

Action Plan 2023

KRISHI VIGYAN KENDRA, DEOGARH, ODISHA



**Odisha University of Agriculture and Technology,
Bhubaneswar**

1. Trainings

(i) Training for farmers & farm women:

Discipline	No. conducted	No. of beneficiary
Crop Production	12	360
Plant Protection	12	360
Home Science	12	360
Soil Science	12	360
Horticulture	5	150
Total	53	1590

(ii) Training for rural youths:

Discipline	No. conducted	No. of beneficiary
Crop Production	1	30
Plant Protection	1	30
Horticulture	1	30
Home Science	1	30
Soil Science	1	30
Total	5	150

(iii) Training for Extension personnel:

Discipline	No. conducted	No. of beneficiary
Crop Production	2	60
Plant Protection	2	60
Horticulture	2	60
Home Science	2	60
Soil Science	2	60
Ag. Extension	4	240
Total	14	420

2. On-farm trials

Crop/ Enterprise	Problems to be addressed	Title of the OFT	Treatment details with FP with source of tech.	Observation parameters
Rice	Lower yield due to cultivation of old var. Lalat	Assessment of High yielding medium duration Rice Varieties in Kharif	FP-Cultivation of rice var Lalat (IET 9947) TO ₁ -Kalinga Dhan 1201 TO ₂ -Kalinga Dhan 1204 TO ₃ -Pratibha	Plant height, no. of effective tillers/hill, grains/panicle and Test wt
Rice	Usually there is 2/3rd Loss of applied Urea N from any rice culture.	Assessment of Nano Urea in Rice	FP- 100 % N (STBFA) soil application(25 % basal + 50 % at tillering + 25 % at PI) TO ₁ - 75 % N (STBFA) soil application(25 % basal + 50 % at tillering + 25 % at PI) + Foliar spray of nano urea @ 4 ml /lit. of water at tillering and PI) TO ₂ - 50 % N (STBFA) soil application (25 % basal+ 50 % at tillering + 25 % at PI) + Foliar spray of nano urea @ 4ml /lit. of water at tillering and PI)	Initial soil nutrient content, Plant height, no. of effective tillers/hill, grains/panicle and Test wt and final soil nutrient content,
Finger millet	Low yield from local variety of finger millet, low profit from existing crop and low nutritional value	Assessment of High yielding finger millet Varieties in Kharif	FP- Cultivation of local var. kala mandia TO ₁ - Arjun TO ₂ - Kalua TO ₃ - OUAT Kalinga finger millet (Shreeratna)	Plant height, no. of effective tillers/m ² number of fingers per ear, grain weight per ear and 1000-grain weight
Onion	Low yield due to local varieties (N-53)	Assessment of different varieties of onion in rabi	FP : Use of existing old varieties (N-53) TO ₁ -Bhima Shakti : Bulbs mature in 130 days after transplanting during late kharif and rabi season. Marketable yield during rabi @ 42.7 t/ha. The variety has better storage for 5-6 months TO ₂ - Bhima kiran: the variety matures in 130 days after transplanting and the average marketable yield is up to 41.5 t/ha. The variety has better storage up to 5-6 months	Days to maturity, bulb size, bulb weight

Rice	Heavy infestation of BPH in low land areas and failure to select proper pesticide against the pest	Assessment on chemical management of BPH in rice	FP: Application of Chlorpyrifos + cypermethrin @ 2 ml/ lit TO ₁ : Application of Buprofezin @ 2ml/lit at 10 DI after emergence of pest TO ₂ : Application of Flonicamid 50WG @ 0.3 g/lit at 15 DI after emergence of pest	No. of chaffy grains/ panicle and no. of discoloured grains/ panicle
Banana	Large areas of plantations affected by sigatoka disease resulting in sever reduction in fruit yield.	Assessment of IDM module for management of sigatoka leaf spot disease in Banana.	FP: Application of Copper oxychloride 50 WP @ 3g/lit TO ₁ : Application of propiconazole along with petroleum based mineral oil (Propiconazole 0.5 ml/l (0.05%) + Petroleum based mineral oil 1%) at 15 DI after emerging disease symptom TO ₂ : Application of oil 1% concentration with Carbendazim 0.05% + calixin 0.05% at 15 DI after emerging disease symptom	% of infected plant, survival %
Paddy straw mushroom	Less production in paddy straw mushroom using crumpled straw due to inappropriate shape	Assessment of different shapes for cultivation of Paddy straw mushroom (<i>Volvariella volvacea</i>) using crumpled straw	TO ₁ – Rectangular compact method Size-45x60x3: Mushroom production by using crumpled paddy straw TO ₂ – Circular compact bed size -(45 cm diameter, 30 cm height):Mushroom production by using crumpled paddy straw	Average weight/button (g), Pin head appearance (days) Biological efficiency (%)
Tomato	Distress sale, spoilage due to high perishability without any value addition	Assessment of different value added products from tomato	TO ₁ - Preparation of Tomato Puree (tomato pulp adding preservatives) TO ₂ - Preparation of Tomato Sauce /ketchup (less than 12 per cent tomato solids and 25 per cent total solids)	Sensory evaluation, Market acceptability
Off season tomato	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	Assessment of suitable marketing strategies for better marketing of high value crops	FP: Sell of produce at local market/haat TO ₁ – Sell to local traders at the farm gate TO ₂ - Fixing a banner at suitable place, preferably at main road indicating the place of production, mentioning the special quality of the produce (Fresh / sweetness / organic etc.) with catchy captions and picture to attract the costumers	Quantity of produce, price at local market, traders price, gate sale price, Quantity sold by different methods, Feedback of customers on the banner, quality of the produce

3. Frontline demonstration

Crop/ Enterprise	FLD title	Demo details with FP	No. of demonstration	No./ area
Crop+ Dairy + Poultry+ Vegetables + Fishery	Popularisation of upland pond based integrated farming system model	FP: Crop+ Fishery RP: Crop+Dairy+ Poultry/ Duckery+ Hort. +Boundary plantation + Fishery and Pond dyke Plantation	10	2 ha
Rice	Demonstration of integrated weed management in rice	FP: Pre emergence application of pretilachlor @1000gm/ha and 30 DAT manual weeding RP: Pre-emergence application of Pretilachlor 30.7% EC @ 1 kg/ha and PoE application of Cyhalofop butyl + Penoxulam @ 135g/ha	10	2 ha
Sesame	Demonstration of INM in Sesame	FP: Indiscriminate use of chemical fertilizer (40:20:20) RP: INM of Sesame – STBR NPK + 25 kg sulphur / ha + 5 kg Zn SO ₄ / ha+ 0.2 % foliar application of boron at pre flowering stage + 4 kg Azotobactor/ ha	10	2 ha
Fodder maize	Demonstration of fodder maize var. African tall	FP: Only feeding with marketed feeds RP: Cultivation fodder maize var. African tall	10	2 ha
Coriander	Demonstration on coriander cultivation in rainy season	FP: No cultivation of coriander in rainy season RP: Kharif coriander var. CO-1, line sowing of treated coriander seeds with Bavistin @ 1gm/100gm of seeds to be done with average spacing of 5-10 cm (P-P) & 30 cm from (R-R)	10	0.5 ha
Watermelon	Demonstration of watermelon hybrid variety Arka Akash	FP: Use of high cost seed variety Augusta (Rs.24000/Kg of seeds) RP: Arka Akash developed by IIHR (Rs.13000/kg of seeds) Dark green with light green broken specks slightly deep foliage, oblong fruit red flesh, with TSS of 12-13% (brix), average fruit weight 6.5kg with 1 fruit per vine. Duration 90-95 days. Fruit yield 65 to 70 t/ha, Good keeping and transport qualities	10	1 ha
Dragon fruit	Demonstration on dragon fruit cultivation	FP :No cultivation of dragon fruit RP: Dragon fruit var. White flesh, Vibrant pink skin and white flesh spotted with black seeds The most common propagation method is by cuttings ,dig the pit size of 60x60x60 cm and plant to plant spacing 2x2 mt.	10	0.5 ha

Litchi	Demonstration on PGR application in Litchi	FP: No application of PGR RP: Foliar application of planofix @ 2.5 ml/10 liter one week after fruit set	10	1 ha
Cow pea	Demonstration on pod borer management in cowpea	FP: Application of cartap hydrochloride 50% SP 2 2gm/lit after appearance of symptom RP: Two spray of Chlorantraniliprole 18.5% SC @ 0.2ml/lit at 10DI during pod formation stage	10	1 ha
Bitter gourd	Demonstration on IPM module for fruit fly management in bitter gourd	FP: Spraying of Chlorpyrifos 20% EC @ 2 ml/lit after infestation RP: IPM module : Soil application of chlorpyrifos 1.5% in the inter space @ 25kg/ha at 30 DAG + placement of poison bait (cartap hydrochloride 50% SP 2g, Jaggery 100g and water 1 lit) + installation of Culure @ 20/ha + periodical removal of damaged fruits	10	1 ha
Papaya	Demonstration on IPM module for management of leaf curl viral disease in papaya	FP: Application of Chlorpyrifos 50% + cypermethrin 5% @ 2 ml/ lit after appearance of symptom and uprooted plants incase of sever infestation RP: IPM module: Soil application of carbofuran 3G around the plant twice (once at transplanting and another at 30 DAT) + alternate application of Flonicamid 50WG @ 150g/ha and neem oil (1500 ppm) @ 1.5 lit/ha at 15 DI + installation of yellow sticky trap @ 25/ha + coriander as intercrop	10	1 ha
Onion	Demonstration on IPM module for management of thrips in onion	FP: Application of propenophos 50% @ 2 ml/ lit after appearance of symptom RP: IPM module : Planting barrier crops - outer row of maize + inner row of wheat , 7-10 DAP of onion , seedling root dip: dip the seedlings (bottom 1/3rd) in carbosulfan 25% EC @ 2ml/l , spray neem oil (1500ppm) @ 3ml/l + profenofos 50% EC @ 0.5ml/l after 15 DAP reduces the thrips infestation	10	1 ha
vegetable seedling	Demonstration on vegetable seedling raising under poly tunnel	FP: Raising vegetable seedling in open field on bed RP: (Construction of low cost polytunnel (3X1X1) m supported by GI frames /bamboo, PVC pipe covered with 200-micron UV stabilized polythene of 35 mt ² . Seed treatment with Bavistin. Vegetable seeds like brinjal, Tomato, Cauliflower, Onion, Chilly etc to be grown:	10	10 units

Backyard Poultry	Demonstration on brooding management in poultry chicks	FP: Rearing without brooding practice RP: Artificial brooding of chicks, brooding management for 21 days with floor space of 0.3 sq ft(per chick) with help of chick guards, artificial heat with 1-3 watt per chick, feeder and drinkers @ 1 each for 50 chicks. Vaccination against RD on 7 th , 28 th day & IBD on 14 th day. Use of electrolytes, preventive antibiotics during brooding, use of electric brooder	10	500 birds
Value addition	Demonstration on preparation of jackfruit wafers to minimize wastage in peak season	FP: Direct selling of Raw jack fruit RP: Preparation of jackfruit wafers in solar dryer by dipping the slices in 2% brine solution for 5 mins for color retention and keep inside the solar dryer for 24 -30 hrs	10	10 kg
Value addition	Demonstration of preparation of value-added product from tamarind	FP: Selling of raw tamarind in the market at low price RP: Preparation of tamarind pulp concentrate by cooking tamarind juices with spices to desired consistency (36 to 38 brix) and packing in sterilized bottles	10	10 kg
Spine gourd	Demonstration of bio fertiliser consortia application in Spine gourd	FP: Application of FYM 2 tons/ha RP: FYM 5t/ha+ Consortia of Azotobacter+ Azospirillum + PSB @4kg/ha each inoculated to 300 kg of FYM mixed with 15 kg of lime incubated at 30% moisture for a week	10	1 ha
Sweet orange	Demonstration of integrated nutrient management in Sweet orange	FP: Application of FYM-10 Kg/tree, N-0.3 Kg/tree, P ₂ O ₅ -0.1 Kg/tree, K ₂ O-0.2 Kg/tree. RP: Application of FYM-30 Kg/tree, N-0.6 Kg/tree, P ₂ O ₅ -0.2 Kg/tree, K ₂ O-0.3 Kg/tree. Spraying of Zinc(0.5%)+Boron(0.2%) once in 3 months at the time of new flush production and application of ZnSO ₄ 50g/tree per plant once in a year. Nitrogen to be applied in 2 split doses during March and October.	10	1 ha
Agriculture and allied sectors	Demonstration on transfer of technology through harnessing human values in agriculture	FP: Technology is often transferred through progressive farmers / change agents RP: Progressive farmers designated by an organization as per the domain of specialization serves as an ambassador of change in the process of technology transfer. (Farmer scientist, farmer professor, farm captain, blue farmer of the district, mushroom lady etc.) Source: IJEE, 2022	15 nos	-

4. Revolving Fund

Seed and planting material

Name of the Crop / Entr.	Variety / Type	Type of Produce	Expected Production
Dhanicha	TL	Seed	6 qtl
Sesame	CS	Seed	3 qtl
Pigeonpea	CS	Seed	5 qtl
Brinjal	Tarini	Seedling	10,000 nos
Tomato	Saksham, Arka Rakshak, Arka Samrat	Seedling	10,000 nos
Cauliflower	Megha	Seedling	10,000 nos
Chilli	Siamhot	Seedling	10,000 nos
Onion	Agrifound dark red	Seedling	10,000 nos
Cabbage	Green challenger	Seedling	10,000 nos
Broccoli	Chow chow	Seedling	2000 nos
Chinese cabbage	Indam cupper	Seedling	4,000 nos
Capsicum	Krishna	Seedling	3000 nos
Red cabbage	Red Ruby	Seedling	4,000 nos
Knolkhol	Surya 15	Seedling	2,000 nos
Marigold	BM-1	Seedling	5000 nos

5. Extension Activities

Sl. No.	Activities/ Sub-activities	No. of activities	Total
1	Field Day	5	150
2	Kisan Mela	2	400
3	Kisan Ghosthi	4	80
4	Exhibition	2	-
5	Film Show	4	100
6	Method Demonstrations	5	60
7	Farmers Seminar	1	50
8	Workshop	1	40
9	Group meetings	25	275
10	Lectures delivered as resource persons	15	375
11	Advisory Services	40	50
12	Scientific visit to farmers field	90	900
13	Farmers visit to KVK	-	1000
14	Diagnostic visits	40	275
15	Exposure visits	2	30
16	Ex-trainees Sammelan	2	60
17	Soil health Camp	5	160
18	Animal Health Camp	2	75
19	Soil test campaigns	5	125
20	Self Help Group Conveners meetings	1	65
21	Mahila Mandals Conveners meetings	1	60
22	Celebration of important days (specify)	5	200
24	Swatchta Hi Sewa	5	190
25	Field Day	4	120
26	Soil and water testing	1000	1000
27	Total	1270	5985