ 4 kg/ha inoculated to300kg VC, mixed with 15 kg$	Vine length , No of leaves/ vine

				lime incubated at 30 %	
				moisture for a week and	
				applied in the rhizosphere,	
9	Tomato	Demonstration on application of lime for management of blossom end rot in tomato (Year-II)	FP RP	Application of NPK fertiliser (a)100:50:40 kg N: $P_2O_5:K_2O/ha$ (RDF=180:120:150) STD+ Soil application of lime (a)0.2LR	Fruit weight, yield, Soil test value before and after crop
10	Cauliflower	Demonstration on application of OUAT consortia biofertiliser in cauliflower (Year-II)	FP RP	Applicationofchemicalfertilizer $100:40:30$ N:P_2O_5K_2OKg/ha(RDF=120:60:60)STD+inoculationofOUATconsortia bio-fertilisers to pre-limed(5%)300 KgFYM/VC(1:25)incubated for7 days at 30% moistureandappliedin the rhizosphere onthe day of planting $100:40:30$	Fruit weight, yield, Soil test value before and after crop
	Maize	Demonstration of Fall Armyworm management practices in Maize	RP	<ul> <li>Spraying of Chloropyriphos <ul> <li>(a) 1lt/ha</li> <li>First Window (seedling to early whorl stage): spray 5% NSKE or Azadirachtin 1500 ppm (a) 5 ml/l of water</li> <li>Second window (mid whorl to late whorl stage): To nd rd rd rd rd</li> <li>manage 2 and 3 instar larvae at 10-20% damage spray Spinetoram 11.7% SC (a) 0.5 ml/l of water</li> <li>Poison baiting: Poison baiting is recommended for late instar larvae of second window. Keep the mixture of 10 kg rice bran + 2 kg jaggery with 2-3 litres of water for 24 hours to ferment. Add 100g Thiodicarb just half an hour before application in the field. The bait should be applied into the leaf whorl of the plants.</li> <li>Third Window (8 weeks after emergence to tasseling and post tasseling): Hand picking of the larvae is advisable.</li> </ul> </li> </ul>	% of pest infestation, No of insect/plant, No of plant infested /m <sup>2</sup>

12	Ridgegourd	Demonstration of fruit fly management in Ridgegourd	FP RP	Application of Chloropyriphos @1lt/ha. Food bait @ 20/ha ,100ml( mixture of 1kg cucumber pulp,50g gur,100ml cow urine, 0.5 1 of water soaked over night & diluted to 05 lt. & add 10 ml Indoxocarb.)Cue lure @ 25/ha, Spinosad 45%SC @ 20ml/ha at 30,45, 60 & 75 DAS	No .of insect/m2
13	Chilli	Demonstration on integrated management of thrips and mite in Chilli	FP RP	Spraying of Imidachloprid@ 200ml/ha Soil application of neem cake @ 2.5 q/ha, installation of blue sticky traps @ 50 nos/ha, application of Difenthiuron 50WP + Spiromesifen 240 SC @ 500 ml/ha at 10 days interval starting from 30 DAT	No .of affected plant/100m
14	Okra	Demonstration on IPM against Mealy bug in Okra	FP RP	Spraying of Imidacloprid@ 200ml/ha. Removal of grasses from the bunds, removal and destruction of affected plants, spraying of Fenitrothion 50 % EC @1.5 l/ha twice at 10 days interval.	No of infected plant/100m <sup>2</sup>
15	Fish	Demonstration on Polyculture of CIFA-GI Scampi/ Freshwater Prawn with Carps	FP RP	Culture of IMC only (SD @ 7500 nos. Fingerling/ha) in few cases stocking of wild Scampi Seed Stocking of CIFA-GI Scampi PL@10,000/ha along with carps@6000/ha (Catla@3000 Nos, Rohu@2000 Nos, Mrigal@500 Nos and Grass carp@500 Nos)	Survivability, Size, ABW, Yield
16	Fish Vegetable	Demonstration of strengthening of pond based IFS	FP RP	Un-utilized or Under-utilized farm pond bund area Fish-Horticulture-Livestock integrated farming. Stocking of yearlings of IMC @ 5000 nos/ha, planting of papaya, banana, seasonal vegetables, drumstick etc. on pond dykes + Duck@250 nos/ha	ABW, Size, Survivability, Yield, Income
17	Fish	Demonstration on Use of CIFRI	FP	Application of synthetic pyrethroids like cypermethrin	Disease incidence (%),

		Agrcure (Tandav/ DANAV) for controlling Argulus in carp culture	RP	<ul> <li>10% EC, Deltamethrin 2.8%</li> <li>EC or Formalin</li> <li>Application of CIFRI-Argcure (Tandav/Danav) @ 40 ml per acre-m, 3 times in 7 days interval</li> </ul>	Mortality (%), SGR, ABW (Harvest), BC ratio
18	Fish	Demonstration of FERTIFISH (Fermented Fish Waste solution) on growth/yield of Vegetable	FP RP	Commercial grade expensive growth promotor application Foliar spray of organic FFWS solution @ 5% in vegetables	Disease and pest infestation (%), yield, economics
19	-	Demonstration on transfer of technology through harnessing human values in agriculture	FP RP	Technology is often transferred through progressive farmers / change agents Progressive farmers designated by an organization as per the domain of specialization serves as an ambassador of change in the process of technology transfer. (Farmer scientist, farmer professor, farm captain, blue farmer of the district, mushroom lady etc.)	Transfer of specific tech (Ha/number), Horizontal spread

#### TRAINING

Category	No. of courses	No. of participants
Farmers and farm women	53	1570
Rural youth	16	225
Extension functionaries	10	200
Vocational training	6	90
SPONSORED	5	150
Total	90	2235

#### **OTHER EXTENSION ACTIVITIES**

Extension Activities	Achievement		
	No	Participants	
Field Days	15	450	
Kisan Mela	3	Mass	
Diagnostic visit	58	810	
Group Meeting	6	150	

Scientific Visit to farmers Fields	152	750
Farmers Visits	260	260
Lecture Delivered by KVK Scientists	15	500
Exhibitions	3	Mass
Film Shows	5	Mass
Radio Programmes	20	Mass
TV Shows	10	Mass
Soil Testing Campaigns	2	100
КМА	35	34200
Celebration Day	18	1700
Video Documentation	5	-
Soil testing	500	-

## Seed production

Сгор	Variety	Class	Area (ha)
Rice	Swarna Sub -1	FS	5
Greengram	Virat	TL	1
Black gram	PU-39	TL	2

# Quality Planting material production

Name	Details of production				
of the crop	Variety	Type of Produce	Qty.( Nos.)		
Papaya	Red lady	PM	1000		
Drumstick	PKM-1	РМ	500		
Tomato	Utkalraja	PM	30000		
Chilli	Ukalrashmi	PM	20000		
Brinjal	Akshita	PM	30000		
Marigold	Bidhan Marigold -2	PM	25000		

#### **Other materials/ Commodities**

Season	Name of item	Quantity/No.	Name of item	Quantity/No.
Kharif / Rabi	Vermi-compost	25 q	Paddy straw and oyster mushroom	1q
Kharif / Rabi	Earthworm( EiseniaFoetida)	20 kg	Poultry (21 days old)	1000 Nos
Kharif / Rabi	Fish	2 q	Honey	10 Kg
Kharif / Rabi	Ornamental fish	1000 pairs		
Kharif / Rabi	Yearling/Fingerling	3000 Kg		