

ACTION PLAN 2021-2022-KVK-BOLANGIR

1. Name of the KVK: Bolangir

Address	Telephone	E mail
At. Larkipali, (RE Farm) PO. Rajendra College , Bolangir-767002 (Odisha)	06652250165	kvkbolangir.ouar@gmail.com bolangirkvk@yahoo.com

2.Name of host organization :

Address	Telephone		E mail
	Office	FAX	
OUAT, Bhubaneswar	0674-2397424	0674-2397919	ouatacademic62@gmail.com

3. Training programmes to be organized (April 2021 to March 2022)

(No. of trainees under categories, date of training are tentative; Venue may be OFF / ON as per situation/ farmers choice)

(a) Farmers and farmwomen (65 nos.)

Thematic area	Title of Training	No.	Days	Venue On / Off	Tentative Date	No. of Participants								
						SC		ST		Other		Total		
						M	F	M	F	M	F	M	F	T
CP	Protein rich Paddy Cultivars and their importance	3	3	OFF	11.05.2021	15	3	12	3	33	9	60	15	75
CP	Seed treatment of pulses through microbial culture	2	2	OFF	20.05.2021	8	4	10	2	20	6	38	12	50
CP	Nutrient management in cotton based intercropping system	1	1	OFF	11.06.2021	7	1	3	0	8	6	18	7	25
CP	Method of high density cotton planting	1	1	OFF	24.06.2021	2	0	4	1	14	4	20	5	25
CP	Sowing techniques in medium duration redgram	1	1	OFF	13.07.2021	7	1	0	0	13	4	20	5	25
PP	Management measures against BPH/ WBPH in Rice	1	1	OFF	20.07.2021	5	1	4	1	11	3	20	5	25
CP	Herbicides for weed management in rice	1	1	OFF	24.07.2021	4	2	5	1	10	3	19	6	25
CP	Nutrient management in Ragi for higher productivity	2	2	OFF	14.08.2021	14	2	6	0	16	12	36	14	50
CP/HOV	House hold food security through nutritional gardening	4	4	OFF/ ON	20.08.2021	8	0	16	2	56	16	80	20	100

CP	Stress tolerant cultivars of rice	3	3	OFF	27.08.2021	2 1	3	0	0	39	8	60	1 5	75
PP	Management of leaf folder and stem borer in Rice	1	1	OFF	07.09.2021	5	1	4	1	11	3	20	5	25
CP	Nutrient management in groundnut	3	3	OFF	09.09.2021	4	2	5	1	10	3	19	6	25
CP	Nutrient management in maize based inter cropping system	1	1	OFF	18.09.2021	5	3	3	1	9	4	17	8	25
CP	Techniques of sowing & weed management in Paira greengram	1	1	OFF	07.10.2021	7	1	0	0	13	4	20	5	25
CP	Hybrid Maize Cultivation	1	1	OFF	27.10.2021	4	2	5	1	10	3	19	6	25
CP	Use of CLCC in Paddy for proper nitrogen management	1	1	OFF	10.11.2021	5	1	4	1	11	3	20	5	25
CP	Sweet corn cultivars and their importance	1	1	OFF	14.11.2021	4	2	5	1	10	3	19	6	25
CP	Herbicides for weed management in groundnut	1	1	OFF	11.12.2021	7	1	3	0	8	6	18	7	25
CP	Judicious use of water in rainfed agriculture	1	1	OFF	04.01.2022	2	0	4	1	14	4	20	5	25
SFM	Vermicomposting Techniques	2	2	OFF	12.09.2021 15.02.2022	1 4	2	0	0	26	8	40	1 0	50
SFM	Sulphur and Boron application for pod development in groundnut	1	1	OFF	16.09.2021	5	1	4	1	11	3	20	5	25
SFM	Method of Zinc application in rice	1	1	OFF	18.09.2021	4	2	5	1	10	3	19	6	25
SFM	Site specific nutrient management	2	2	OFF	04.10.2021	1 4	2	6	0	16	1 2	36	1 4	50
SFM	INM in greengram	2	2	OFF	09.10.2021 11.01.2022	4	0	8	2	28	8	40	1 0	50
SFM	Application of microbial consortia to increase the production of pigeon pea	1	1	OFF	26.10.2021	7	1	0	0	13	4	20	5	25
SFM	B and Mo application for management of browning and whiptail disease in cauliflower	1	1	OFF	14.11.2021	5	1	4	1	11	3	20	5	25

SFM	Sulphur application in onion for enlargement of bulb	1	1	OFF	10.12.2021	4	2	5	1	10	3	19	6	25
SFM	Biofertilizer application in vegetables	1	11	OFF	15.12.2021	5	3	3	1	9	4	17	8	25
SFM	Use of organic waste decomposer in NADEP composting	1	1	OFF	12.01.2022	4	2	5	1	10	3	19	6	25
HOF	Improved varieties and Methods of planting in Papaya	1	1	OFF	17.08.2021	5	1	4	1	11	3	20	5	25
HOF	Training and pruning of orchards	1	1	OFF	08.09.2021	5	3	3	1	9	4	17	8	25
HOF	Commercial flower production	2	2	OFF	16.09.2021	8	4	10	2	20	6	38	12	50
HOV	Nursery raising and production tech of kharif onion	1	1	OFF	21.10.2021	4	2	5	1	10	3	19	6	25
HOF	Propagation techniques of ornamental plants	1	1	OFF	05.10.2021	4	2	5	1	10	3	19	6	25
HOV	Protected cultivation of vegetables	2	2	OFF	25.10.2021	10	2	8	2	22	6	40	10	50
HOV	Planting techniques and management of Kharif Tomato	1	1	OFF	14.12.2021	5	3	3	1	9	4	17	8	25
PP	Techniques of managing shoot and fruit borer in Brinjal	1	1	OFF	11.08.2021	4	2	5	1	10	3	19	6	25
PP	Management of fruitfly in Cucurbit vegetables	1	1	OFF	21.12.2022	4	2	5	1	10	3	19	6	25
PP	YMV Resistant var. of okra and its control	1	1	OFF	04.02.2022	4	2	5	1	10	3	19	6	25
LPM	Low cost artificial brooding of chicks in backyard	1	1	OFF	18.06.2021	5	0	3	0	17	0	25	0	25
LPM	Thornless cactus as livestock fodder for rainfed wasteland	1	1	OFF	08.07.2021	5	0	3	0	17	0	25	0	25
LPM	Heat tolerant strains of poultry bird for backyard situation	2	2	OFF	20.07.2021 25.10.2021	10	0	6	0	34	0	50	0	50

LPM	Cultivation and feeding strategies of Hybrid Napier	2	2	OFF	06.08.2021 08.10.2021	1 0	0	6	0	34	0	50	0	50
LPM	Methods of straw treatment and its benefits in feeding to cows	1	1	OFF	16.08.2021	5	0	3	0	17	0	25	0	25
LPM	Feeding management in goats wrt concentrate feeding	1	1	OFF	26.08.2021	5	0	3	0	17	0	25	0	25
LPM	Quality milk production by mineral and bypass fat supplementation	1	1	OFF	18.09.2021	5	0	3	0	17	0	25	0	25
LPM	Care and Management of New born with special reference to vaccination and deworming	2	2	OFF	24.09.2021	1 0	0	6	0	34	0	50	0	50
LPM	Preparation of Ghee as a value added dairy product	1	1	OFF	05.10.2021	5	0	3	0	17	0	25	0	25
LPM	Gene up gradation strategies in goat	1	1	OFF	05.11.2021	5	0	3	0	17	0	25	0	25
LPM	Azolla cultivation strategies and feeding management in livestock	2	2	OFF	18.11.2021	1 0	0	6	0	34	0	50	0	50

(b) Rural youths (10 nos.)

Thematic area	Title of Training	No.	Days	Venue On/Off	Tentative Date	No. of Participants								
						SC		ST		Other		Total		
						M	F	M	F	M	F	M	F	T
CP	Production and use of Vermicompost	1	3	ON	25.07.2021	2	1	0	0	10	2	12	3	15
CP	Models of one ha integrated farming system	1	3	ON	21.09.2021	1	1	2	1	7	3	10	5	15
CP	Seed production techniques in paddy	1	3	ON	18.11.2021	2	0	1	0	10	2	12	3	15
CP	Micro irrigation with mulching in vegetables	1	3	ON	05.02.2022	2	1	0	0	9	3	12	3	15
SFM	Nutrient deficiency symptoms and their management	1	3	ON	4.09.2021	2	1	0	0	9	2	12	3	15
Organic Input Production	Soil testing and interpretation of soil health card for fertiliser	1	3	ON	5.10.2021	1	1	2	1	7	3	10	5	15

	application													
SFM	Use of lime for management of acid soils	1	3	ON	16.11.2021	2	1	0	0	9	2	12	3	15
LPM	Integrated livestock farming as a source of income	1	2	ON	20.08.2021	1	1	2	1	7	3	10	5	15
LPM	Value addition in milk to increase scope of income	1	2	ON	11.09.2021	2	0	1	0	10	2	12	3	15
LPM	Backyard and dip-litter semi-intensive poultry production	1	2	ON	10.11.2021	2	1	0	0	9	3	12	3	15

(c) Extension functionaries (7 nos.)

Thrust area/ Thematic area	Title of Training	No.	Days	Venue On/Off	Tentative Date	No. of Participants								
						SC		ST		Other		Total		
						M	F	M	F	M	F	M	F	T
CP	Climate resilient agriculture	1	1	ON	05.08.2021	2	0	1	0	7	0	10	0	10
CP	Crop diversification in upland rainfed areas	1	1	ON	26.10.2021	2	0	1	0	7	0	10	0	10
CP	Millets and its agro techniques of production	1	1	ON	06.01.2021	2	0	2	0	6	0	10	0	10
SFM	Techniques of Soil management for sustainable agriculture	1	1	ON	4.01.2022	2	0	1	0	7	0	10	0	10
SFM	Management of problem soil in the district	1	1	ON	12.10.2021	2	0	1	0	7	0	10	0	10
LPM	Ration planning in milch cows	1	1	ON	24.11.2021	2	0	1	0	7	0	10	0	10
LPM	Anti-microbial drug resistance in livestock and strategies to control	1	1	ON	19.12.2021	2	0	2	0	6	0	10	0	10

4. Frontline demonstration to be conducted* (16 nos.)

FLD 1	Demonstration on Finger millet (Var. Arjun) to increase income of farm family
Crop	Finger millet
Thrust Area	To increase yield by replacing local low yielding varieties
Thematic Area	Varietal substitution
Season	Kharif 2021
Farming Situation	Rainfed Upland
FLD 2	Demonstration of stress tolerant rice variety-Swarna Sreya

Crop	Paddy
Thrust Area	Crop production
Thematic Area	Varietal trial
Season	Kharif 2021
Farming Situation	Rainfed Medium land
FLD 3	Demonstration of cowpea as inter crop in hybrid maize in Kharif
Crop	Maize
Thrust Area	Crop Production
Thematic Area	Intercropping for space utilization and weed management
Season	Kharif 2021
Farming Situation	Irrigated upland
FLD 4	Demonstration on high yielding variety Pigeon pea PRG 176
Crop	Pigeon Pea
Thrust Area	Crop production
Thematic Area	Varietal trial
Season	Kharif 2021
Farming Situation	Irrigated up Land
FLD 5	Demonstration on Secondary and micro nutrient application in Groundnut
Crop	Groundnut
Thrust Area	Oilseed Production
Thematic Area	Integrated nutrient management
Season	Kharif 2021
Farming Situation	Irrigated Medium Land
FLD 6	Demonstration on INM in Greengram
Crop	Greengram
Thrust Area	Production of pulses
Thematic Area	Integrated nutrient management
Season	Rabi 2021-22
Farming Situation	Rainfed medium land
FLD 7	Demonstration of production technology of Vermicompost
Crop	Vermicompost
Thrust Area	Organic farming
Thematic Area	Production of inputs at site
Season	Kharif 2021
Farming Situation	Homestead
FLD 8	Demonstration on 'S' application in rabi onion for enlargement of bulb
Crop	Onion
Thrust Area	Increase production in onion
Thematic Area	Nutrient management
Season	Rabi 2021-22
Farming Situation	Irrigated upland
FLD 9	Demonstration of off-season cultivation of triple resistant tomato variety Arka Rakshak
Crop	Tomato
Thrust Area	Off season Vegetable crop production
Thematic Area	Varietal substitution
Season	Kharif 2021

Farming Situation	Irrigated upland
FLD 10	Demonstration of Kharif Onion var. Line 883
Crop	Onion
Thrust Area	To promote adoption of Kharif onion
Thematic Area	Varietal substitution
Season	Kharif 2021
Farming Situation	Irrigated upland
FLD 11	Demonstration of papaya Var-Red Lady in homestead
Crop	Papaya
Thrust Area	Low production from local papaya variety
Thematic Area	Varietal substitution and IGA
Season	Rabi 2020-21
Farming Situation	Resource poor family/ Homestead

FLD 12	Demonstration of nutritional garden for Improving Nutritional Security of farm family
Crop	Combination of Vegetables
Thrust Area	Nutritional security to farm family
Thematic Area	IGA
Season	Round the year
Farming Situation	Irrigated Homestead
FLD 13	Demonstration on Artificial brooding management in chicks
Commodity	Poultry
Thrust Area	Brooding Management in chicks
Thematic Area	Poultry production
Season	Rabi 2021-22
Farming Situation	Intensive
FLD 14	Demonstration on feeding of concentrate to increase the rate of body weight gain in goats
Commodity	Goat
Thrust Area	Feeding management in goats
Thematic Area	LPM
Season	Round the year
Farming Situation	Semi intensive
FLD 15	Demonstration of Bypass fat and mineral mix feeding for sustained milk production with increase milk yield and increase specific gravity
Commodity	Dairy
Thrust Area	To increase milk fat percentage in CB cows
Thematic Area	LPM
Season	Round the year
Farming Situation	Intensive
FLD 16	Demonstration of oral deworming against both ecto and endo parasites in goats to support body weight gain
Commodity	Goat
Thrust Area	To increase body weight gain in goats
Thematic Area	LPM
Season	Round the year
Farming Situation	Intensive

FLD No.	Crop & variety / Enterprises	Proposed Area (ha)/ Unit (No.)	Technology package for demonstration	Parameter (Data) in relation to technology demonstrated	Cost of Cultivation (Rs.)			Tentative No. of farmers / demonstration								
					Name of Input	D e m o	L o c a l	SC		ST		Other		Total		
								M	F	M	F	M	F	M	F	T
1	Finger millets	4/20	Growing of Finger Millet Var. Arjun with 50-40-25 kg N-P2O5-K2O/ha along with Zinc @ 12.5 kg/ha + herbicide oxyflurofen @ 37.5 g/ha + one hand weeding at 21 DAS; The variety having duration 100-105 days, yield potential 6t/ha, Resistance to blast and stem borer .	No. of tillers/ plant ; Farmers preference; pest incidence Yield/ha	Finger millets			2	0	1	0	7	0	10	0	10
2	Rice	4/20	Rice variety Swarna Sreya Bold grain, possesses 77 % hulling , tolerant to many insect and diseases ; can withstand drought , suitable for rainfed medium land ; 120-125 days, Av. yield 4.5-5.0 ton/ ha	Plant height, No. of tillers / hill, no. of panicles / plant; , tolerance to water stress condition ; Incidence of insect pest & diseases, duration of crop , Yield/ha, C:B ratio	Rice Var. Swarna Shreya			2	0	1	0	7	0	10	0	10
3	Pigeon Pea	4/20	Pigeon pea PRG 176 Duration 140 days, Yield : 20-22 Q/ha; Indeterminate, Semi spreading , suitable for rainfed condition	Duration, Plant height, No. of pods / plant , Incidence of pest , Day to flowering, Economics	Pigeon pea PRG 176			2	0	1	0	7	0	10	0	10

4	Maize + Cowpea	4/20	Maize+ Cowpea row ratio of 1:1 + application of STBFR (120-75-75 kg N:P2O5:K2O/ha) + FYM(10 t/ha)+ Biofertilizer consortia @ 12 kg/ha + Zn @ 5 kg/ha	Plant height, Plant population, CEY, yield(q/ha),	Maize Cowpea seed need based PP chem			2	0	1	0	7	0	10	0	10	
5	Groundnut	4 /10	Application of 100 % RDF + lime 5q/ha with application of Sulpher @ 30kg/ha along with Boron 1.25kg/ha as Borax which will improve oil content and more no of filled pod in Groundnut.	Initial Soil test value of pH, S and B,Pod wt/Plant, no of filled with bold kernel /plant	Micronutr ients , other elements			2	0	1	0	7	0	10	0	10	
6	Greengram	2 /10	Soil test based NPK with FYM @ 5 t/ha and seed inoculation with Rhizobium @ 20g/kg seed and treatment with ammonium molybdate @ 10 g /25 kg of seed.	Nodule no /plnat, Nodule wt/plant, efficiency, pod wt/plant, grain weight /plant	<i>Rhizobiu m</i> , PSB, lime, Amm. Molybdat e			2	0	1	0	7	0	10	0	10	
7	Vermicompost	10 units	Composting cow dung and leafy materials in the ratio of 3:10 in the vermicompost polythene bag size of 8'x4'x2.5' with release of earthworm (variety: Eisenia foetida) @ 1kg per quintal of waste material.	Cost of intervention. Additional income over additional investment Yield (q/ha), B:C ratio,	Culture and vermitank / bed			2	0	1	0	7	0	10	0	10	
8	Onion	2/10	Application of Sulphur @45 kg/ha along with the soil test based fertilizer application	S value of soil before and after the crop, Bulb size, farmers preference	Sulphur			2	0	1	0	7	0	10	0	10	
9	Onion	1/10	Growing of kharif onion var.	Bulb size, Bulb	onion var.			2	0	1	0	7	0	10	0	10	

			Line 883; Bulb are dark red ; round shape, shiny skin; Bulb dia. 4.5-5.5 cm; 90 days duration ; Av yield 300-325 Q/ha	weight , Incidence of pest and diseases, days to maturity, yield (Q/ha)	Line 883									0		
10	Tomato	1/10	Demonstration of triple resistant high yielding Tomato variety (Arka Rakshak); Spacing 100x60 cm, Seed rate 200gm/ha. , Yield 700 Q/ha, Round fruit , thick skin Arka Rakshak var. F1 hybrid has triple disease resistance to To LCV, BW and early blight.	No. of fruits/ plant, incidence of diseases , keeping quality,	Tomato variety , Arka Rakshak			1	1	1	0	6	1	8	2	10
11	Papaya	1/10	Demonstration of Red lady var. of Papaya; Gynodioecious; semi dwarf, produces short oblong and elongated fruits; average fruit wt. 1.5-2kg, spacing 1.8 x 1.8m, NPK 300: 250:400gm in 4 split, 5 kg FYM/ Plant	Fruit weight (gm), Fruit Size, No. of fruits / plant	seedling			2	0	1	0	7	0	10	0	10
12	Nutritional Garden	2/10	Trellis structure for raising cucurbits, Poly tunnel for raising seedlings, Cement ring tank for vermi - composting, Growing vegetables round the year covering leafy vegetables , Solanaceous vegetables, Roots and Tubers, cucurbits suiting to consumption pattern + Two Papaya Plants	Availability of Vegetables (Kg), yield / enterprise; Consumption pattern and marketed surplus of Vegetables	Planting material, tank, poly tunnel		-	2	0	1	0	5	2	8	2	10

			,One Lemon, one drumstick and two Banana and floriculture in bunds															
13	Poultry	(20 Chicks each)	Brooding management for 21 days with floor space of 0.3 ft ² with help of chick guards, artificial heat @1-3 watt/chick, feeder and drinkers @ 1 each for 50 birds. Vaccination against RD on 7th, 28th day IBD on 14th day.	Chick mortality rate during brooding, Body weight at 21 days, Survivability of birds till start of laying	Chick guard Feeder Waterer Vaccine		-	1	1	1	1	3	3	5	5	10		
14	Goat	100 nos. goats	Feeding Concentrate @ 70-100g/day/goat from 4m to 12 month of age	Body weight gain Incidence of diarrhoea	Goat feed		-	2	0	1	0	5	2	8	2	10		
15	Dairy	10 nos. cows	Inclusion of bypass fat @15-20 gm/kg milk production per cow per day, supplemented to cows 5 months after parturition	Milk Yield (l/day) Milk fat (%)	Bypass fat		-	2	1	1	0	5	1	8	2	10		
16	Goat	60 nos. of goats	Closantel @10mg/kg BW (3-4 ml/Goat) Liver extract @10mg/Kg BW; Repeat after 14 days ; Closantel is effective against both ecto and endo parasites and is a oral anthelmintics so can be easily administered by the farmer; Closantel @10mg/kgBW (3-4 ml/Goat) Liver extract @10mg/Kg BW; Repeat after 14 days	No. Eggs/Slide; Weight gain in 3months / 6 months; Incidence of Diarrhoea	Closantel			2	0	1	0	5	2	8	2	10		

Extension and Training activities under FLD:

[illegible]

5. a) 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	Pooja	July - Dec	5	Seed (FS)	150 Q	375000	425,000	50,000
	Swarna Shreya	July – Nov	2	Seed (FS)	60 Q	150000	170,000	20000
Papaya	Red Lady and other improved varieties	Nov-Jan	-	Seedlings	4000 nos	15000	35000	20000
Vegetables	Tomato, Cabbage, Cauliflower, Brinjal, Chilli, Onion	Sept-Nov	-	Seedlings	400000	130000	280000	150000
Flower	Ceracole	Dec-Jan		Seedlings	2,000 nos	2,000	5,000	3,000
Vermi-compost	<i>Eudrillus</i>	July-Feb	-	Comost/ Culture	20 Q	10,000	20,000	10,000
Chicks	Kadaknath/ Rainbow rooster/ Aseel	Oct-Jan	-	20 day old brooded chicks	1500 nos	38,000	58,000	20,000

6. Extension Activities

Sl. No.	Activities/ Sub-activities	No. of activit	Total (Approx)		
			Male	Female	Total
1.	Field Day	12			480
2.	Kisan Mela	2			1000
3.	Kisan Ghosthi	2			50
4.	Exhibition	4			1000
5.	Film Show	2			40
6.	Method Demonstrations	8			80
7.	Farmers Seminar				
8.	Workshop				
9.	Group meetings	8			240
10.	Lectures delivered as resource persons	8			-
11.	Advisory Services	48			1000
12.	Scientific visit to farmers field	60			1500
13.	Farmers visit to KVK				
14.	Diagnostic visits	40			600
15.	Exposure visits	5			100
16.	Ex-trainees Sammelan	4			80
17.	Soil health Camp	3			120
18.	Animal Health Camp	4			140
19.	Agri mobile clinic				
20.	Soil test campaigns	3			120
21.	Farm Science Club Conveners meet				
22.	Self Help Group Conveners meetings				
23.	Mahila Mandals Conveners meetings				
24.	Celebration of important days (specify)	5			2500
25.	Sankalp Se Siddhi				
26.	Swatchta Hi Sewa	10			200
27.	Mahila Kisan Diwas	1			30
28.	Any Other (Specify)				
	Total	225			9280

7. Revolving Fund (in Rs.)

Opening balance of 2020-2021 (As on 01.04.2021)	Amount proposed to be invested during 2021-2022	Expected Return

8. Expected fund from other sources and its proposed utilization

Project	Source	Amount to be received (Rs. in lakh)
Skill training	ASCI, INDIA	3.5

9. On-farm trials to be conducted* (7 nos.)

OFT-1

Season	Summer 2021-22
Title of the OFT	Assessment of nutrient supplement through foliar application in green gram
Problem Diagnosed	Poor branching and pod setting, Opportunity for yield improvement
Important cause	Only basal application of fertilizers (20-40-20). No basal application
Production System	Green gram
Micro farming situation	Irrigated medium land
Technology for testing	TO-1 : Basal application + 2 foliar sprays of 18-18-18 WSF (1%) at 30 and 45 DAS TO 2 : Basal application + 2 foliar spray of Urea (2%) at 30 and 45 DAS
Existing practice	Only basal application of fertilizers (20-40-20). No foliar application
Hypothesis	TO 1: Foliar application of WSF 18-18-18 gives foliar nutrients with proper concentration and less volatile loss TO 2: Very low quantity of Urea required than soil application
Objectives	To assess foliar nutrient supplementation on yield of green gram
Treatment	
Critical Inputs	Fertilizer and need based PP Chemicals
Unit Size	02 ha
No. of Replication	10
Unit cost	1000
Total Cost	10000
Monitoring Indicator	Plant height, No. of branches/plant, No. of pods/plant, Test weight (g)
Source of Technology	IIPR, 2016; TNAU, 2006

Season	Kharif 2021
Title of the OFT	Assessment of herbicide for weed management in transplanted rice
Problem Diagnosed	Low yield due to high weed infestation
Important cause	No herbicide application
Production System	Rice
Micro farming situation	Rain fed low land
Technology for testing	TO1- Application of Cyhalofop butyl + Penoxulam @ 135g/ha at 20 DAT TO3- Application of PE Pendimethalin @ 0.75 KG/HA, fb Chlorimuron ethyl +Metasulfuron methyl @ 4g/ha 20 DAT
Existing practice	No herbicide application
Hypothesis	TO1: ALS inhibitor TO2: ALS inhibitor
Objectives	To assess the performance of suitable herbicide in case of transplanted rice
Treatment	
Critical Inputs	Herbicides and need based PP Chemicals
Unit Size	02 ha
No. of Replication	10
Unit cost	2000
Total Cost	20000
Monitoring Indicator	Weed flora composition , WCE(%)Effective panicles/m ² No of filled grains/panicle, Grain yield (q/ha), Straw yield (q/ha)s
Source of Technology	

OFT-2

Season	Kharif 2021
Title of the OFT	Assessment of Sweet Corn var. for higher profitability in rainfed upland
Problem Diagnosed	Low yield from existing corn variety
Important cause	Growing of sole maize crop
Production System	Maize-vegetable
Micro farming situation	Rainfed bunded upland , Kharif
Technology for testing	TO-1: Varieties- VL Sweet corn 1 (FSCH 18) TO2: Variety- Pusa Super Sweet corn 1
Existing practice	Growing of Sweet corn variety Sugar 75
Hypothesis	TO 1: VL Sweet corn 1 with enhanced sweetness with yield 10.8 t/ha TO2: Pusa super sweet corn with grain yield 9.3 t/ha and fodder yield 16.2t/ha
Objectives	To assess the performance of suitable sweet corn and market preference
Treatment	
Critical Inputs	Seed and need based PP chem.
Unit Size	0.2 ha
No. of Replication	10
Unit cost	2000/-
Total Cost	20,000/-
Monitoring Indicator	Compatibility with existing farming system , Plant height, Amount of irrigation water required, , Cob size , weed incidence , yield(q/ha)
Source of Technology	ICAR-IARI , 2020

OFT-3**OFT-4**

Season	Kharif 2021
Title of the OFT	Assessment of zinc deficiency in lowland rice
Problem Diagnosed	Low yield of Rice due to poor grain filling in soil deficient in zinc
Important cause	Application of no zinc in lowland rice
Production System	Rice –Rice
Micro farming situation	Rainfed lowland ,
Technology for testing	TO1 : Soil Test Based Recommendation of NPK+ Zinc Sulphate @ 25 kg/ha TO2 : STBR of NPK + 5t FYM /ha + Zinc Sulphate @ 12.5 kg/ha
Existing practice	Application of no zinc in lowland rice, grown in deficit soil
Hypothesis	T O ₁ : Application of only major nutrients based on initial soil test value only meets the demand for bulk requirement the nutrients where as there is deficiency of other trace elements. Zn as a trace element is highly essential for rice which involved in several enzymatic physiological relations. As we are not providing organic manure , we are applying higher dose of Zn in the form of Zn So ₄ as basal application. T O ₂ : Application of soil test based major nutrients along with organic manure provides some of the trace elements which is not sufficient as per Zn requirement for rice is concerned. So a lower dose of Zn is applied as basal in form of Zn So ₄ which will meet the

	Zn requirement of Rice.
Objectives	To assess role of Zinc in grain filling and contribution to yield
Treatment	NPK, Zinc Sulphate, FYM
Critical Inputs	Micronutrient
Unit Size	0.2 ha
No.of Replication	7
Unit cost	Rs 1000/-
Total Cost	Rs 7,000/-
Monitoring Indicator	Pre and Post soil test value, Root growth (cm), Plant height, No. of tillers /sq m, No. of filled grain per panicle, 1000 grain weight (gm)
Source of Technology	AICRP on LTFE, OUAT, 2017 AICRP on micronutrients and pollutants, OUAT, 2016

OFT-5

Season	Rabi 2021-22
Title of the OFT	Assessment of micronutrient application in Cauliflower
Problem Diagnosed	Low curd keeping quality, flavor and yield due to micronutrient deficiency
Important cause	No micronutrient application
Production System	Rice-Vegetable
Micro farming situation	Rainfed Upland
Technology for testing	TO1 : STD + 3 foliar spray of 100 ppm boron (as borax) at 10 days interval TO2 : STD + 3 foliar sprays of 50 ppm boron + 50 ppm Mo at 10 days interval
Existing practice	No application of micronutrient, RDF(120:40:60)only
Hypothesis	TO1: To know the sole effect of Boron we will apply B which has effect on curd quality. Foliar application of 100 ppm boron in the form of Borax is done at 10 days interval TO2: To know the combine effect of B with Mo. Mo increases the curd size, curd weight and manage the whiptail disease. 50 ppm B as Borax and 50 ppm Mo as Ammonium molybdate is applied as foliar spray thrice at 10 days interval
Objectives	To manage the deficiency of micronutrient and contribution to yield
Treatment	Bo and Mo
Critical Inputs	Borax and Molybdenum
Unit Size	0.2 ha
No. of Replication	7
Unit cost	500
Total Cost	3500
Monitoring Indicator	Curd weight (gm), Plant height (cm), Nutrient status , economics
Source of Technology	AICRP in vegetable crops, 2007-07 Annual report, 2017-18 IIVR

OFT-6

Season	Rabi 2021-22
Title of the OFT	Comparative assessment of improved poultry breeds for production in Backyard system
Problem Diagnosed	Poor production and income from local nondescript desi type chicken
Important cause	High chick mortality and poor production potential
Production System	Poultry

Micro farming situation	Backyard
Technology for testing	TO-1: Rearing of Kadaknath with proper brooding and backyard feeding management TO2- Rearing of Aseel with proper brooding and backyard feeding management TO3- Rearing of Pallishree with proper brooding and backyard feeding management
Existing practice	Rearing Desi birds without proper brooding and zero feeding management
Hypothesis	Kadaknath and Aseel are desi alike birds with better growth potential and disease resistance. Pallishree is a strain developed from OUAT with much better growth potential than desi and other backyard suitable birds
Objectives	To test the suitable backyard poultry var.
Treatment	Kadaknath , Aseel and Pallishree
Critical Inputs	Poultry, Chickguard, Feeder, Brooder, Vaccine
Unit Size	15
No. of Replication	10
Unit cost	2000
Total Cost	30000
Monitoring Indicator	Body weight at 1m, 2m, 4m ; age of laying ; egg production ; chick mortality
Source of Technology	Annual Report 2016-17, Dir. of Poultry , ICAR, Annual Report 2017-18, ICAR-CARI

OFT-7

Season	Round the year 2021-22
Title of the OFT	Assessment of different feed regime on milk production in dairy cows
Problem Diagnosed	High grain cost leading to high cost of production and otherwise low milk production due to no grain feeding
Important cause	High grain cost
Production System	Dairy
Micro farming situation	Homestead
Technology for testing	TO-1: Grazing + Straw @ 6-8 kg/day + Local available oil cake @ 100g/day TO2: Grazing + Straw @ 6-8 kg/day + Local available pulse residue (Gandhiri) @ 250g/day + Maize @ 250g/day
Existing practice	Grazing , heavy straw feeding and occasional concentrate feeding
Hypothesis	TO 1: Oil cake are good source of protein TO2: Pulse residues are source of protein and maize is source of carbohydrate
Objectives	To test the suitable feed regime with low cost for sustainable milk production
Treatment	Feeding with locally available oil cake Feeding with locally available pulse residue and Maize
Critical Inputs	Oil cake, Gandhiri, Maize
Unit Size	1
No.of Replication	10
Unit cost	1500
Total Cost	15000
Monitoring Indicator	Milk yield/day, Lactation length, Health status
Source of Technology	Annual Report ICAR-ATARI, Kolkata, 2014

Soil and Water testing

Details	No. of Samples	No. of Farmers									No. of Villages	No. of SHC to be distributed
		SC		ST		Other		Total				
		M	F	M	F	M	F	M	F	T		
Soil Samples	200	30		45		110		185		185	12	1000
Water Samples	-	-	-	-	-	-	-	-	-	-	-	-
Others	-	-	-	-	-	-	-	-	-	-	-	-
Total	200	30		45		110		185		185	12	1000

Heads	Expenditure (last year) up to 31.03.2021	Expected fund requirement 2021- 22
TA	40,000	1,00,000
Office Expenses/ POL etc.	5,05,000	5,00,000
Training (FW/ RY/ IS)	3,01,000	3,00,000
FLD	1,65,000	1,60,000
OFT	1,00,000	1,20,000
SCP Contingency	2,00,000	2,50,000
HRD	4,000	25,000
NR(Books)	10,000	10,000
* Additional reqt. At New adm. Building	-	5,00,000
Total	13,25,000	19,65,000

Funds requirement and expenditure

ACTION PLAN

(2021-22)



KRISHI VIGYAN KENDRA, BOLANGIR

ODISHA UNIVERSITY OF AGRICULTURE AND TECHNOLOGY