Annual Action plan 2025-26

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ON FARM TESTING

OFT-1

Assessment of Biofortified rice varieties for enhancing food and nutritional security			
Season & Year	Kharif -2025	**No. of Trials & village**	07&kankpur, Khuntiapada
Crop	Rice	**Farming Situation**	Rainfed medium low land
Problem Diagnosed	Low yield from the existing variety, loss of micronutrients like zinc and iron which leads to malnutrition.	**Spread & Intensity of Problem**	29876 ha (39%)
FP	Cultivation of rice variety Lalat	**Source of technology**	
TO_1	CRDHAN 311(MUKUL)		(NRRI, CUTTACK 2022)
TO_2	CR DHAN 315		(NRRI, CUTTACK 2022)
TO_3	DRR DHAN 48		(IIRR, HYDERABAD, 2015)
Characteristics of Technology	**TO_1:CRDHAN 311 (MUKUL)** (It has high protein content (10.1%) and moderately high level of Zn content (20 ppm) in polished rice. medium duration (120-125 days), semi-dwarf plant type (110 cm) with long bold grain and good cooking and eating quality. It is suitable for irrigated and favorable shallow rainfed areas. National average of grain yield is 4.3 t/ ha^{-1} and in Odisha it is 5.5 t ha^{-1}. **TO_2: CR DHAN 315** (Duration125-135 days, Medium slender, Long and dense panicle,Rich in Zinc(20-26ppm) in polished grain compared to 12-16ppm in popular varieties. grain yield is 5.0 t ha^{-1} . Resistant to leaf folder, moderately resistant to stem bore, moderately tolerant to leaf blast, neck blast and brown spot. **TO_3: DRR DHAN 48** (It is a biofortified, high-yielding rice variety enriched with zinc, known for its high zinc content(22 ppm in polished rice,27ppm in brown rice) and suitability for water-stressed regions. Duration 135-140 days(seed to seed).It is a semi-dwarf, medium slender grain variety. Grain yield is 5.5 t ha^{-1} It has low glycemic index of 51.1.It has good cooking quality with desirable amylose content (20.7%). It is moderately resistant to bacterial blight, blast, sheath rot and rice tungro virus.		
Observation Parameters	No. of tillers/m^2, No of grains/panicle, Test weight, Zinc content in grain (ppm)	**Performance Indicator**	Cost of Intervention, Additional income over Additional cost, Yield per ha, B:C Ratio.
Associated Scientist(s)	Kabita Mishra,Scientist (Agronomy) Sri Tapan Kumar Das, Scientist (Plant protection)		

OFT-2

Assessment of high yielding varieties of green gram for rice fallow condition.			
Season & Year	Rabi- 2025-26	**No. of Trials & village**	07 & Badhigaon, Gambharipadar, Amthapada

Crop	Greengram	**Farming Situation**	Rice-fallow, Irrigated medium land
Problem Diagnosed	Low yield due to unavailability of suitable variety.	**Spread & Intensity of Problem**	675ha (21%)
FP	Cultivativation of local varieties (Chaiti muga)	**Source of technology**	(IIPR, KANPUR, 2020)
TO_1	IPM 312-20(Vashudha):		
TO_2	OUAT Kalinga Greengram 1((Shreejan) (OBGG 58		(OUAT,BHUBANESWAR 2023)
Characteristis of Technology	**FP:** Cultivativation of local varieties (Chaiti muga) **TO_1**: **IPM 312-20(Vashudha)**: It is a high-yielding and disease-resistant variety of green gram. Yield Potential: 8-10 q/ha Days to Maturity: 65-80 days. Highly resistant to MYMV and Cercospora Leaf Spot, leaf crinkle and leaf curl diseases.Green,shining and attractive seeds with a 100 seed weight of 3.9grams. **TO_2: OUAT Kalinga Greengram 1((Shreejan) (OBGG 58)**:Yield Potential: 8-9q/ha. Days to Maturity: 70 days. Resistant to MungbeanYellow MosaicVirus, leaf crinkle virus, moderately resistant to web blight, anthracnose, root rot, powdery mildew, Resistant against white fly and pod borer.		
Observation Parameters	No of pods/plant,,No of seeds/pod, Test weight,	**Performance Indicator**	Cost of Intervention, Additional income over Additional cost, Yield per ha, B:C Ratio.
Associated Scientist(s)	Kabita Mishra, Scientist (Agronomy) Sri Tapan Kumar Das, Scientist (Plant protection)		

Assessment of off season tomato during Summer season (S)			
Season & Year	Kharif,2025	**No. of Trials & village**	07,Rampur,Khuntiapada,Kanakpur, Sarsara
Crop	Tomato	**Farming Situation**	Rainfed upland

Problem Diagnosed	Low yield due to unavailability of disease resistance varieties	**Spread & Intensity of Problem**	70%
FP	Cultivation of tomato variety Lakshmi	**Source of technology**	IIHR,Banglore,2019 ICAR-IIVR-2023-24
TO_1	**Arka Abhed:** High yieldig F1 Hybrid, Semi-determinate, Multiple disease resistance, suitable for summer, Kharif, Rabi with yield potential 70-75 t/ha.		
TO_2	**Kashi Adbhut:** F1 Hybrid determinate habbit with yield potential of 35-40 t/ha, suitable for summer cultivation.		
Characteristics of Technology	**FP:** Cultivation of tomato variety Lakshmi **TO_1:** Arka Abhed: High yieldig F1 Hybrid, Semi-determinate, Multiple disease resistance, suitable for summer, Kharif, Rabi with yield potential 70-75 t/ha. **TO_2:** Kashi Adbhut: F1 Hybrid determinate habbit with yield potential of 35-40 t/ha, suitable for summer cultivation.		
Observation Parameters	No.of fruits/ Plant(No), Wt. of each fruit(g) Wt of fruits/plant(kg), Yield (q/ha)	**Performance Indicator**	Cost of Intervention, Additional income over Additional cost, Yield per ha, B:C Ratio.
Associated Scientist(s)	Dr Samapika Dalai, SMS(Horticulture) Sri Tapan Kumar Das, Scientist (Plant protection)		

OFT-3

OFT-4

Assessment of Onion Varieties of Rabi Season (2nd Year)			
Season &	Rabi 2025	**No. of Trials & village**	07, Brahmanpali,Chhatiniakata,Rampur,

Year			Baghiapada
Crop	Onion	**Farming Situation**	Irrigated upland
Problem Diagnosed	Low yield due to Unavailability of Suitable variety.		
FP	Cultivation of farmer own variety	**Source of technology**	DOGR, PUNE ,2022)
TO_1	Cultivation of Onion variety: Bhima Shakti.		
TO_2	Cultivation of Onion variety: Bhima Dark Red.		
Characteristics of Technology	**FP:** Cultivation of farmer own variety **TO_1:** Cultivation of Onion variety: Bhima Shakti(Bulb attains immediate attractive red colour after harvest, round in shape, very good storage life, suitable for both Kharif and Rabi season. Yield 45-50 t/ha. **TO_2:** Cultivation of Onion variety: Bhima Dark Red(Bulb attains deep red colour after harvest, round in shape, very good storage life, suitable for both Kharif and Rabi season. Yield 40-45 t/ha.		
Observation Parameters	Bulb diameters, Skin colour, Bulb weight Yield Sprouting (%)	**Performance Indicator**	Cost of Intervention, Additional income over Additional cost, Yield per ha, B:C Ratio.
Associated Scientist(s)	Dr Samapika Dalai, SMS(Horticulture) Sri Tapan Kumar Das,Scientist(Plant protection)		

OFT-5

Assessment of IDM for Sheath Blight Management in Rice. (New)			
Season & Year	Kharif 2025	**No. of Trials**	07, Sarsara, Gambharipadar

		& village	
Crop	Rice	**Farming Situation**	Rainfed up land
Problem Diagnosed	Farmers are applying high dose of non-targeted fungicides with improper dose which increase the cost of cultivation.	**Spread & Intensity of Problem**	All the three blocks are affected by this problem More than 17000 ha
FP	Low yield and Indiscriminate application of spurious chemicals with improper dose	**Source of technology**	OUAT SLREC proc. 2018, and IIRR Annual report 2020
TO_1	Seed treatment with Trichoderma viride @ 10g/ lit water and 2-3 sprayings of Trichoderma viride @ 10g/L at 10-15 days interval.		
TO_2	Seed treatment with Trichoderma viride @ 10g/L water and Spraying of the combination fungicide (Azoxystrobin + Difenconazole) @ 1ml/L twice at 15 days interval starting from initiation of the infection		
Characteristics of Technology	**TO1:** Seed treatment with Trichoderma viride @ 10g/ lit water and 2-3 sprayings of Trichoderma viride @ 10g/L at 10-15 days interval. **TO2:** Seed treatment with Trichoderma viride @ 10g/L water and Spraying of the combination fungicide (Azoxystrobin + Difenconazole) @ 1ml/L twice at 15 days interval starting from initiation of the infection		
Observation Parameters	PDI(%), Yield, ICBR	**Performance Indicator**	Time of application, Nos. of application, disease initiation, Percentage(%) of control, Percentage ()% of infestation, yield, cost of cultivation
Associated Scientist(s)	Tapan Kumar Das, Scientist (PP)		

OFT-6

Assessment of management practices against pod borer complex in Greengram (2^{nd} year)

Season & Year	Rabi 2025-26	**No. of Trials & village**	07 Baghiapada,Chhataniakata
Crop	Greengram	**Farming Situation**	Rainfed up land
Problem Diagnosed	Farmers are unaware about crop loss due to pod borer incidence. Crop loss identified during harvesting stage.	**Spread & Intensity of Problem**	Mostly during rabi season this is a serious problem in greengram crop. 3000 ha areas are affected by this problem
FP	Farmers are not fallowing proper management stratagies and applying pesticides like cypermethrin, chloropyriphus during severe infestation stage.	**Source of technology**	Dept. of Entomology, OUAT, 2023. OUAT, AR, 2018
TO_1	Foliar spray of NSKE 5% at 30 DAS followed by Chlorantraniliprole 18.5 SC @ 200 ml/ha at 45 DAS.		
TO_2	Foliar spray of Neem oil 1500PPM @3ml/lit at 30 days after sowing (DAS) followed by Flubendiamide 39.35% SC 200 ml/ha at 45 DAS.		
Characteristics of Technology	**TO1:** Chlorantraniliprole 18.5%SC, 200 g/l SC Insecticide Products is a new phthalamide insecticide known for its high efficiency and broad-spectrum insecticidal effect, which is particularly suitable for the control of chewing pests such as caterpillars. **TO2:** Flubendiamide (39.35%) in a Suspension Concentrate (SC). It targets a wide range of harmful pests, especially Lepidopteran pests. Neem oil 1500PPM is bio product act as antifeedant, deterrent, ovicidal action manage the pest poulation increase.		
Observation Parameters	No. of damaged pods/plant, % of infestation, Yield, ICBR	**Performance Indicator**	Time of application, interval of application, pest monitoring
Associated Scientist(s)	Tapan Kumar Das, Scientist (PP)		

OFT-7

Assessment of blended Ragi and Green gram Malt (K) (New)			
Season & Year	Kharif 2025	**No. of Trials & village**	07 & Nuapada,

			Amthapada, Kulutakhali
Crop/ Commodity	Ragi malt	**Farming Situation**	Homestead
Problem Diagnosed	Opportunity to make suitable value added products for SHGs /FPOs	**Spread & Intensity of Problem**	100 qtls. & 20 %
FP	Preparation of ragi powder	**Source of technology**	AICRP on Post harvest technology OUAT, 2012
TO_1	Ragi Malt powder		
TO_2	Chhatua preparation from Ragi and Green gram.		
Characteristics of Technology	**TO_1:** Ragi Malt powder: Soak ragi and green gram separately in water (12 h), sprout ragi (24 h) & green gram (12 h) at room temperature in moist cloth, dry (50 ° C for 8 h) the sprouted grains ,remove the rootlets , roast the grains, grind to the fine powder keep in air tight bottle, keep in airtight bottle (good source of calcium , iron& fibre). **TO_2:** Chhatua preparation from Ragi and Green gram.		
Observation Parameters	Shelf life (days), Output/Kg. of raw product, Sensory evaluation (0–9-point hedonic scale), Nutritional profile/100g,	**Performance Indicator**	Net Return (Rs.), B:C Ratio.
Associated Scientist(s)	Sasmita Pal , Scientist(Home science) Dr. Mayuri Sing Sardar, SMS (Agriculture Extension)		

OFT-8

Assessment of value added products from banana for enhancing Income of SHGS (New)			
Season & Year	Rabi ,2025-26	**No. of Trials & village**	07, Kanakpur, Podaguda
Crop	Banana	**Farming Situation**	Homestead
Problem Diagnosed	Low return due to poor shelf life and storability by application of ripening hormone like Ethylene at market.	**Spread & Intensity of Problem**	120ha & 25%
FP	Direct selling of ripe banana	**Source of technology**	Post harvest technology centre,TNAU,Coimbatore, 2015
TO_1	Preparation of banana fruit bar-ripe		
TO_2	Preparation of banana biscuit		
Characteristics of Technology	**TO1:** Preparation of banana fruit bar(ripe fruit+homogenization+pulp preparation+ addition of sugar,pectin and citric acid +dehydration at 70 0 C +set in to sheet and cut into a suitable size. **TO2:** Preparation of banana biscuit(Banana flour, Maida(60%+30%), additin of sugar,dalda,baking powder,milk powder and essence,mixing, preparation of dough+Shaping+ Baking.		
Observation Parameters	Shelf life(days) sensory evaluation(0-9 point hedonic scale), nutritional profile/100g,	**Performance Indicator**	Cost of Intervention, Additional income over additional cost, B:C Ratio.
Associated Scientist(s)	Sasmita Pal , Scientist (Home science) Dr Samapika Dalai, SMS (Horticulture)		

OFT-9

Assessment of suitable marketing strategies for better marketing of high value crops			
Season & Year	Rabi 2025-26	**No. of Trials & villages**	90

Crop	Sweet Corn	**Farming Situation**	Irrigated medium land
Problem diagnosed	Lack of proper marketing strategy, market intelligence, market price and involvement of middle man in marketing gives less bargaining power and net return in marketing of the produce	**Spread and intensity of problem**	35 %
FP	Sell of produce at local market/haat.		
TO1	Sell to local traders at the farm gate		
TO2	Fixing 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 customers.		
Characteristics oftechnology	**TO1 :** Sell to local traders at the farm gate. **TO2**: Fixing 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.		
Observation Parameters	Quantity of produce, Price at local market, traders price, gate sale price, Quantity sold by different methods, feed back of customers on the banner, quality of the produce.		
Scientist(s) to be involved	Dr. Mayuri Sing Sardar, SMS (Agril. Extension)		

OFT-10

Assessment of effectiveness of extension method for transfer of Seed treatment technology in different field crops (Groundnut) in the operational area of KVK (K)	
Season & Year	Kharif-2025
Problem diagnose	Less efficacy of existing technology transferred method.
Target	Farmers and farm women
Number of trials	60
Farmers Practices	Informal method of getting technology through neighbours, input dealers etc.
TO1	Technology transfer through training.
TO2	Technology transfer through method demonstration.
Characteristics of technology	**TO1:** Technology transfer through training. **TO2:** Technology transfer through method demonstration.
ObservationParameters	Rate of technology adoption, change in farm income, knowledge gain(%), Yield.
Scientist(s) to be involved	Dr. Mayuri Sing Sardar, SMS (Agril. Extension)

FRONT LINE DEMONSTRATION

FLD-1

Demonstration on nutri-rich finger millet variety Shree ratna (K)			
Season & Year	Kharif 2025		
Crop / commodity	Fingermillet	**Farming Situation**	Rainfed upland
Problem diagnosed	Low yield due to unavailability of suitable variety	**Source :**	OUAT,Bhubaneswar , 2023
FP	Cultivation of local ragi variety-Budha mandia		
Demo	Cultivation of nutri-rich finger millet variety OUAT Kalinga Ragi 1 (Shreeratna)		
Characteristics of technology	**FP: Ragi variety-Budha mandia** (Duration 105-110 days, seeds are orange red colour, Yield potential of 9.5-12 quintals/ha. **Demo: OUAT Kalinga Ragi 1 (Shreeratna)**: This is a medium duration variety with duration of 117 days, high zinc (21.6mg/kg),iron content(50.2 mg/kg),average yield potential of 2416 kg/ ha ,suitable for kharif and irrigated summer, medium sized light green leaves, top incurved ear heads , light brown seed colour, non-lodging and non-shattering type , Resistant to brown spot and foot rot , moderately resistant to blast disease , and also to stem borer, aphid and grass hopper.		
Observation Parameters	No of tillers/m^2, No of fingers/plant,Test weight(g),		
Performance Indicator	Cost of Intervention, Additional income over Additional cost, Yield per ha, B:C Ratio.		
Scientist to be involved	Mr.s Kabita Mishra, Scientist (Agronomy)		

FLD-2

Demonstration on weed management in transplanted rice (K)	
Season &	Kharif 2025

Year			
Crop / commodity	Rice	**Farming Situation**	Rainfed medium low land
Problem diagnosed	Manual weeding is time cosuming, expensive, Labour scarcity during peak period of weed management	**Source**	AICRP on Weed management),OUAT,2024
FP	Manual weeding at 30 DAT		
Demo	Pre emergence application of Pretilachlor 50 EC @ 1500 ml/ha, fb Penoxulam 1.02 % + Cyhalofop butyl 5.1 % OD @ 2250 ml/ha at 25 DAT		
Characteristics of technology	**Demo:** **Pretilachlor:** Pretilachlor interferes with the enzyme Acetyl-CoA carboxylase (ACCase), which is crucial for the synthesis of very long chain fatty acids. **Penoxulam 1.02 % + Cyhalofop butyl 5.1 %** : It is a herbicide that works by inhibiting two different enzymes in plants: Aceto Lactate Synthase (ALS) and Acetyl co-enzyme A carboxylase (ACCase). Penoxsulam inhibits ALS, which is essential for the synthesis of branched-chain amino acids in plants, leading to the death of susceptible weeds. Cyhalofop-butyl inhibits ACCase, an enzyme involved in fatty acid synthesis in grasses, disrupting their growth and development. Broad spectrum weed control for grassy, sedges and broad leaved weeds.		
Observation Parameters	Dominant weed species, No of weeds/$m^{2,}$ No. of tillers//m^2, Number of grains/panicle, Test weight,		
Performance Indicator	Cost of Intervention, Additional income over Additional cost, Yield per ha, B:C Ratio.		
Scientist to be involved	Mrs. Kabita Mishra, Scientist (Agronomy)		

FLD-3

Demonstration in integrated crop management in Sesame (R)

Season & Year	Rabi 2025-26		
Crop / commodity	Sesame	**Farming Situation**	Irrigated Rice-fallow
Problem diagnosed	low productivity due to local existing variety and poor management, inefficient nutrient management, susceptibility to pests and diseases, and marketing issues	**Source :**	OUAT, Bhubaneswar, 2023
FP	Cultivation of local variety Maghi rasi, Farmers' Package of practice		
Demo	Cultivation of high yielding sesame variety Kalinga Sesame-1/Ashrit (OSM-22) STBF, Soil application of PSB @5kg/ha + Sulphur @20kg/ha**.**		
Characteristics of technology	**Demo:** Kalinga Sesame-1/Ashrit (OSM-22) is a sesame variety known for its high oil content and seed yield. It matures in 87-93 days and has an oil content ranging from 37-41%. The average seed yield is around 2600 kg/ha (IR). A key feature is its resistance to Downy mildew and moderate resistance to leafhopper. Phosphorus Solubilizing Bacteria (PSB) help make phosphorus, an essential nutrient for plant growth, more available to sesame plants by converting it into forms that the plants can readily absorb. Sulfur is also crucial for plant growth and development, particularly for the synthesis of essential amino acids and proteins. Integrated Nutrient Management (INM) is a sustainable approach that combines the use of chemical fertilizers, organic manures, and biofertilizers to optimize nutrient availability and minimize environmental impact.		
Observation Parameters	No of capsules/plant, No of seeds/capsule, Seed weight(g)		
Performance Indicator	Cost of Intervention, Additional income over Additional cost, Yield per ha, B:C Ratio.		
Scientist to be involved	Mrs Kabita Mishra, Scientist (Agronomy)		

FLD-4

Demonstration of weed management in Groundnut			
Season & Year	Rabi 2025-26		
Crop / commodity	Groundnut	**Farming Situation**	Irrigated medium land
Problem diagnosed	Manual weeding is time cosuming, expensive, Labour scarcity during peak period of weed management	**Source :**	AICRP on Weed management), OUAT,Bhubaneswar, 2023
FP	Hand weeding at 20 DAS		
Demo	Application of pre-emergence herbicide Oxyflourfen @0.05 a.i kg/ha at 0-3 DAS fb post emergence herbicide Imazethapyr 0.12 a.i kg/ha at 20 DAS		
Characteristics of technology	**Demo:** **Oxyflourfen**:Oxyfluorfen is a diphenylether herbicide that specifically targets the PPO(protoporphyrinogen oxidase enzyme, which plays a critical role in the biosynthesis of chlorophyll. This disruption leads to chlorophyll deficiency, oxidative damage to cell membranes, and ultimately, plant death. **Imazethapyr** :Imazethapyr's mode of action on weeds in groundnut involves inhibiting acetohydroxyacid synthase (AHAS), an enzyme crucial for the biosynthesis of branched-chain amino acids (valine, leucine, and isoleucine). This inhibition leads to a disruption of protein synthesis and, consequently, stunted weed growth and eventual death.Broad spectrum weed control.		
Observation Parameters	No of pods/plant, No of seeds /pod, Dominant weed species, Weed Density/m^2		
Performance Indicator	Cost of Intervention, Additional income over Additional cost, Yield per ha, B:C Ratio.		
Scientist to be involved	Mrs. Kabita Mishra, Scientist (Agronomy)		

FLD-5

Demonstration on Turmeric as intercrop in Mango Orchard (K)	
Season & Year	Kharif 2025-26

Crop / commodity	Turmeric	**Farming Situation**	Rainfed Upland
Problem diagnosed	Improper resource management	**Source:**	CHES Bhubaneswar 2016
FP	Mango orchard without any intercropping.		
Demo	Variety *Roma*, Seeding rhizome @ 1500 kg/ha spacing 60 x 30 cm, fertilizer dose 120:60:60 kg N:P:K per ha, Mango spacing 7 m x 7 m, average yield of Turmeric as inter crop 10-15 tons per ha.		
Characteristics of technology	**Demo:** Variety *Roma*, Seeding rhizome @ 1500 kg/ha spacing 60 x 30 cm, fertilizer dose 120:60:60 kg N:P:K per ha, Mango spacing 7 m x 7 m, average yield of Turmeric as inter crop 10-15 tons per ha..		
Observation Parameters	No.of fingers/ Plant, Fresh wt. of Rhizome plant (g), Yield (q/ha), Economics		
Performance Indicator	Cost of Intervention, Additional income over Additional cost, Yield per ha, B:C Ratio.		
Scientist to be involved	Dr. Samapika Dalai, SMS (Horticulture)		

FLD-6

Demonstration of Okra variety Kashi Chaman (2nd Year)			
Season & Year	Kharif, 2025		
Crop / commodity	Okra	**Farming Situation**	Rainfed , Medium Land
Problem diagnosed	Low yield and susceptible to YVMV and OLECV,	**Source :**	ICAR-IIVR, Varanasi 2019
FP	Cultivation of okra hybrid Radhika		
Demo	Demonstration of Okra variety Kashi Chaman 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		
Characteristics of technology	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		
Observation Parameters	Fruit length(cm), Fruit of pods/plant, Yield(q/ha), B:C ratio		
Performance Indicator	Cost of Intervention, Additional income over Additional cost, Yield per ha, B:C Ratio.		
Scientist to be involved	Dr. Samapika Dalai, SMS (Horticulture)		

FLD-7

Demonstration on Integrated Nutrient Management in Kharif onion (K). (New)	
Season & Year	Kharif- 2025

Crop / commodity	Onion	**Farming Situation**	Irrigated Upland
Problem diagnosed	Improper nutrient management in kharif onion	**Source :**	Annual Report, NHRDF, 2023
FP	Improper Nutreient management.		
Demo	Farm yard mannure 3500 kg ha $^{-1}$ + Vermicompost 3500 kg ha $^{-1}$ & Neem Cake 1000 kg ha $^{-1}$ + Azotabactor @ 10 kg ha^{-1} + Phuspate solubilizing bacteria @ 5 kg ha^{-1}+Pseudomonas @ 5 kg ha^{-1} + Trichoderma 5 kg ha^{-1}.		
Characteristics of technology	**Demo:** Farm yard mannure 3500 kg ha $^{-1}$ + Vermicompost 3500 kg ha $^{-1}$ & Neem Cake 1000 kg ha $^{-1}$ + Azotabactor @ 10 kg ha^{-1} + Phuspate solubilizing bacteria @ 5 kg ha^{-1}+Pseudomonas @ 5 kg ha^{-1} + Trichoderma 5 kg ha^{-1}.		
Observation Parameters	Sprouting (%) at June & July month, Bulb diameter, Skin colour, Bulb Weight, Yield q/ ha.		
Performance Indicator	Cost of Intervention, Additional income over Additional cost, Yield per ha, B:C Ratio.		
Scientist to be involved	Dr. Samapika Dalai, SMS (Horticulture)		

FLD-8

Demonstration on Chrysanthemum variety Bidhan Jayanti in Rabi Season (2nd Year)			
Season & Year	Rabi 2024-25	**No. of Demo**	1.0
Crop / commodity	Chrysanthemum	**Farming Situation**	Irrigated Medium Land
Problem diagnosed	Low yield due to Cultivation of local variety	**Source :**	AICRP on Flori culture,BBSR-2016-16
FP	No chrysanthemum flower cultivation.		
Demo	Cultivation of Chrysanthemum variety Bidhan Jayanti.		
Characteristics of technology	**Demo:** Chrysanthemum variety Bidhan Jayanti is yellow in colour used as loose flower, 680gm yellow flower /plant.		
Observation Parameters	No.of flowers/plant, Yield q/ha.		
Performance Indicator	Cost of Intervention, Additional income over Additional cost, Yield per ha, B:C Ratio.		
Scientist to be involved	Dr. Samapika Dalai, SMS (Horticulture)		

FLD-9

Demonstration on Eco-friendly management of pod borer complex in pigeonpea (2Nd Year)

Season & Year	Kharif 2025	**No. of Trials & village**	10 , Mundapada, Kultakhali
Crop	Pigeonpea	**Farming Situation**	Rainfed upland
Problem Diagnosed	Low yield and Indiscriminate application of spurious chemicals with improper dose and inproper time	**Spread & Intensity of Problem**	Affected Area= 1250 ha Intensity= 45%
FP	Farmers are not fallowing the proper management practices during the need of application or any proper insecticides. Farmers are applying non targeted pesticides in improper dose like chloropyriphus, cypermethrin , trizophus etc.	**Source of technology**	RRTTS, Station Trail, OUAT, BBSR 2018
Demo	Application of Azadirachtin 0.15%@ 1.5 Lit./ ha + Spinosad 45 SC @ 200 ml / ha at 50% flowering and second 15-20 days after 1ST spraying. Application of Azadirachtin 0.15%@ 1.5 Lit./ ha + Emamectin Benzoate 5 SG @ 200 gm / ha at 50% flowering and second 15-20 days after 1ST spraying.		
Characteristics of Technology	**Demo:** Application of Azadirachtin 0.15% at 50 % flowering stage can minimize the pest infestation to 40 % and application of Spinosad 45 SC and Emamectin Benzoate 5 SG alternatively at 15 days interval can 90 % reduced the pod borer complex in pigeonpea crop.		
Observation Parameters	Pod borer incidence (larval count at 1 DBS and 5, 10 and 15 DAS), NE population (Spider and LBB) at 1 DBS and at 5, 10 and 15 DAS, percent pod infestation at harvest. Yield, B:C ratio, Net profit Yield (q/ha), Additional income over additional investment and B:C ratio, Yield & economics		
Performance Indicator	Cost of Intervention, Additional income over Additional cost, Yield per ha, B:C Ratio.		
Associated Scientist(s)	Tapan Kumar Das, Scientist (Plant Protection)		

FLD-10

Demonstration on IPM strategy for management of sucking pests in cotton. (2nd year)			
Season & Year	Kharif 2025	**No. of Trials & village**	10 Jharamunda
Crop	Cotton	**Farming Situation**	Rainfed upland
Problem Diagnosed	High incidence of sucking pests during vegetative, Flowering and boll formation stage results low yield.	**Spread & Intensity of Problem**	More than 60% areas are affected Intensity = 45%
FP	Farmers are not fallowing proper preventive & curative practices for management of sucking pests population in proper time and applying of cypermethrin, chloropyriphus and triazophos + deltamethrin @ 1 l/ ha which encourage the pest for rapid multiplication.	**Source of technology**	AICRP, Cotton, Bhawanipatna-2018
Demo	Timely sowing of crop Planting of maize as border crop around the field, intercropping of cowpea @ 8:2 ratio; Application of Azadirachtin 0.15%@ 1.5 Lit./ ha twice @ 30 & 45 DAS; Installation of yellow sticky traps @ 40/acre & need based Application of Flonicamid 50% WG @ 175 gm/ha twice at 10 days interval		
Characteristics of Technology	**Demo:** This technology is integration of all three aspects like cultural, mechanical, botanical and chemical management approach which manage the sucking pests like aphids, jassids, white fly and thrips effectively.		
Observation Parameters	No of aphid, white flies, thrips, & jassids.3 leaves, Percentage (%) of sucking pests infestation Yield (q/ha), Net return (Rs/ha,)B:C ratio, Yield (q/ha), Additional income over additional investment and B:C ratio Yield & economics		
Performance Indicator	Net Return, ICBR		
Associated Scientist(s)	Tapan Kumar Das, Scientist (Plant Protection)		

FLD-11

Demonstration on Integrated Powdery mildew disease management in Greengram			
Season & Year	Rabi 2024-25	**No. of Trials & village**	10, Telibandh, Polam
Crop	Greengram	**Farming Situation**	Irrigated medium land Rice-greengram farming system
Problem Diagnosed	Farmers are applying improper fungicides during disease emergence stage which encourage the rapid spread of the disease results low yield.	**Spread & Intensity of Problem**	15000 ha. Of greengram areas are affected by this disease problem in the District during Rabi season
FP	Farmers are not fallowing seed and seedling treatment technique and applying fungicides like carbendazim during disease appearance stage only.	**Source of technology**	OUAT RRTTS, BBSR-2023
Demo	Application of combine fungicide thrice with Trifloxystrobin + Tebuconazole @ 0.5 gm/lit thrice at 10 days interval after disease initiation Or Application of combine fungicide thrice with Azoxystrobin + Difenconazole @ 1 ml/lit at 10 days interval after disease initiation		
Characteristics of Technology	**Demo:** Both the combine fungicide applied three time with a interval of 10 days during disease initiation stage can effectively manage the powdery mildew disease in greengram crop.		
Observation Parameters	Percentage (%) of disease infestation, PDI Percentage (%), Yield (q/ha), Net return (Rs/ha) B:C ratio Yield (q/ha), Additional income over additional investment and B:C ratio, Yield & economics		
Performance Indicator	Net Return, ICBR		
Associated Scientist(s)	Tapan Kumar Das, Scientist (Plant Protection)		

FLD-12

Demonstration on IDM practices for viral disease management in Watermelon

Season & Year	Summer 2025-26	**No. of Trials & village**	10, Polam,Rampur
Crop	Watermelon	**Farming Situation**	Irrigated Medium land
Problem Diagnosed	Farmers are not taking any type of preventive measures for management of sucking pests like white flyes, GLH, pumpkin bettles, thrips, Aphids etc by application of proper pesticides. They are applying fungicides like Carbendazim+mancozeb and chloropyriphus during viral infestation time.	**Spread & Intensity of Problem**	320 ha, 43%
FP	Farmers are not taking any type of preventive measures for management of sucking pests like white flies, GLH, pumpkin bettles, thrips, Aphids etc. by application of proper pesticides. They are applying fungicides like Carbendazim+mancozeb and chloropyriphus during viral infestation time.	**Source of technology**	ICAR-IIHR, AR, 2018
Demo	Rotational spraying of Spinetoram 11.7 SC @1.0 ml/l, Acetamiprid 20 SP @ 0.5 g/l, Fipronil 5% SC @ 1.5ml/l and Alpha cyhalothrin @ 1.0 ml/l at weekly intervals starting from 20 DAG and growing maize as border crop.		
Characteristics of Technology	**Demo:** Integrated approach like planting of maize crop as border crop15 days before watermelon sowing, application of pesticides in sequential method with weekly interval alternatively to minimize the sucking pests like white flies, GLH, pumpkin bettles, thrips, Aphids etc. to minimize the spreading of viral infection.		
Observation Parameters	PDI (%), Cost of intervention, Yield, ICBR and farmers' feedback Yield (q/ha), Additional income over additional investment and B:C ratio Yield & economics		
Performance Indicator	Net Return, ICBR		
Associated Scientist(s)	Tapan Kumar Das, Scientist (Plant Protection)		

FLD-13

Demonstration of Ganga Maa Mandal Nutri Garden Model for Household nutritional security (K/R). (NEW)			
Season & Year	Round the year 2025		
Crop / commodity	Vegetable	**Farming Situation**	Backyard
Problem diagnosed	Poor availability of bundle straw due to mechanization	**Source :**	Gujrat Vidyapith KVK ,2020
FP	Irregular and unsystematic Nutritional Gardening with seasonal vegetables.		
Demo	The Ganga Maa Mandal Model		
Characteristics of technology	**Demo: The Ganga Maa Mandal Model-**This model is a circular garden layout covering less than 800 sq.ft with a 30 ft diameter, divided into four concentric rings separated by 1.5 footwide walkways for easy access. At the centre is a 3 ft wide, 2 ft deep compost pit for recycling organic waste . Tall and vine crops like banana, papaya and bottle gourd are planted along the outer ring, while inner ring host a mix of seasonal vegetables and leafy greens. This design maximizes space, supports year round cultivation and promotes soil health through integrated composting.		
Observation Parameters	Average consumption of vegetables(g/member/day), Nutrional availability /member/day, Average total production(kg),		
Performance Indicator	Additional income(Rs.), B:C Ratio.		
Scientist to be involved	Smt. Sasmita Pal, Scientist (Home Science)		

FLD-14

Demonstration of packaging of processed tender jackfruit(OFT TO FLD)(NEW) (COMMON FOR ZONE)			
Season & Year	Pre Kharif - 2025		
Crop / commodity	Jackfruit	**Farming Situation**	Homestead
Problem diagnosed	Poor price realization due to sale of whole tender jackfruit	**Source :**	AICRP on PHET,OUAT, 2016-17
FP	Sale of whole tender jackfruit		
Demo	Sale of processed tender jackfruit in Punnet Packet		
Characteristics of technology	**Demo:** Surface cleaning/dirt removal by washing, peeling & cutting into pieces. Dipping in 0.5% (w/v) citric acid & 0.1% ascorbic acid for 7mins, surface drying and packaging in punnet pack or PP pouch with 0.0675% perforation & refrigerated, storage at 100 C.		
Observation Parameters	Shelf life(days), sensory evaluation(0-9 point hedonic scale).		
Performance Indicator	Cost of Intervention, Additional income over Additional cost, B: C Ratio.		
Scientist to be involved	Smt. Sasmita Pal, Scientist (Home Science)		

FLD-15

Demonstration of preparation of mushroom soup mix (R). (New)			
Season & Year	Rabi 2025-26		
Crop / commodity	Oyster Mushroom	**Farming Situation**	Homestead
Problem diagnosed	Poor acceptance of raw oyster mushroom, low income.	**Source :**	ICAR-DMR for commercial use,2020
FP	Selling of fresh oyster mushroom.		
Demo	Preparation of Mushroom soup mix.		
Characteristics of technology	**Demo:** Mushroom soup mix was developed with 30% oyster mushroom powder, 30 % corn flour, 25% milk powder, 8% salt, 3% sugar, 2% black peeper and 2% oregano.The soup mix has to be boiled for 2 minutes with 14 times quantity of water.		
Observation Parameters	Shelf life(days), Conversion ration,		
Performance Indicator	Net Returns (Rs.), B:C ratio.		
Scientist to be involved	Smt. Sasmita Pal, Scientist (Home Science)		

FLD-16

Demonstration of bio-fortified sweet potato variety Bhu Sona for nutritional security of farm family . (2ND YEAR)			
Season & Year	Rabi 2025-26		
Crop / commodity	Sweet potato	**Farming Situation**	Irrigated medium land
Problem diagnosed	Poor nutritional status of farm women.	**Source :**	(Source- CTCRI, Thiruvananthapuram, Kerala, 2017)
FP	Local variety Kanchangada		
Demo	Cultivation of Variety Bhu Sona		
Characteristics of technology	Cultivation of Variety Bhu Sona (Pro vitamin-A 14.0 mg/100gm),tuber yield 19.8t/ha, dry matter 27.0-29.0,starch 20% total sugar 2.0-2.4%.		
Observation Parameters	Sensory evaluation (0-9 point hedonic scale), adoption rate.		
Performance Indicator	Cost of Intervention, Additional income over Additional cost, Yield per ha, B:C Ratio.		
Scientist to be involved	Smt. Sasmita Pal, Scientist (Home Science)		

FLD-17

Demonstration on proper farm planning including record keeping and availing better marketing opportunities.			
Season & Year	Year Round, 2025-26	**No. of demo.**	40+40= 80
Crop	Mixed cropping	**Farming Situation**	Rainfed Medium land
Problem Diagnosed	Less remuneration from the existing rice production due to increase in production cost by improper farm planning and marketing		
FP	Cultivation without any definite planning and record keeping including bulk marketing at doorstep.		
Demo	Designing the proper scheduling of different farm activities by maintaining timely recor ds and planning the cropping keeping in view to fetch good market value from the produ ce.		
Details of technology	**Demo:** Designing the proper scheduling of different farm activities by maintaining timely recor ds and planning the cropping keeping in view to fetch good market value from the produ ce.		
Observation parameters	Timely Availability / delivery of inputs and technology, Suitability of technology, Ease in handling the extension method Retention and retrieval of information.		
Performance Indicator	Change in income, Change in production cost, Change in knowledge, Change in skill, Change in perception, Sustainability, Adoptability.		
Scientist(s) to be involved	Dr. Mayuri Sing Sardar, SMS (Agril. Extension)		

FLD-18

Demonstration on extent of adoption of climate resilient technology among farmers for s ustainable production.			
Crop/ Enterprise	**Vegetables**	**Nos. Of demonstrations .**	**100**
FP	Cultivation of suitable crops feasible to their ecosystem		
Demo	Recommended climate resilient technology /enterprises Practice by the farmer.		
Observation parameter	Cost reduction (Rs./ha), Yield enhancement (q/ha), Crop loss (%), Cropping intensity (%), Incremental income.		
Scientist(s) to be involved	SMS (Agril. Extension), KVK, BOUDH		

Cluster Frontline Demonstration(CFLD) Programme on Oilseed crop for the year 2025-26

Sl No.	**Season**	**Crop**	**Variety**	**Area covered(ha)**	**Beneficiaries(nos.)**
1.	**Kharif**	Groundnut	Kadari, Lepakshi	30	75
2.		Sesame	Suprava	30	75
3.	**Rabi**	Rapeseed& Mustard	-	30	75
4.		Groundnut	-	30	75
5.				**Total: 120 ha**	**Total: 300 nos.**