

# ANNUAL ACTION PLAN

2024-2025



**KVK, JAJPUR**



**OUAT, BHUBANESWAR**

## BASIC INFORMATION OF THE DISTRICT

1	Geographical area	2,89,900 ha
2	Gross cropped area	2,50,602 ha
3	Total cultivated area	1,45,450 ha
	Upland	51754 ha (36%)
	Medium land	48036 ha (33%)
	Low land	45660 ha (31%)
4	Net sown area	1,37,000 ha
	Fallow land	5000 ha
	Waste land	4000 ha
5	Total Paddy area	1,17,000 ha
6	Cropping intensity	170 %
7	Soil type	Alluvial soil, red laterite soil, saline soil
8	No of GP	331
9	No of village	1859
	Total population	1826000
	SC population	3,73513
	ST population	125989
10	No of Agriculture laboures	81,907
11	No of non-Agriculturelaboures	2,45,421
12	Irrigation potential	
	-Kharif	47%
	- Rabi	27%
13	Fertilizer consumption	
	-Kharif	111.2 kg/ha
	- Rabi	56.86 kg/ha
	- Average	84.03 kg/ha
	- Humidity	62% -87 %
	- Temperature	
	- Min	14 <sup>0</sup> C
	- Max	43 <sup>0</sup> C
	- Annual Rain fall	1559.9 mm
	- No. of rainy day	73.2
	- PH range	4 to 7.40

## 2. Training programme to be Organized (April 2024 to March 2025)

### (a) Farmers and Farmwomen

Title of Training	No.	Duration	Venue On/Off	Tentative Date	No. of Participants								
					SC		ST		Other		Total		
					M	F	M	F	M	F	M	F	T
<b>Crop production</b>													
Integrated weed management in Jute	1	1	Off	June ,2024	2	-	-	-	23	-	25	-	25
Nursery management for quality rice seedling production	1	1	Off	July,2024	1	-	-	-	24	-	25	-	25
INM in rice	1	1	Off	July, 2024	1	-	-	-	24	-	25	-	25
IWM in maize	1	1	Off	Aug, 2024	-	-	-	-	25	-	25	-	25
Improved cultivation practice of millet crops (Sorghum & Pearl millet)	1	1	Off	Aug, 2024	-	-	-	-	25	-	25	-	25
Improved cultivation practice of millets (Finger millet & Little millet)	1	1	Off	Sept, 2024	-	-	-	-	25	-	25	-	25
Integrated Farming system for livelihood security	1	1	Off	Sept, 2024	-	-	-	-	25	-	25	-	25
Improved jute harvesting and retting for quality fiber production	1	1	Off	Oct, 2024	-	-	-	-	25	-	25	-	25
Cultivation of stress tolerant rice varieties to mitigate climate change	1	1	Off	Oct, 2024	1	-	-	-	24	-	25	-	25
INM in groundnut	1	1	Off	Nov, 2024	1	-	-	-	24	-	25	-	25

Integrated Nutrient Management in sugarcane	1	1	Off	Nov,2024	-	2	-	-	22	1	22	3	25
Intercropping for higher yield and sustainability	1	1	Off	Dec, 2024	-	-	-	-	25	-	25	-	25
IWM in sugarcane	1	1	Off	Dec, 2024	2	1	-	-	22	-	24	1	25
Integrated weed management in groundnut	1	1	Off	Jan, 2025	3	1	-	-	21	-	24	1	25
<b>Soil Science</b>													
Technique of soil sample collection & fertilizer management	1	1	Off	June, 2024	2	1	-	-	22	-	24	1	25
Use of nano fertilizer for improved crop performance	1	1	Off	July, 2024	1	1	-	-	23	-	24	1	25
INM in maize	1	1	Off	August, 2024	2	1	-	-	22	-	24	1	25
Micronutrient deficiency in rice	1	1	Off	Sept, 2024	3	-	-	-	21	1	24	1	25
Bio-fertilizer application in Vegetable	1	1	Off	Sept, 2024	1	-	-	-	23	1	24	1	25
Technique of soil sample collection & fertilizer management	1	1	Off	Oct, 2024	2	1	-	-	22	-	24	1	25
INM in brinjal	1	1	Off	Oct, 2024	-	-	-	-	23	2	23	2	25
INM in potato	1	1	Off	Nov, 2024	1	-	-	-	23	1	24	1	25
Nutrient management in groundnut	1	1	Off	Nov, 2024	-	-	-	-	23	2	23	2	25
Natural farming	1	1	Off	Dec, 2024	-	-	-	-	20	5	20	5	25
Method lime application in groundnut	1	1	Off	Dec, 2024	1	-	-	-	23	1	24	1	25
Management of acid soil	1	1	Off	Jan, 2025	-	-	-	-	20	5	20	5	25

Waste decomposer for decomposing paddy straw	1	1	Off	Jan, 2025	-	-	-	-	20	5	20	5	25
Foliar application of urea phosphate in greengram	1	1	Off	Feb, 2025	2	1	-	-	22	-	24	1	25
<b>Plant protection</b>													
IPM practices for control of disease in rice	1	1	Off	June, 2024	5	-	-	-	20	-	25	-	25
Management of hoppers in rice	1	1	Off	June, 2024	-	2	2	-	20	1	22	3	25
IPM on paddy pest	1	1	Off	July, 2024	-	2	-	-	22	1	22	3	25
IPM of sucking pest complex in papaya	1	1	Off	August, 2024	-	2	-	-	22	1	22	3	25
Management of sucking pest in okra	1	1	Off	August, 2024	4	-	-	-	20	1	24	1	25
IPM in maize FAW	1	1	Off	Sept, 2024	-	-	-	-	24	1	24	1	25
Major pest and disease of okra	1	1	Off	Sept, 2024	1	-	-	-	24	-	25	-	25
IPM of brinjal fruit & shoot borer in brinjal	1	1	Off	Oct, 2024	2	1	-	-	22	-	24	1	25
IDM of groundnut disease	1	1	Off	Nov, 2024	2	1	-	-	22	-	24	1	25
Management of sucking pest in chilli	1	1	Off	Nov, 2024	-	2	-	-	22	1	22	3	25
Management of leaf feeder in cabbage	1	1	Off	Dec, 2024	1	-	-	-	24	-	25	-	25
IDM in bitter gourd	1	1	Off	Dec, 2024	2	1	-	-	22	-	24	1	25
IPM of white fly in green gram	1	1	Off	Jan, 2025	-	-	-	-	25	-	25	-	25
Management of white fly in cucurbit	1	1	Off	Feb, 2025	-	-	-	-	25	-	25	-	25
<b>Horticulture</b>													

Cultivation techniques of kharif onion	1	1	Off	June, 2024	-	2	-	-	22	1	22	3	25
Scientific mgt. practices of turmeric and ginger as intercrop	1	1	Off	June, 2024	3	1	-	-	18	3	21	4	25
Profitable papaya Cultivation techniques	1	1	Off	July, 2024	5	-	-	-	20	-	25	-	25
Improved cultivation techniques of Brinjal and Okra	1	1	Off	July, 2024	1	2	-	-	22	-	23	2	25
Cultivation techniques of T.C Banana for higher income	1	1	Off	August, 2024	-	2	2	-	20	1	22	3	25
Production techniques of marigold& Tube rose	1	1	Off	August, 2024	-	2	-	-	22	1	22	3	25
Cultivation techniques of potato	1	1	Off	Sept, 2024	-	-	-	-	24	1	24	1	25
Important medicinal plants and their uses	1	1	Off	Sept, 2024	4	-	-	-	20	1	24	1	25
Cultivation techniques of cauliflower for increasing yield and quality	1	1	Off	Oct, 2024	1	2	1	1	20	-	22	3	25
Sorting, grading & packaging of vegetable	1	1	Off	Oct, 2024	-	2	-	-	22	1	22	3	25
Improved management practices in capsicum	1	1	Off	Nov, 2024	3	1	-	-	18	3	21	4	25
Pointed gourd cultivation for higher income	1	1	Off	Feb, 2025	3	1	-	-	18	3	21	4	25
Cultivation techniques of summer tomato	1	1	Off	Feb, 2025	3	2	2	1	12	5	17	8	25
Importance of organic manures in vegetable cultivation	1	1	Off	March, 2025	4	-	-	-	20	1	24	1	25
<b>Agril. Extension</b>													
Formation and management of farmer producer organization	1	1	Off	June, 2024	5	-	-	-	20	-	25	-	25
Organic farming and its role in sustainable	1	1	Off	July, 2024	2	-	-	-	23	-	25	-	25

development													
Climate resilient technology for sustainable development	1	1	Off	Aug, 2024	1	-	-	-	24	-	25	-	25
Management of SHGs	1	1	Off	Aug, 2024	-	3	-	-	-	22	-	25	25
Alternative livelihood options for resource poor farm family	1	1	Off	Sept, 2024	5	-	-	-	20	-	25	-	25
Role and importance of ITKs in agricultural development	1	1	Off	Sept, 2024	5	-	-	-	20	-	25	-	25
Role and importance of ICT in agricultural development	1	1	Off	Oct, 2024	3	-	-	-	22	-	25	-	25
Alternative livelihood options for resource poor farm family	1	1	Off	Oct, 2024	3	-	-	-	22	-	25	-	25
Role and importance of farm records in agricultural development	1	1	Off	Nov, 2024	5	-	-	-	20	-	25	-	25
Role and importance of ICT in agricultural development	1	1	Off	Nov, 2024	4	-	-	-	21	-	25	-	25
Role and importance of social media in agricultural development	1	1	Off	Dec, 2024	5	-	-	-	20	-	25	-	25
Income generation activities of SHGs	1	1	Off	Dec,2024	-	3	-	-	-	22	-	25	25
Scientific cultivation of green gram	1	1	Off	Jan, 2025	3	-	-	-	22	-	25	-	25
Formation and management of farmer producer organization	1	1	Off	Feb, 2025	5	-	-	-	20	-	25	-	25

**(b) Rural youths**

Themati c area	Title of Training	N o.	Durati on	Venu e  On/ Off	Tentati ve  Date	No. of Participants								
						SC		ST		Oth er		Total		
						M	F	M	F	M	F	M	F	T
<b>I. Crop production</b>														
ICM	Integrated Farming System for Livelihood security	1	3	On	Dec, 2024	3	-	-	-	1	-	1	-	1
										2		5		5
ICM	Seed production for higher income	1	3	On	Feb, 2025	-	-	-	-	1	-	1	-	1
										5		5		5
<b>II. Soil Sc.</b>														
ICM	Azolla production technique	1	3	On	Sept, 2024	3	2	-	-	8	2	1	4	1
												1		5
Soil fertility management	Method of vermicomposting	1	3	On	Dec, 2024	1	1	-	-	1	-	1	1	1
										3		4		5
<b>III. Plant Protection</b>														
IPM	Preparation of jibamruta and bijamruta	1	3	On	Sept, 2024	3	2	-	-	8	2	1	4	1
												1		5
IPM	Beekeeping for enhancing rural income	1	3	On	Dec, 2024	2	2	-	-	5	6	7	8	1
														5
<b>IV. Horticulture</b>														
Nursery raising	Improved method of seedling production technique	1	3	On	Sept, 2024	-	3	-	-	6	6	6	9	1
														5
Cultivation of flower	Commercial flower cultivation especially Exotic flower	1	3	On	Dec, 2024	2	2	-	-	5	6	7	8	1
														5
<b>V. Agril. Extn.</b>														
CBD	Entrepreneur	1	3	On	Dec,	2	-	-	-	1	-	1	-	1



	ship development				2024					3		5		5
CBD	Farming system approach	1	3	On	Feb.2025	2	-	-	-	13	-	15	-	15

**(b) Extension functionaries**

Thrust area/ Thematic area	Title of Training	No.	Duration	Venue	Tentative Date	No. of Participants								
						SC		ST		Other		Total		
						M	F	M	F	M	F	M	F	T
<b>I. Crop production</b>														
ICM	Natural farming for sustainable crop production	1	1	On	Nov,2024	-	4	-	-	-	11	-	15	15
ICM	Contingency planning for crop production under changing climate	1	1	On	Jan,2025	1	1	-	-	13	-	14	1	15
<b>II. Soil Sc.</b>														
Soil fertility management	Use of soil test kit (Mridaparikh yak)	1	1	On	Nov,2024	-	3	-	-	67	79	6	15	15
Soil fertility management	Management of problematic soil	1	1	On	Feb,2025	2	2	-	-	56	67	8	15	15
<b>III. Plant Protection</b>														
IPDM	Safe use of pesticide	1	1	On	Oct,2024	1	1	-	-	13	-	14	1	15

IPDM	Sustainable use of plant protection products	1	1	On	Dec, 2024	-	3	-	-	6	7	9	6	15
<b>IV. Horticulture</b>														
Natural Farming	Natural farming for horticultural crops	1	1	On	Nov,2024	-	3	-	-	6	6	6	9	15
Production technology	Exotic vegetable cultivation	1	1	On	Jan,2025	2	-	-	-	8	5	10	5	15
<b>V. Agril. Extn.</b>														
CBD	Market led extension	1	1	On	Nov, 2024	2	-	-	-	11	2	13	2	15
CBD	Climate smart agriculture	1	1	On	Jan, 2025	2	-	-	-	11	2	13	2	15

## ON-FARM TESTING

Sl. No	Title of OFT	Code	Season	Problem	No. of Trial	Technology option	Observation parameter	Source of tech.
<b>CROP PRODUCTION</b>								
1.	Assessment of different early duration rice varieties for upland rice ecosystem <b>(NEW)</b>	24OAG03(K)	Kharif, 2024	Identification of suitable short duration rice variety for -Rice-Groundnut-Vegetable cropping system	7	FP-Cultivation of Rice Var. Udayagiri TO1- Cultivation of Rice cv. -CR Dhan 808: TO2-Cultivation of Rice cv.-OUAT Kalinga Rice-5 (Nabanna)	Effective tillers/hill, grains/panicle, test weight, crop duration, yield, Economics	NRRI ,Cuttack ,2023 OUAT, 2022-23
2.	Assessment of non ragi millet crops for diversification of millet production system	24OAG07(K)	Kharif 2024-25	Non availability of suitable non ragi millet crop for diversification	7	FP-finger millet  TO1- Little millet  TO2-Pearl millet  TO3 –Sorghum  TO4 –Foxtail millet	Plant density and yield of individual crops, ragi equivalent yields, economics.	IIHR 2023
<b>HORTICULTURE</b>								
3.	Assessment of off-season Tomato during summer season	24OHO01(S)	Summer 2025	Low yield from summer tomato var. Chiranjibi	7	FP- Cultivation of tomato var. Chiranjibi  TO <sub>1</sub> -Arka Abhed (high yielding F1 hybrid , semi determinate, multiple disease resistance fruits are firm , 90-100g),suitable for summer, kharif,rabi 140-150 days,70-75 t/ha  TO <sub>2</sub> -ArkaRakshak (High yielding F1	No of fruit/plant , Wt. of each fruit (g), Yield (q/ha), B.C ratio	iihr.res.in 2023

						hybrid with triple disease resistance , fruits 90-100g 75-80t/ha, suitable round the year)		
4.	Assessment on INM packages for increasing yield of pointed gourd	24OHO04(R)	Rabi 2024-25	Low production from pointed ground cultivation due to inadequate fertilizer management	7	FP: Application of 150:60:60 kg NPK/ha without bio fertilizer and micronutrient application TO <sub>1</sub> - 150:60:60 kg NPK/ha + 50% Boron as basal+ 50% boron as foliar spray + FYM@ 10t/ha + consortia biofertilizer@ 12kg/ha. TO <sub>2</sub> - 150:60:60 kg NPK/ha + 50% Boron as basal+ 50% boron as foliar spray + FYM@ 10t/ha + consortia bio fertilizer @ 12kg/ha + lime@ 0.2 LR	Number of Fruits/plant (no), Fruit length(cm), Fruit weight(g), Yield (q/ha)	All India Network project on biodiversity and biofertilizer(AIN M, 2016)
5.	Assessment of climate resilient onion varieties	24OHO08(K)	Late Kharif 2024	Low profit from kharif onion cultivation	7	FP: Cultivation of onion var. N53 TO <sub>1</sub> : BhimaShakti,suitable for late kharif season maturity 130 days, DAT. Yield 45.9t/ha, storage life 5-6 months TO <sub>2</sub> : Bhima Light Red, suitable for late kharif ,bulb weight- 85g, maturity 105-110 days DAT, self-life 3 months. Yield 42.5 t/ha	Days to harvest, Bulb Diameter(cm ), Bulb weight(g), yield(q/ha)	Source: DOGR, 2022
6.	Assessment of Marigold varieties for higher yield and quality	24OHO11(R)	Rabi 2024-25	Low yield and profit from marigold var. Seracole	7	FP: Cultivation of var. Serakole TO1-Variety ArkaBhanu- F1 hybrid, attractive, compact flower shape and golden yellow colour with a shelf life of 7-8 days, yield potential-10-11 t/acre TO2-Variety ArkaAbhi- F1 hybrid of African marigold, attractive radiant lemon yellow color, large flowers 7-8 cm, good shelf life 6-8 days, high yield 10-11 t/acre	Days to 1 <sup>st</sup> flower bud appearance, Flowering Duration (days), Number of flowers / plant  Loose flower yield (kg/plant)	IIHR, Bangalore, 2020
<b>SOIL SCIENCE</b>								
7.	Assessment	23OAG09(K)	Kharif	Low yield due to	7	FP- 100 % N (as conventional urea	Initial and	TO <sub>1</sub> - OUAT,

	of nano urea liquid fertilizer in transplanted rice		2024	Improper use of urea fertilizer		application), P and K TO <sub>1</sub> - 50 % recommended N + 100 % P and K as basal application and two sprays Nano urea @ 0.4 % tillering and PI stage TO <sub>2</sub> - 75 % recommended N + 100 % P and K as basal application and two sprays Nano urea @ 0.4% at tillering and PI stage	post harvest soil test value No. of effective tillers /sq m, No. of filled grain per panicle, 1000 grain weight (gm)	(IFFCO project), 2020  TO <sub>2</sub> - AAU, Annual report 2019-20
8.	Assessment of nutrient management practice in groundnut	24OSS03(R)	Rabi 2024-25	Low yield due to Boron (73%) and S (40%) deficiency.	7	FP- Application of RDF only. TO <sub>1</sub> - Soil test dose+seed treatment with rhizobium@50g/kg seed +FYM@ 5t/ha + Boron@ 1kg/ha+ Sulphur@45kg/ha TO <sub>2</sub> - Application of soil tes dose along with Lime 0.2 LR, FYM@ 5t/ha, seed inoculation with rhizobium+Boron@1kg/ha+Sulphur @45 kg/ha..	No of pods/plant, Plant height, Yield, B:C ratio .	TO <sub>1</sub> - AICRP on Dry land Agriculture 2015.  TO <sub>2</sub> - Annual Report 2019, OUAT
<b>PLANT PROTECTION</b>								
9.	Assessment of Integrated management of sucking pest in okra  (NEW)	23OPP21(K)	Kharif, 2024	Sucking pest like aphid, white fly and jassids incidence in okra reduces the yield to a great extent	7	FP : Spraying of Thiamethoxam 25WG @ 250 g/ha TO <sub>1</sub> - Seed treatment with Imidacloprid 600 FS @ 5ml/kg of seed, Installation of Yellow Sticky trap @50/ha at 25 DAS, alternate spraying of Afidopyropen 5% DC @ 600 ml/ha and Neem oil 3000 PPM @ 1 l/ha starting from 30 DAS. TO <sub>2</sub> - Seed treatment with Imidacloprid 600 FS @ 5ml/kg of seed, Installation of Yellow Sticky trap @50/ha, Alternate Spraying of Tolfenpyrad 15% EC @ 1000 ml/ha and Neem oil @ 1 l/ha starting from 30 DAS.	Mean population of Jassid/ 3 leaves, Mean population of Aphid/ 3 leaves, Mean population of Whitefly / 3 leaves, % of YVMV incidence	TO <sub>1</sub> - GAU, Anand, 2022  TO <sub>2</sub> - RVSKVV, GWALIOR, 2021
10	Assessment of IPM	23OPP10(K/	Rabi 2024-	Low yield due to heavy fruit fly	7	FP- Spraying of Chlor +Cyper @1 lit/ha	fruit fly incidence %,	TO <sub>1</sub> - RRTTS,

	modules against fruit fly infesting bitter gourd	R)	25	incidence		TO <sub>1</sub> - Soil application of chlorpyrifos 1.5 % dust in the inter spaces @ 25 kg/ ha at 30 DAG + Placement and spot application of Jaggery (100g), cartap hydrochloride (2 g) & water (1 liter) poison bait + Installation of cue lure @ 20/ha + Periodic removal and destructions of damaged fruits. TO <sub>2</sub> - Food bait @ (20 baits/ ha, 100ml/ bait) (Mixture of 1kg cucumber fruit pulp +50g Gur + 100ml cow urine +0.5 lit water and kept for over night, diluted in 5 lit water and added 10 ml malathion) + Pheromone trap with Cue- lure @25 traps / ha installed at 20 DAS (Change of lure at 20 days interval) + foliar spray with Spinosad 45SC @ 20 ml/ ha at 30, 45, 60 and 75 DAS.	Vine growth, no of infested fruits /plant , fly /trap  Spread-& Intensity- 1500ha (2500ha) 65%	RANITAL-2018  TO <sub>2</sub> - RRTTS, Bhubaneswar-2023
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**AGRIL.EXTENSION**

11	Assessment of effectiveness of different extension methods to access information on different crop production	23OEE02(Y)	Kharif 2024	Poor accessibility to accurate and timely information on technical knowledge/advisory in different production system	90	FP: Farmers getting information from peer group, input dealers, extension functionaries, mass media and, KMA  TO <sub>1</sub> : FP + Short Video Lecture+ Focus Group discussion  TO <sub>2</sub> : FP + Using of " Xpert" App.	Timely Availability / delivery of technology, suitability of technology, ease in handling, retention and retrieval of information	
12	Assessment of	23OEE06(K)	Kharif	Yield loss due to poor accessibility	120	FP: Information from fellow farmers	Accuracy, timeliness,	

	effectiveness of various sources of information for pest management in rice <b>(NEW)</b>		2024	to accurate and timely information on technical knowledge for pest management in rice		TO <sub>1</sub> : Information from input dealers (Information to be collected through identified dealers)  TO <sub>2</sub> : Technological backstopping from first line extension workers Extension functionaries (Information through AAOs/KS/VAWs)  TO <sub>3</sub> :Technological backstopping from Front line extension workers (KVK/RRTTS/SAU/ICAR)	usability, reliability, accessibility, change in knowledge, skill and attitude	
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## FRONTLINE DEMONSTRATION

Sl. No	Title of FLD	Code	Season	Problem	No. of Demo	Farmers practice	Details of Technology	Observation parameter	Source of tech.
<b>CROP PRODUCTION</b>									
1.	Demonstration on Integrated Nutrient Management in scented rice <b>(NEW)</b>	24FAG06(K)	Kharif 2024	Low yield due to poor nutrient management	13	Low dose of NPK and FYM- 1 t/ha no use of micronutrient and Bio fertiliser	Recommended dose of fertilizer (60-30-30 kg NPK/ha + FYM 5 t/ha + Zn 5kg/ha+ S 20kg/ha + Azospirillum 5kg/ha + PSM 5kg/ha)	EBT/m <sup>2</sup> , panicle/length, No of granule/panicle  Test wt., yield, B:C: ratio	RRTTS, Bahawanipatna  OUAT 2015
2.	Demonstration of Chemical weed management in transplanted rice <b>(NEW)</b>	24FAG09(K)	Kharif 2024	Low yield due to heave weed infestation and unavailability of casual labours	13	Manual weeding at 30 DAT	Pre emergence application of Pretilachlor 50 EC @ 1500 ml/ha, fb Penoxulam 1.02 % + Cyhalofop butyl 5.1 % OD @ 2250 ml/ha @ 25 DAT	EBT/m <sup>2</sup> , panicle/length, No of granule/panicle  Test wt., yield, B:C: ratio	OUAT Annual Report 2020-21
3.	Demonstration on	24FAG24 (K)	Rabi	Low yield	13	Hand	Application of pre-	No of	RRTTS, 2011

	weed management in Groundnut  (NEW)		2024-2025	due to heavy weed infestation and more cost of production		weeding 20 DAS	emergence herbicide Oxyflourfen @0.05 a.i kg/ha at 0-3 DAS <i>fb</i> post emergence herbicide Imazethapyr 0.12 a.i kg/ha at 20 DAS	branches/plant, No of pods/plant, yield, B:C ratio	
4.	Demonstration retting of jute fibre	23FAG38(K/R)	Rabi 2024-25	Jute retting time is more than 15 days. Improper retting gives low quality of extracted Jute fibre	13	Retting of Jute fibre through traditional method. Keeping Jute bundles in stagnant water under submerged condition and manual method of stripping	Retting of jute fibre through use of CRIJAF sona @30 kg/ha by sprinkling over jute bundles and then manual stripping	Quality fiber recovery %, reduction in retting duration	OUAT, Annual report, 2016
<b>HORTICULTURE</b>									
5.	Demonstration on natural farming technology for tomato  (NEW)	24FHO01(R)	Rabi 2024-2025	Lack of natural farming package of practices for remunerative tomato cultivation	13	FP- Cultivation of tomato var. Priya with 120:80:50kg N:P:K per ha	RP-Cultivation of tomato with marigold as intercrop in the ratio of 1:5, maize as barrier crop. Straw mulching and irrigation in alternate channel. Application of Jibamruta (500 lit/ha) thrice at 15 days interval. Foliar spray of Nimastra(200l/ha)t	No of weeds/m <sup>2</sup> , No. of fruits/plant, Wt. of the fruit (gm), Yield(q/ha), B:C ratio	RRTTS, Ranital 2022-2023



							wice at 15 days interval		
6.	Demonstration on Arka vegetable special for higher yield & quality in cauliflower	24FHO05(R)	Rabi 2024-2025	Low curd weight and curd size	13	NPK @120:50:50 kg/ha +Foliar application of micronutrient ( 3ml./lit) at 30 DAT	RP -RDF +application of NutriviteArka vegetable special @5g/lit water + Soil application with 5 kg Arka Microbial consortium mixed with 500kg FYM/ha	Curd diameter, Curd weight (gm), Yield(q/ha), B:C ratio	IIHR, Bangalore 2016
7.	Demonstration of Okra variety Kashi Chaman  (NEW)	24FHO08(K/R)	Rabi 2024-2025	Low profit from Okra cultivation variety (Mahyco-10)	13	Cultivation of Okra var. (Mahyco-10)	RP-Demonstration of Okra variety KashiChaman Medium tall plants, dark green fruits 11-14 cm long, First flowering on 41 days after sowing, resistant to YVMV and OLECV, yield 150 - 160 q/ha in 45 to 100 days	Fruit length(cm), Fruit wt., No of Fruits/plant, Yield(q/ha), B:C ratio	ICAR-IIVR, Varanasi 2019
8.	Demonstration on turmeric as intercrop in mango orchard  (NEW)	24FHO22 (K)	Kharif 2024	Unutilization of interspace in mango orchard , Lesss profit from mono cropping	13	Mango Orchard without any intercropping	RP-Var. Roma, seeding rhizome @ 1500kg/ha spacing 60 x 30 cm, fertilizer dose 120:60:60 kg N:P:K per ha., Mango spacing 7mx7m, average yield of turmeric as intercrop 10-	No of fingers/plant, Fresh wt. of Rhizome plant(g),  Yield q/ha, Economics	CHES Bhubaneswar 2016

							15tonnes/ha		
9.	Demonstration on Polythene mulching in chilli for higher yield and profitability	24FHO13 (R)	Rabi 2024-2025	Low yield from chilli cultivation due to irregular water management and weed infestation	13	FP- Cultivation of chilli var. Utkal Ava without mulching with RDF 150-60-90 kg NPK/ha.	RP-Application of 30 micron plastic mulch at the time of transplanting in ridge and furrow system along with RDF 150-60-90 kg NPK/ha.	No of weeds/m <sup>2</sup> , No of fruits/plant, fruit yield/plant(g), Yield(q/ha), B:C ratio	PFDC,OUAT, Bhubaneswar 2017-18
10.	Demonstration on high yielding IVY gourd variety Arka Nilachal kunkhi	23FHO07 (K/R)	Rabi 2024-25	Low yield due to use of local variety	13	Local variety Mainshia kunduri	Arka Nilachal Kunkhi is a dual purpose variety with fruit weight of 23-25 gm. Each plant bears 800-850 fruit with yield potential of 18-20 kg per vine. Moderately tolerant to Anthracnose, downy mildew and fusarium wilt.	No. of fruits/plant, individual fruit wt. fruit yield/plant	CHES Bhubaneswar,20 05
<b>SOIL SCIENCE</b>									
11.	Demonstration on application of OUAT consortia in cauliflower (NEW)	24FSS12(R)	Rabi 2024-2025	Low yield due to imbalanced dose of fertilizer	13	Low yield due to imbalance use of manure and fertilizer	RP: STBF + inoculation of OUAT consortia biofertilizers to pre-limed(5%) 300 kg FYM/vermicompost (1:25)incubated for 7 days at 30% moisture and applied in the rhizosphere on the day of planting at 30% moisture and applied	No of fruits/plant, Fruit wt(g),Plant height.	AINP on soil bio density Biofertilizer-2018-2019,OUAT, BBSR

							in the rhizosphere on the day of planting.		
12.	Demonstration of Boron and Zinc management in maize (NEW)	24FSS03(K)	Khari f 2024	Poor plant growth and low cob weight due to low dose of fertilizer	13	Lower dose of chemical fertilizer 70:30:30 NPK kg/ha	Application of N:P:K:B:Zn @ 150:75:60:1:5 kg/ ha + Lime 0.1 LR + FYM @ 5 t ha	Plant height, cob length and weight, Grain wt.	RRTSS, Bhawanipatna, OUAT, 2017-18
13.	Demonstration on foliar application of urea phosphate in greengram.	23FAG23(R)	Rabi 2024- 25	Poor branching & low pod setting	13	Only basal (15:30:15)NP K kg/ha& no foliar application	75% N + 75% P & full dose of K + foliar spray of 2% Urea phosphate at 20 &35 DAS	No of branch/plant, No of pods/plant, No of grains/pod	RRTTSS Coastal Zone- 2017
14.	Demonstration on microbial inoculants for fast ex-situ decomposition of farm wastes	24FSS02(K/R)	Rabi 2024- 25		13	Harvesting of rice in combine harvester and burning of residue in the field	NRRI decomposer @ 1kg in 100lit of water with 100 lit urea solution and 10kg cowdung slurry for 1 ton paddy show	No of fruit/plant, Fruit weight(gm)	ICAR,IARI-2020
<b>PLANT PROTECTION</b>									
15.	Demonstration on management of major diseases of rice with non-chemical approach using bio-formulations (NEW)	24FPP07(K)	Kharif 2024	Excess use of chemicals leads to increase environmental pollution and loss in biodiversity	13	Spraying of fungicides to control disease in rice	Seed treatment with Beejamrit @ 10% in water by soaking overnight before sowing + soil amendment with Jeevamrit @ 100 l/ac before transplanting + spraying with Jeevamrit @ 10 % solution in water twice at 15 days interval starting from disease initiation	PDI (%), Cost of Intervention, Yield, ICBR and farmers' feedback	RRTTS, Ranital, OUAT, 2019
16.	Demonstration on management of Fall Army Worm ( <i>Spodopterafrugiperda</i> ) in maize	23FPP05(K)	Khari f 2024	Low yield due to Heavy incidence of FAW	13	Application of Profeno+ Cyper @ 2ml/lit	Seed treatment with (cyzapyr + thiamethoxam) @ 6 ml/ kg seed + Installation of bird perches up to 45 DAS + Foliar application of tetraniliprole @ 200 ml/	Plant and cob damage %,no of larvae/plant	RRTTS Ranital-2022

							ha at 30 DAS + Whorl application and field placement of Poison baits (10 kg rice bran + 2 kg jaggery+ 2-3 l of water+ 100 g thiodicarb) at 45 DAS		
17.	Demonstration on IPM strategies against tobacco caterpillar in Groundnut (NEW)	24FPP13(R)	Rabi 2024-2025	Heavy incidence of tobacco caterpillar in ground nut reduced yield	13	Application of Chloro + Cyper @2ml/lit	Installation of Pheromone traps @ 5 nos./ha for monitoring the pest + Fixation of bird perches @ 30 nos./ha for avian predation + sunflower as barrier trap crop + placement of poison baits (10 kg rice bran + 1 kg jaggery + 250 ml Lambda cyhalothrin) at 30 DAS + need based foliar application of (Indoxacarb 5.25% + Novaluron 4.5% SC) @ 750 ml/ha in the evening hours based on ETL	No. of infested plants/m <sup>2</sup> (%), Cost of intervention, Yield, ICBR and farmers' feedback	RRTTS, Ranital, 2020
18.	Demonstration on comb honey production technology in Asian Bee (NEW)	24FPP31(R)	Rabi 2024-2025	Low yield due to improper bee rearing	13	Rearing of Honey bee in wooden frame	Selection of ample bee foraging plants and identifying the honey flow season in a particular area for comb honey production, maintenance of young prolific queen with populous colony in a hive with ISI specification particularly w.r.t bee space, training and stimulating the bees to construct new natural combs, fixing new comb in comb honey production frame and fixing it with	Kg honey/box/annum, ICBR and farmers' feedback	AICRP on HB & P, OUAT, 2023

							wooden or plastic ISI specified frame size (208 X 65 X 23 mm), collection of comb honey frames when sealed cent per cent in super chamber. Removal of comb honey from wooden or plastic frames with no damage to combs.		
<b>AGRIL. EXTENSION</b>									
19.	Demonstration of the effectiveness of short technology videos on technology adoption	23FEE01(Y)	Rabi 2024-25	Less efficacy of existing dissemination modes i.e. text messages/verbal advisory	60	Efficacy of existing dissemination methods i.e. text messages/verbal advisory	Preparation of small videos (0.5-2.0 minutes) on different activities of production process of selected commodities and the same will be sent through WhatsApp to the identified group of farmers.	Informative and timeliness of the information / technology / skill delivered Understanding the method and process depicted in the video -Retention, retrieval & re-use of the content (Observation to be taken on a three point scale and measured in a weighted matrix)	
20.	Demonstration of usefulness of crop calendar for improving the	23FEE02 (Y)	Rabi 2024-25	Lack of technical print literature as	60	Existing print material i.e. text and bulky messages, not	Providing crop calendar with multi colour pictorial, concise and season	Applicability of calendar, Accessibility of calendar,	

	technical knowledge of farmers and application of technology			per farmers need		season specific and redundant information regarding technology	specific message, very informative and particular information regarding specific technology for improving the technical know how of farmers	knowledge level, change in attitude	
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### Seed and planting material production by utilization of instructional farm (Crops / Enterprises)

Name of the Crop / Enterprise	Variety / Type	Period From..... to .....	Area (ha.)	Details of Production				
				Type of Produce	Expected Production (quintals)	Cost of inputs (Rs.)	Expected Gross income (Rs.)	Expected Net Income (Rs.)
Paddy	Kalachampa	July to Dec 2024	6 ha	FS	240	4,80,000/-	7,68,000/-	2,88,000/-
Brinjal	JK-80-31, Tarini	July, 2024 to March 2025	0.26	Planting material	10000	4700/-	10000/-	5300/-
Chilli	Daiya, Siamhot	July, 2024 to March 2025	0.3	Planting material	5000	1500/-	2500/-	1000/-
Papaya	Vinayak, Pearl swapna, Red lady	July, 2024 to March 2025	2.0	Planting material	4000	55000/-	1,20,000/-	60000/-
Tomato	ArkaRakshak	Sept, 2024 to March 2025	0.6	Planting material	15000	8500/-	15000/-	6500/-
Onion	Agri found light red (AFLR)	Sept, 2024 to March 2025	0.8	Planting material	1,00,000	50000/-	10,000/-	5000/-
Cauliflower	White contesa, Payal	Sept, 2024 to Dec, 2024	0.13	Planting material	2000	2000/-	2500/-	2000/-
Cabbage	Pusa drum head, Lucky ball	Sept, 2024 to Dec, 2024	0.13	Planting material	2000	2000/-	2500/-	2000/-
Capsicum	Ayesha, Nandini	Sept, 2024 to Dec, 2024	0.13	Planting material	10000	10000/-	20,000/-	10000/-
Broccoli	KT-Sel-1, Known-you F <sub>1</sub> Hybrid	Sept, 2024 to Dec, 2024	0.13	Planting material	1000	2000/-	2000/-	2200/-
Drumstick	ODC-3 , PKM-1	July 2024 to	5	Planting	1000	1000/-	4000/-	6000/-

		March 2025		material					
Vermicompost	E.foetida	Round the year			30 q.	15,000/-	45,000/-	30,000/-	
Vermi worm	E.foetida				10 kg	1000/-	5000/-	4000/-	
Mushroom	P. sajorcaju				200 kg	10000/-	16000/-	6000/-	
Poultry	Kadaknath and Chhabro				2000 nos.	100000/-	130000/-	30000/-	
Honey	Apiscerenaindica				10 kg	10000/-	12000/-	2000/-	
Fish fingerling	IMC				500 kg (5000 no.)	10000/-	40000/-	30000/-	

### EXTENSION ACTIVITIES

Sl. No.	Activities/ Sub-activities	No. of activities proposed	Farmers				Extension Officials			Total		
			M	F	T	SC/ ST (% of total)	Male	Female	Total	Male	Female	Total
1.	Field Day	15	324	43	367		5	3	8	329	46	375
2.	KisanMela	2	200	75	275		12	5	17	212	80	292
3.	KisanGhoshi	5	120	25	145		6	2	8	126	27	153
4.	Exhibition	5	326	25	351		138	11	149	464	36	500
5.	Film Show	48	555	32	587		10	3	13	565	35	600
6.	Method Demonstrations	15	310	20	330		20	3	23	330	23	360
7.	Farmers Seminar	5	85	5	90		8	2	10	93	7	100
8.	Workshop	5	95	5	100		-	-	-	95	5	100
9.	Group meetings	25	378	122	500		-	-	-	378	122	500
10.	Lectures delivered as resource persons	25	876	125	1001		27	5	32	903	130	1060
11.	Scientific visit to farmers field	350	290	30	320		-	-	-	290	30	320
12.	Farmers visit to KVK	630	510	120	630		-	-	-	510	120	630
13.	Diagnostic visits	52	956	234	1190		128	78	206	1084	312	1396
14.	Exposure visits	4	62	32	94		8	5	13	70	37	107
15.	Ex-trainees Sammelan	1	20	25	45		3	2	5	50	25	75
16.	Soil health Camp	2	96	42	138		8	4	12	104	46	150
17.	Animal Health Camp	2	50	60	110		6	4	10	106	94	200
18.	Agri mobile clinic	-	-	-	-	-	-	-	-	-	-	-
19.	Soil test campaigns	2	68	21	89		8	3	11	76	24	100
20.	Self Help Group Conveners meetings	2	108	22	130		15	5	20	123	27	150
21.	Celebration of important days (specify)											
a.	Swatchta Hi Sewa	10	175	27	202		4	1	5	179	28	207
b.	MahilaKisanDiwas	1	-	25	25	-	-	-	-	-	25	25
c.	World Soil Day	1	20	25	45		3	2	5	50	25	75
d.	World Food Day	1	24	12	36	-	2	2	5	26	14	40

Sr. Scientist & Head  
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Dt. 30.08.2024