

Action Plan

2022 – 23

KRISHI VIGYAN KENDRA, SONEPUR



ODISHA UNIVERSITY OF AGRICULTURE AND TECHNOLOGY

REVISED PROFORMA FOR ACTION PLAN 2022

1. Name of the KVK:

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|--|--------------|--|
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2. Name of host organization :

| Address | Telephone | | E mail |
|--|-------------|-----------------|-----------------------------|
| | Office | FAX | |
| Directorate of Extension Education, OUAT, Bhubaneswar- 751003 | 0674-239756 | 0674- 239756 | deanextensionouat@yahoo.com |

3. Training programme to be organized (January 2022 to December 2022)

(a) Farmers and farmwomen

| Thematic area | Title of Training | No. | Duration | Venue On/Off | Tentative Month | No. of Participants | | | | | | | | |
|------------------------|--|-----|----------|-----------------|--------------------|---------------------|---|----|---|-------|---|-------|---|----|
| | | | | | | SC | | ST | | Other | | Total | | |
| | | | | | | M | F | M | F | M | F | M | F | T |
| Crop Production | | | | | | | | | | | | | | |
| INM | Training on INM for higher yield in groundnut | 1 | 1 | Off-campus | | - | - | - | - | - | - | - | - | 25 |
| INM | Training on Nitrogen management by LCC in Rice | 1 | 1 | Off-campus | | - | - | - | - | - | - | - | - | 25 |
| IWM | Training on mechanical and cultural methods of weed management in rice | 1 | 1 | Off-campus | | - | - | - | - | - | - | - | - | 25 |

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|----------------------|--|---|---|------------|--|---|---|---|---|---|---|---|---|----|
| INM | Training on integrated nutrient management in green gram | 1 | 1 | Off-campus | | - | - | - | - | - | - | - | - | 25 |
| ICM | Training on micro nutrient management in lowland rice | 1 | 1 | Off-campus | | - | - | - | - | - | - | - | - | 25 |
| IWM | Training on integrated weed management in groundnut in kharif season. | 1 | 1 | Off-campus | | - | - | - | - | - | - | - | - | 25 |
| ICM | Training on Contingent crop management during untimely rainfall in Rice in kharif season. | 1 | 1 | Off-campus | | - | - | - | - | - | - | - | - | 25 |
| Soil testing | Training on soil testing and use of soil health card | 1 | 1 | Off-campus | | - | - | - | - | - | - | - | - | 25 |
| Ecosystem protection | Training on adverse effect of residue burning and alternative way of rice residue management | 1 | 1 | Off-campus | | - | - | - | - | - | - | - | - | 25 |
| ICM | Training on safe storage and post harvest management of pulses | 1 | 1 | Off-campus | | - | - | - | - | - | - | - | - | 25 |
| WM | Training on types of nozzle, sprayer and spraying techniques of herbicides in Rice | 1 | 1 | Off-campus | | - | - | - | - | - | - | - | - | 25 |
| IWM | Training on IWM in cotton | 1 | 1 | Off-campus | | - | - | - | - | - | - | - | - | 25 |
| IWM | Training on integrated weed management in | 1 | 1 | Off-campus | | - | - | - | - | - | - | - | - | 25 |

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| | groundnut in rabi season | | | | | | | | | | | | | |
| INM | Training on INM for higher yield in groundnut | 1 | 1 | Off-campus | | - | - | - | - | - | - | - | - | 25 |
| Horticulture | | | | | | | | | | | | | | |
| ICM | Improved varieties of onion suitable for kharif season and its cultivation practice | 1 | 1 | Off-campus | | - | - | - | - | - | - | - | - | 25 |
| ICM | Orchard management practice to improve yield in mango | 1 | 1 | Off-campus | | - | - | - | - | - | - | - | - | 25 |
| IDM | Training on package & practice of brinjal & its wilt tolerant Varieties | 1 | 1 | Off-campus | | - | - | - | - | - | - | - | - | 25 |
| INM | Integrated nutrient management in banana cultivation | 1 | 1 | Off-campus | | - | - | - | - | - | - | - | - | 25 |
| INM | Nutrient and fertilizer management in mango | 1 | 1 | Off-campus | | - | - | - | - | - | - | - | - | 25 |
| Special horticultural practice | Grafting technique in vegetable crops to increase disease resistance | 1 | 2 | On-campus | | - | - | - | - | - | - | - | - | 15 |
| ICM | Training on appropriate cultivation practice of Cauliflower in off season | 1 | 1 | Off-campus | | - | - | - | - | - | - | - | - | 25 |
| Nursery raising | Scientific raising of seedling through pro-tray in watermelon | 1 | 1 | Off-campus | | - | - | - | - | - | - | - | - | 25 |
| Special horticultural | Roof top gardening of vegetables and | 1 | 1 | Off- | | - | - | - | - | - | - | - | - | 25 |

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| practices | flowers | | | campus | | | | | | | | | | |
| ICM | Training on improved method of cultivation Guava/Pomegranate | 1 | 1 | Off-campus | | - | - | - | - | - | - | - | - | 25 |
| IWM | Different methods of irrigation and watermanagent in cucurbits | 1 | 1 | Off-campus | | - | - | - | - | - | - | - | - | 25 |
| ICM | Cultivation practice of tissue culture banana | 1 | 1 | Off-campus | | - | - | - | - | - | - | - | - | 25 |
| Plant Protection | | | | | | | | | | | | | | |
| IPM | IPM for Borer management in maize | 1 | 1 | Off-campus | | - | - | - | - | - | - | - | - | 25 |
| IDM | IDM for sheath blight in Rice. | 1 | 1 | Off-campus | | - | - | - | - | - | - | - | - | 25 |
| IPM | Chemical and cultural management of for BPH in paddy | 1 | 1 | Off-campus | | - | - | - | - | - | - | - | - | 25 |
| IPM | Integrated management for Pink Boll Worm and sucking pests in Kharif cotton | 1 | 1 | Off-campus | | - | - | - | - | - | - | - | - | 25 |
| IDM | Integrated management for wilt complex in Brinjal | 1 | 1 | Off-campus | | - | - | - | - | - | - | - | - | 25 |
| IPM | Use of new generation safe pesticides for collar rot management in groundnut | 1 | 1 | Off-campus | | - | - | - | - | - | - | - | - | 25 |
| IDM | Integrated crop management for | 1 | 1 | Off-campus | | - | - | - | - | - | - | - | - | 25 |

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| | MYMV in green gram | | | | | | | | | | | | | | |
| IPM | IPM for melon fruit fly in bittergourd | 1 | 1 | Off-campus | | - | - | - | - | - | - | - | - | - | 25 |
| IPM | IPDM for thrips and purple blotch in onion | 1 | 1 | Off-campus | | - | - | - | - | - | - | - | - | - | 25 |
| IDM | Management of die back, fruit rot and anthracnose diseases in chilly | 1 | 1 | Off-campus | | - | - | - | - | - | - | - | - | - | 25 |
| Soil Science | | | | | | | | | | | | | | | |
| INM | Training on application of Sulphur and Ca for increasing oil content and pod quality of groundnut | 1 | 1 | Off-campus | | - | - | - | - | - | - | - | - | - | 25 |
| INM | Training on micronutrient nutrient management in green gram | 1 | 1 | Off-campus | | - | - | - | - | - | - | - | - | - | 25 |
| INM | Training on deficiency symptoms of micronutrients and their mgmt | 1 | 1 | Off-campus | | - | - | - | - | - | - | - | - | - | 25 |
| INM | Training on nitrogen management in Rice. | 1 | 1 | Off-campus | | - | - | - | - | - | - | - | - | - | 25 |
| Production and use of organic inputs | Training on methods of preparation of Vermicompost | 1 | 1 | Off-campus | | - | - | - | - | - | - | - | - | - | 25 |
| Soil testing | Training on methods of Soil sample collection, processing of soil sample and testing of different nutrient by | 1 | 1 | Off-campus | | - | - | - | - | - | - | - | - | - | 25 |

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| | Mridaparikshyak | | | | | | | | | | | | | |
| Home Science/Women Empowerment | | | | | | | | | | | | | | |
| Nutritional security | Training on nutritionally rich vegetables and fruits and importance of balance diet | 1 | 1 | Off-campus | | - | - | - | - | - | - | - | - | 25 |
| IGA | Training on different bed types by using crumbled straw for paddy straw mushroom production | 1 | 1 | Off-campus | | - | - | - | - | - | - | - | - | 25 |
| IGA | Training on treatment of substrate for controlling competitive fungus (ink-cap) | 1 | 1 | Off-campus | | - | - | - | - | - | - | - | - | 25 |
| Nutritional security | Training on planning and management of nutritional garden | 1 | 1 | Off-campus | | - | - | - | - | - | - | - | - | 25 |
| Brooding management | Training on Brooding management | 1 | 1 | Off-campus | | - | - | - | - | - | - | - | - | 25 |
| Nutritional security | Training on different nutritional garden structure | 1 | 1 | Off-campus | | - | - | - | - | - | - | - | - | 25 |
| IGA | Training on quality nursery raising in poly tunnel | 1 | 1 | Off-campus | | - | - | - | - | - | - | - | - | 25 |
| Housing | Training on proper housing | 1 | 1 | Off- | | - | - | - | - | - | - | - | - | 25 |

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| management | management of chicks | | | campus | | | | | | | | | | |
| Feed management | Training on low cost feed management of Duck | 1 | 1 | Off-campus | | - | - | - | - | - | - | - | - | 25 |
| IGA | Training on different varieties of oyster mushroom and its scientific production technology | 1 | 1 | Off-campus | | - | - | - | - | - | - | - | - | 25 |
| PHM | Training on post harvest management of mushroom | 1 | 1 | Off-campus | | - | - | - | - | - | - | - | - | 25 |
| Value addition | Training on different value added products from oyster mushroom | 1 | 1 | Off-campus | | - | - | - | - | - | - | - | - | 25 |
| Agricultural extension | | | | | | | | | | | | | | |
| CBD | Training on group leadership and management of SHGs | 1 | 1 | Off-campus | | - | - | - | - | - | - | - | - | 25 |
| CBD | Training on Agro enterprise management among farm women | 1 | 1 | Off-campus | | - | - | - | - | - | - | - | - | 25 |
| CBD | Training on preparation of project proposal for SHGs | 1 | 1 | Off-campus | | - | - | - | - | - | - | - | - | 25 |
| CBD | Training on Market led production | 1 | 1 | Off-campus | | - | - | - | - | - | - | - | - | 25 |

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| | initiative for vegetables | | | | | | | | | | | | | |
| CBD | Training on ITKs in agriculture and its importance | 1 | 1 | Off-campus | | - | - | - | - | - | - | - | - | 25 |
| CBD | Training on role of farmer producer organisation in strenenting farmers economy | 1 | 1 | Off-campus | | - | - | - | - | - | - | - | - | 25 |
| CBD | Training on different income generating activities for SHG members | 1 | 1 | Off-campus | | - | - | - | - | - | - | - | - | 25 |
| CBD | Training on different Govt. Schemes for SHG groups | 1 | 1 | Off-campus | | - | - | - | - | - | - | - | - | 25 |
| CBD | Training on market behaviour and existing market channel. | 1 | 1 | Off-campus | | - | - | - | - | - | - | - | - | 25 |
| CBD | Training on different available credit institutes | 1 | 1 | Off-campus | | - | - | - | - | - | - | - | - | 25 |
| CBD | Training on proper business plan for FPOs | 1 | 1 | Off-campus | | - | - | - | - | - | - | - | - | 25 |
| CBD | Training on improved Production technology | 1 | 1 | Off-campus | | - | - | - | - | - | - | - | - | 25 |

(b) Rural youths

| Thematic area | Title of Training | No. | Duration | Venue On/Off | Tentative Month | No. of Participants | | | | | | | | | |
|-------------------------|---|-----|----------|-----------------|--------------------|---------------------|---|----|---|-------|---|-------|---|----|--|
| | | | | | | SC | | ST | | Other | | Total | | | |
| | | | | | | M | F | M | F | M | F | M | F | T | |
| Crop Production | | | | | | | | | | | | | | | |
| Composting method | Training on methods of preparation of organic bio products and different method of composting | 1 | 2 | On Campus | | - | - | - | - | - | - | - | - | 15 | |
| Bio-fertilizer | Training on BGA and Azolla cultivation | 1 | 2 | On Campus | | - | - | - | - | - | - | - | - | 15 | |
| Horticulture | | | | | | | | | | | | | | | |
| Nursery management | Training on Nursery raising techniques in vegetable and fruits | 1 | 2 | On Campus | | - | - | - | - | - | - | - | - | 15 | |
| Protected cultivation | Training on Protected cultivation of vegetable and flower crops | 1 | 2 | On Campus | | - | - | - | - | - | - | - | - | 15 | |
| Plant Protection | | | | | | | | | | | | | | | |
| Biological control | Scientific bio-agent production practices for sustainable agriculture | 1 | 2 | On Campus | | - | - | - | - | - | - | - | - | 15 | |
| Safe use of pesticide | Safe and judicious use of | 1 | 2 | On Campus | | - | - | - | - | - | - | - | - | 15 | |

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| | pesticides | | | | | | | | | | | | | | |
| Home Science/Women Empowerment | | | | | | | | | | | | | | | |
| Brooding Management | Training on brooding and rearing management of different poultry breeds in backyard for income generation | 1 | 2 | On Campus | | - | - | - | - | - | - | - | - | - | 15 |
| Value addition | Training on different value added products from tomato | 1 | 2 | On Campus | | - | - | - | - | - | - | - | - | - | 15 |
| Agricultural extension | | | | | | | | | | | | | | | |
| CBD | Potential entrepreneurial opportunity in livestock system | 1 | 2 | On Campus | | - | - | - | - | - | - | - | - | - | 15 |
| CBD | Potential entrepreneurial opportunity in Agri-horti system | 1 | 2 | On Campus | | - | - | - | - | - | - | - | - | - | 15 |

(c) Extension functionaries

| Thrust area/ Thematic area | Title of Training | No. | Duration | Venue On/Off | Tentative Month | No. of Participants | | | | | | | | | |
|-------------------------------|--|-----|----------|-----------------|--------------------|---------------------|---|----|---|-------|---|-------|---|---|----|
| | | | | | | SC | | ST | | Other | | Total | | | |
| | | | | | | M | F | M | F | M | F | M | F | T | |
| Crop Production | | | | | | | | | | | | | | | |
| Chemical weed management | Different types of new generation herbicide for weed | 1 | 2 | On Campus | | - | - | - | - | - | - | - | - | - | 15 |

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| | management | | | | | | | | | | | | | |
| Horticulture | | | | | | | | | | | | | | |
| Special horticultural practice | Training on horticultural practices for quality planting material production in fruits and flower crops | 1 | 2 | On Campus | | - | - | - | - | - | - | - | - | 15 |
| Seed production | Seed production techniques of vegetable crops | 1 | 5 | On Campus | | - | - | - | - | - | - | - | - | 15 |
| Plant Protection | | | | | | | | | | | | | | |
| IPM | Modern pest control methods in managing insect pests of major field crops | 1 | 2 | On Campus | | - | - | - | - | - | - | - | - | 15 |
| Home Science/Women Empowerment | | | | | | | | | | | | | | |
| Nutritional security | Low cost and nutrient efficient diet designing | 1 | 2 | On Campus | | - | - | - | - | - | - | - | - | 15 |
| Nutritional security | Planning and layout of nutrition garden and different nutritional garden structure | 1 | 2 | On Campus | | - | - | - | - | - | - | - | - | 15 |
| Agricultural extension | | | | | | | | | | | | | | |
| CBD | Application of new media in extension | 1 | 2 | On Campus | | - | - | - | - | - | - | - | - | 15 |
| CBD | Motivational and communication skills for extension personnel | 1 | 2 | On Campus | | - | - | - | - | - | - | - | - | 15 |

4. Frontline demonstration to be conducted*

FLD-1-

Crop: Rice

Thrust Area: Crop production

Thematic Area: IWM

Season: kharif

Farming Situation: low land

FLD-2-

Crop: Cotton

Crop: Thrust Area: Crop production

Thematic Area: Weed management

Season: Kharif

Farming Situation: Rainfed, medium land

FLD-3-

Crop: Green gram

Thrust Area: Crop production

Thematic Area: INM

Season: Rabi

Farming Situation: Irrigated medium land

FLD-4-

Crop: Groundnut

Thrust Area: Crop production

Thematic Area: IWM

Season: Rabi

Farming Situation: Irrigated medium land

FLD-5-

Crop: Vegetable seedling

Thrust Area: Horticulture

Thematic Area: Seedling raising technique

Season: Rabi

Farming Situation: upland

FLD-6-

Crop: Banana

Thrust Area: Horticulture

Thematic Area: propagation technique

Season: Rabi

Farming Situation: Uplan

FLD-7-

Crop: onion

Thrust Area: Horticulture

Thematic Area: Fertilizer application

Season: Kharif

Farming Situation: upland

FLD-8-

Crop: Tomato

Thrust Area: Horticulture

Thematic Area: Varietal performance

Season: Rabi

Farming Situation: Upland

FLD-9-

Crop: Cotton

Thrust Area: Plant protection

Thematic Area: IPM

Season: Kharif

Farming Situation: Upland and Medium land

FLD-10-

Crop: Green gram

Thrust Area: Plant protection

Thematic Area: IPM

Season: Rabi

Farming Situation: Irrigated medium land

FLD-11-

Crop: Chilli

Thrust Area: Plant protection

Thematic Area: IDM

Season: Rabi

Farming Situation: Irrigated medium land

FLD-12-

Crop: Brinjal

Thrust Area: Plant protection

Thematic Area: IDM

Season: Rabi

Farming Situation: Irrigated medium land

FLD-13-

Crop: Mango

Thrust Area: Home science

Thematic Area: Drudgery Reduction

Season: Pre-Kharif

Farming Situation: Homestead

FLD-14

Crop: Vegetables & fruits

Thrust Area: Home Science

Thematic Area: Nutritional security

Season: Round the year

Farming Situation: Homestead

FLD-15

Crop: Duck

Thrust Area: Home Science

Thematic Area: Feed management

Season: Round the year

Farming Situation: Backyard

FLD-16

Crop: Vegetable seedling

Thrust Area: Home Science

Thematic Area: IGA

Season: Round the year

Farming Situation: Upland

FLD-17

Crop: Oyster Mushroom

Thrust Area:

Thematic Area: Entrepreneurship

Season: Rabi

Farming Situation: Homestead

| Sl. No. | Crop & variety / Enterprises | Proposed Area (ha) / Unit (No.) | Technology package for demonstration | Parameter (Data) in relation to technology demonstrated | Cost of Cultivation (Rs.) | | | No. of farmers / demonstration | | | | | | | | | |
|---------|------------------------------|---------------------------------|--|--|---------------------------|------|-------|--------------------------------|---|----|---|-------|---|-------|---|---|----|
| | | | | | Name of Inputs | Demo | Local | SC | | ST | | Other | | Total | | | |
| | | | | | | | | M | F | M | F | M | F | M | F | T | |
| 1 | Rice | 1ha | Application of pendimethal in @ 750 g/ha as pre-emergence application i.e 0-3 DAT followed by Bispyribac sodium @ 25 g/ha as post- | Weed count , No of Filled grains /Panicle, 1000 grain weight, no of effective tillers per m2 | - | - | - | - | - | - | - | - | - | - | - | - | 10 |

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| | | | emergence i.e 25 DAT | | | | | | | | | | | | | | |
| 2 | Ground nut | 1 ha | Pre- emergence application of pendimethal in 30%+imaze thyper 2% @1.0 kg/ha ready mix fbpost emergence application of quizalfop-p- ethyl @50g/ha at 20 DAS | Pod weight/plant , No of filled pod per plant, Weed control efficiency Yield(q/ha), Economics | - | - | - | - | - | - | - | - | - | - | - | - | 10 |
| 3 | Green gram | 1 ha | Application of 75% STBF + Foliar application of WSF (18:18:18) @ 2% at 25 and 40 DAS | Nodule no /plant, No of pods/plant, No of seeds/pod, test weight, Available NPK in soil(Before & After), Yield (q/ha), Economics | - | - | - | - | - | - | - | - | - | - | - | - | 10 |
| 4 | Cotton | 1 ha | Pre- emergence application of pendimethal in @ 1.0 kg a.i./ ha as pre- emergence with post emergence application of Quizalofop- p-ethyl @ 50g a.i./ ha | No of bolls/plant, weed control efficiency | - | - | - | - | - | - | - | - | - | - | - | - | 10 |

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| | | | at 20 DAS and one hand weeding at 45 DAS. | | | | | | | | | | | | | | |
| 5 | Vegetable seedling | 10 nos | Use of protray technique of vegetable seedling raising using coco peat as media | Germination %, seedling mortality %, height of seedling, days from seed sowing to transplanting , B:C ratio | - | - | - | - | - | - | - | - | - | - | - | - | 10 |
| 6 | Banana | 10 nos | Bunch feeding and INM in banana to increase bunch weight and finger size | Bunch weight (kg), Finger size (cm), finger weight (gm), no.of fruits/bunch, Yield (Qt/ha), Gross return, Net return, B:C ratio | - | - | - | - | - | - | - | - | - | - | - | - | 10 |
| 7 | Onion | 1ha | Application of oxyflurofen @ 0.05 kg/ha before planting with one hand weeding at 40-60 days after planting is | Bulb weight, plant height, no of leaves /plant, bulb diameter | - | - | - | - | - | - | - | - | - | - | - | - | 10 |

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| | | | best to control the weeds in Onion crop. | | | | | | | | | | | | | |
| 8 | Tomato | 1 ha | Arka Apeksha- High yielding variety developed by IIHR. It has triple disease resistant to leaf curl, bacterial wilt and early blight. Fruits are oblonged and medium large.(90-100gm). Yield potential 43-90tn/ha in 140-150 days | Avg. No. of fruits/plant, fruit weight (gm), days to fruit initiation, days to fruit maturity , Yield (Qt /ha), Gross return, Net return, B:C ratio | - | - | - | - | - | - | - | - | - | - | - | 10 |
| 9 | Greengram | 1 ha | Seed treatment with Imidacloprid 600 FS @ 5 ml / kg seed + Yellow sticky trap @ 50/ha + Neem oil 5 @5ml/lit spray on appearance of white fly on YST + Spraying of Diafenthiur on 50 WP @ 312.5 g a.i./ha | pest count/leaf, Infected leaves /plant, YMV infected plants/sq.mtr % of infestation, Additional income over additional investment, Yield and B:C ratio | - | - | - | - | - | - | - | - | - | - | - | 10 |
| 1 | Cotton | 1 | Timely | % of | - | - | - | - | - | - | - | - | - | - | - | 10 |

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| 0 | | ha | sowing latest by 1st wk of July, Collection and destruction of fallen squares/bolls/flowers in the initial stage of infestation, Spraying of neem based pesticide 15000ppm @ 2.5ltr/ha , Installation of pheromone traps @ 40/ha for mass trapping of pink boll worm one wk prior to flowering, | infestation, Additional income over additional investment, Yield and B:C ratio | | | | | | | | | | | | |
| 1 1 | Chilli | 1ha | Seed treatment with (Carboxin 37.5% + Thiram 37.5%) @ 0.2% followed by three sprayings with Difenconazole @ 0.1% from initial disease appearance at 10 days interval | PDI, Incidence %, Yield(q/ha), B:C ratio | - | - | - | - | - | - | - | - | - | - | - | 10 |
| 1 | Brinjal | 1ha | Seed | Wilt | - | - | - | - | - | - | - | - | - | - | - | 10 |

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| 2 | | | treatment with Metalaxyl+ Mancozeb 72% WP @ 2gm/kg +soil application of carbofuran @ 1kg a.i./ha+ soil drenching of carbendazim 0.15%+ streptocycline 0.015% at 30 and 45 days after transplanting | percentage, no of wilted plant/m ² , Yield(q/ha), B:C ratio | | | | | | | | | | | | | |
| 13 | Mango | 10 | Demonstration of Fruit Harvester for picking of mango from Orchard for drudgery reduction | Energy expenditure rate (KJ/min),W HR (beats/min), % reduction in drudgery, % increase in efficiency, CBR Yield ,B:C ratio, Net profit | - | - | - | - | - | - | - | - | - | - | - | - | 10 |
| 14 | Nutritional garden | 10 nos | Demonstration of nutritional garden for improving nutritional security of farm family Nutritional garden with Protein, Vitamin & | Consumption of vegetables/day(Kg) Availability of vegetable/day(Kg) Mean increase in consumption | - | - | - | - | - | - | - | - | - | - | - | - | 10 |

| | | | | | | | | | | | | | | | | |
|----|------|-------|---|--|---|---|---|---|---|---|---|---|---|---|---|----|
| | | | <p>iron rich vegetables and fruits with consumers preference</p> <p>1. Trellis structure with PP rope for raising cucurbits: 2. Pro-tray for raising seedlings in small quantity + 3. cement ring tank for vermi composting,</p> <p>Growing vegetables round the year covering leafy vegetables, sola , Solanaceous vegetables, Roots and Tubers, cucurbits suiting to consumption pattern + Two</p> <p>Papaya Plants ,One Lemon, one drumstick and two Banana and floriculture in bund</p> | n of vegetables and fruits compared to RDA (%) | | | | | | | | | | | | |
| 15 | Duck | 10nos | Demonstration | Egg laying age | - | - | - | - | - | - | - | - | - | - | - | 10 |

| | | | | | | | | | | | | | | | | | |
|----|--------------------|--------|--|--|---|---|---|---|---|---|---|---|---|---|---|---|----|
| | | | <p>Azolla as a supplementary feed to reduce feed cost</p> <p>Feeding of fresh Azolla @ 200g/duck/day as replacement of 20% concentrate in feed of Khaki Campbell ducks was beneficial in terms of improved FCR, egg production and egg quality traits with enriched yolk colour.</p> | <p>(Months)</p> <p>Egg production/year (nos)</p> <p>Body weight (Kg)</p> <p>Cost of intervention . Additional income over additional investment, B:C ratio</p> | | | | | | | | | | | | | |
| 16 | Vegetable seedling | 10 nos | <p>Demonstration on vegetable seedling raising under poly tunnel</p> <p>Low cost poly tunnel made up of Bamboo and PVC pipe is installed in a raised bed. Soil solarization , seed treatment practices ensures production of healthy seedling,</p> | <p>% of seedling survival, seed germination %, Number of days required from seed sowing to transplanting (days), Seedling height (cm)</p> | - | - | - | - | - | - | - | - | - | - | - | - | 10 |

| | | | | | | | | | | | | | | | | | | |
|----|-----------------|----------|---|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| | | | reduces disease infestation and protection against harsh climatic condition. | | | | | | | | | | | | | | | |
| 17 | Oyster Mushroom | 50 nos . | Preparation of small videos (1.5-2.0 minutes) on different activities of production process of selected commodities and the same will be sent through whatsapp to the identified farmers and do group discussion with those farmers. Details of Technology : Production packages will be divided into different segments and short videos will be produced and disseminated through whatsapp. | Timeliness, Understanding the method and process depicted in the video, Retention , retrieval & re-use of the content Awareness creation, Knowledge acquisition & retention, Real-time applicability , Uptake of new practice, Information sharing & spillover effects, Change in perception | | | | | | | | | | | | | | |

Extension and Training activities under FLD:

| Activity | Title of Activity | No. | Clientele | Duration | Venue On/Off | No. of Participants | | | | | | | | |
|-----------|---|-----|-------------------------------------|----------|-----------------|---------------------|---|----|---|-------|---|-------|---|----|
| | | | | | | SC | | ST | | Other | | Total | | |
| | | | | | | M | F | M | F | M | F | M | F | T |
| Field day | Demonstration of herbicides for weed management in transplanted rice | 1 | F & FW, RY and Line dept. personnel | 1 Day | OFF | - | - | - | - | - | - | - | - | 50 |
| Field day | Demonstration on integrated weed management in groundnut | 1 | F & FW, RY and Line dept. personnel | 1 Day | OFF | - | - | - | - | - | - | - | - | 50 |
| Field day | Demonstration on IWM in cotton | 1 | F & FW, RY and Line dept. personnel | 1 Day | OFF | - | - | - | - | - | - | - | - | 50 |
| Field day | Demonstration on INM in Green gram | 1 | F & FW, RY and Line dept. personnel | 1 Day | OFF | - | - | - | - | - | - | - | - | 50 |
| Field day | Demonstration on use of pro-tray raising technique for raising vegetable seedling | 1 | F & FW, RY and Line dept. personnel | 1 Day | OFF | - | - | - | - | - | - | - | - | 50 |
| Field day | Demonstration on bunch feeding in banana to | 1 | F & FW, RY and Line dept. | 1 Day | OFF | - | - | - | - | - | - | - | - | 50 |

| | | | | | | | | | | | | | | | |
|-----------|---|---|-------------------------------------|-------|-----|---|---|---|---|---|---|---|---|---|----|
| | increase bunch weight | | personnel | | | | | | | | | | | | |
| Field day | Demonstration on use of weedicide to control weed infestation in rabi onion cultivation | 1 | F & FW, RY and Line dept. personnel | 1 Day | OFF | - | - | - | - | - | - | - | - | - | 50 |
| Field day | Demonstration on wilt resistant tomato variety Arka Apeksha | 1 | F & FW, RY and Line dept. personnel | 1 Day | OFF | - | - | - | - | - | - | - | - | - | 50 |
| Field day | Demonstration of Pink boll worm management in Cotton | 1 | F & FW, RY and Line dept. personnel | 1 Day | OFF | - | - | - | - | - | - | - | - | - | 50 |
| Field day | Demonstration of YMV management in green gram. | 1 | F & FW, RY and Line dept. personnel | 1 Day | OFF | - | - | - | - | - | - | - | - | - | 50 |
| Field day | Demonstration on IDM for anthracnose in chilli | 1 | F & FW, RY and Line dept. personnel | 1 Day | OFF | - | - | - | - | - | - | - | - | - | 50 |
| Field day | Demonstration on Integrated management for wilt complex in Brinjal | 1 | F & FW, RY and Line dept. personnel | 1 Day | OFF | - | - | - | - | - | - | - | - | - | 50 |
| Field day | Demonstration of Fruit Harvester for picking of mango from | 1 | F & FW, RY and Line dept. | 1 Day | OFF | - | - | - | - | - | - | - | - | - | 50 |

| | | | | | | | | | | | | | | | |
|-----------|--|---|-------------------------------------|-------|-----|---|---|---|---|---|---|---|---|---|----|
| | Orchard for drudgery reduction | | personnel | | | | | | | | | | | | |
| Field day | Demonstration of nutritional garden for ensuring Nutritional Security of farm family | 1 | F & FW, RY and Line dept. personnel | 1 Day | OFF | - | - | - | - | - | - | - | - | - | 50 |
| Field day | Demonstration on Azolla as a supplementary feed to reduce feed cost | 1 | F & FW, RY and Line dept. personnel | 1 Day | OFF | - | - | - | - | - | - | - | - | - | 50 |
| Field day | Demonstration on vegetable seedling raising under poly tunnel | 1 | F & FW, RY and Line dept. personnel | 1 Day | OFF | - | - | - | - | - | - | - | - | - | 50 |
| Field day | Demonstration of the effectiveness of short technology videos on technology adoption | 1 | F & FW, RY and Line dept. personnel | 1 Day | OFF | - | - | - | - | - | - | - | - | - | 50 |

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 | Hasanta | June to October | 3.0 | FS | 90.0 | | 2,92,500.00 | |
| | Pratikshya | June to December | 1.0 | FS | 32.0 | | 1,04,000.00 | |
| | CO-51/MTU-1156 | June to November | 1.0 | FS | 29.0 | | 94,250.00 | |
| Green gram | IPM-02-14 | January to April | 2.0 | Certified | | | | |
| Groundnut | Dharani | December to March | 0.1 | Certified | | | | |
| Brinjal | Swarna shakti, Swarna ajay Blue star | June to February | - | Seedling | 10,000 | | 15,000 | |
| Chilli | Pusa Sadabahar, | June to February | - | Seedling | 10,000 | | 20,000 | |
| Papaya | Red lady, Honey dew, Pusa nanha | June to September | - | Seedling | 5,00 | | 7,500 | |
| Drumstick | PKM-1 | June to September | - | Seedling | 250 | | 3,750 | |
| Onion | Bhima super, Bhima shakti, Agrifound light red | July to august | - | Seedling | 10,000 | | 3,000 | |
| Cabbage | Golden acre, Pusa drum head, Pusa mukta | September to December | - | Seedling | 12,000 | | 24,000 | |
| Tomato | Arka rakshak, Lakhmi | June to December | - | Seedling | 10,000 | | 15,000 | |
| Cauliflower | Pusa meghna, Pusa snow ball | September to December | - | Seedling | 12000 | | 24,000 | |

| | | | | | | | | |
|----------------------------|--|-----------------------|---|----------|--------|--|--------|--|
| Broccoli | Lucky F1 Hybrid | September to December | - | Seedling | 1000 | | 2,000 | |
| Coloured Capsicum | California wonder, yellow wonder | September to December | - | Seedling | 500 | | 2,000 | |
| Knolkhol | White Vienna, purple vienna | September to December | - | Seedling | 1500 | | 3000 | |
| Red Cabbage | Namdhari -NS-1460 | September to December | - | Seedling | 500 | | 1000 | |
| Cherry Tomato | Namdhari, NS-577 | September to December | - | Seedling | 500 | | 1000 | |
| Lettuce | Batavia lettuce, Butter lettuce | September to December | - | Seedling | 500 | | 1000 | |
| Marigold | Ceracole, Pusa narangi gairda | September to December | - | Seedling | 4000 | | 8000 | |
| Chrysanthemum | NBRI INDIANA, NBRI KUSUM | September to December | - | Seedling | 200 | | 1000 | |
| Rose | Manuparle, Arka sinchana, Arka sharmeeli | September to December | - | Seedling | 100 | | 3000 | |
| Mango | Amrapalli, Dasherri | | - | Sapling | 1000 | | 35000 | |
| Paddy straw mushroom spawn | <i>Volvariella volvacea</i> | June to September | - | Spawn | 1000 | | 18,000 | |
| Oyster mushroom spawn | <i>Pleurotus sajorajju</i> <i>Pleurotus florida</i> <i>Hypsizygus ulmarius</i> | September to February | - | Spawn | 1000 | | 18,000 | |
| Paddy Straw mushroom | <i>Volvariella volvacea</i> | June to September | | Mushroom | 1.0qtl | | 15,000 | |
| Oyster | <i>Pleurotus</i> | October-March | | Mushroom | 1.0qtl | | 8,000 | |

| | | | | | | | | |
|--------------|---|-------------------|--|--------------|--------|--|--------|--|
| mushroom | <i>sajorcaju</i> <i>Pleurotus florida</i> <i>Hypoglystus ulmarius</i> | | | | | | | |
| Chicks | Vanaraja, Kadaknath , Aseel, RIR, Kaveri | Round the year | | Chicks | 10,000 | | | |
| Duckling | Khaki campbell, White pekin | Round the year | | Duckling | 3,000 | | | |
| Quail | Japanese Quail | Round the year | | Quail | 300 | | | |
| Vermicompost | | Round the year | | Vermicompost | 50qtl | | 75,000 | |
| Vermiworm | | Round the year | | Vermiworm | 10 kg | | 5,000 | |

b) Village Seed Production Programme

| Name of the Crop / Enterprise | Variety / Type | Period From..... ... to | Area (ha.) | No. of farmers | Details of Production | | | | |
|-------------------------------|----------------|----------------------------------|------------|----------------|-----------------------|-------------------------|----------------------|-----------------------------|---------------------------|
| | | | | | Type of Product | Expected Production (q) | Cost of inputs (Rs.) | Expected Gross income (Rs.) | Expected Net Income (Rs.) |
| | | | | | | | | | |
| | | | | | | | | | |

6. 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 | 17 | - | - | - | - | - | - | - | - | - | 900 |
| 2. | KisanMela | 1 | - | - | - | - | - | - | - | - | - | 350 |
| 3. | KisanGhoshi | 2 | - | - | - | - | - | - | - | - | - | 30 |
| 4. | Exhibition | 5 | - | - | - | - | - | - | - | - | - | 1500 |
| 5. | Film Show | 5 | - | - | - | - | - | - | - | - | - | |
| 6. | Method Demonstrations | 10 | - | - | - | - | - | - | - | - | - | 200 |
| 7. | Farmers Seminar | 05 | - | - | - | - | - | - | - | - | - | 275 |
| 8. | Workshop | 5 | - | - | - | - | - | - | - | - | - | |
| 9. | Group meetings | 18 | - | - | - | - | - | - | - | - | - | 180 |
| 10. | Lectures delivered as resource persons | 22 | - | - | - | - | - | - | - | - | - | |
| 11. | Advisory Services | 55 | - | - | - | - | - | - | - | - | - | 10850 |
| 12. | Scientific visit to farmers field | 300 | - | - | - | - | - | - | - | - | - | 540 |
| 13. | Farmers visit to KVK | 2200 | - | - | - | - | - | - | - | - | - | 2200 |
| 14. | Diagnostic visits | 45 | - | - | - | - | - | - | - | - | - | 225 |
| 15. | Exposure visits | 01 | - | - | - | - | - | - | - | - | - | 30 |
| 16. | Ex-trainees Sammelan | 02 | - | - | - | - | - | - | - | - | - | 50 |
| 17. | Soil health Camp | 02 | - | - | - | - | - | - | - | - | - | |
| 18. | Animal Health Camp | 01 | - | - | - | - | - | - | - | - | - | |
| 19. | Agri mobile clinic | - | - | - | - | - | - | - | - | - | - | |
| 20. | Soil test campaigns | 01 | - | - | - | - | - | - | - | - | - | 300 |
| 21. | Farm Science Club Conveners meet | 12 | - | - | - | - | - | - | - | - | - | 300 |
| 22. | Self Help Group Conveners meetings | 04 | - | - | - | - | - | - | - | - | - | 100 |
| 23. | Mahila Mandals Conveners meetings | - | - | - | - | - | - | - | - | - | - | - |
| 24. | Celebration of important days (specify) World Food day, World soil day, Agricultural education day, Women in agriculture day, Kishan divas | 25 | - | - | - | - | - | - | - | - | - | 1250 |
| 25. | Sankalp Se Siddhi | - | - | - | - | - | - | - | - | - | - | - |
| 26. | Swatchta Hi Sewa | 05 | - | - | - | - | - | - | - | - | - | 250 |
| 27. | Mahila Kisan Diwas | 01 | - | - | - | - | - | - | - | - | - | 50 |
| 28. | Any Other (Specify) | - | - | | | | | | | | | |
| | Total | | | | | | | | | | | |

7. Revolving Fund (in Rs.)

| Opening balance of 2021-2022 (As on 01.04.2021) | Amount proposed to be invested during 2022-2023 | Expected Return |
|--|--|------------------------|
| 1,33,301.00 | 5,00,000/- /-(Approx.) | 7,00,000/- /-(Approx.) |

8. Expected fund from other sources and its proposed utilization

| Project | Source | Amount to be received (Rs. in lakh) | Proposed purpose of utilization (in brief) |
|----------------|---------------|--|---|
| | | | |
| | | | |
| | | | |

9. On-farm trials to be conducted*

OFT-1

- i. **Season:** Pre Rabi,2022
- ii. **Title of the OFT:** Assessment of Decomposer for in-situ residue management in Rice
- iii. **Thematic Area:** Residue management
- iv. **Problem diagnosed:** Environmental pollution due to residue burning in field
- v. **Production system:** Rice-pulse and Rice fallow farming system,.
- vi. **Micro farming system:** Rainfed Medium land
- vii. **Technology for Testing:** NRRI microbial consortium containing Three microbial strains *Aspergillus awamori* (NRRI-CPD- COMF5), *Trichoderma viridi* (NRRI-CPD-COMF6) and *Streptomyces sp* (NRRI-CPD-COMA4) decomposes within 45 days of application. Pusa decomposer is a mix of seven fungi strains that produce enzymes to digest cellulose, lignin and pectin in paddy straw . It decomposes within 30 days of application.
- viii. **Objective(s):** To reduce environmental pollution and to maintain soil health
- ix. **Treatments:**

Farmers Practice (FP): Harvesting of rice in combine harvester and burning of residue in the field.

T O₁:NRRI decomposer @ 10 capsules in 100lit of water with 2 % jaggery solution for 1 ha.
T O₂: PUSA decomposer @ 4 capsules in 25 lit of water with 2 % jaggery solution and pulse powder for 1 ha.

Critical Inputs: Bio decomposer capsules
Unit Size: 1 ha
- x. **No of Replications:** 7
- xi. **Unit Cost:** 300
- xii. **Total Cost:** 2100
- xiii. **Monitoring Indicator:** Cost of Intervention. Soil organic matter content(Before and After), Ease of cultivation (1-5 Scale), Yield of Greengram (next crop)
- xiv. **Source of Technology (ICAR/ AICRP/ SAU/ Other, please specify):** Source : ICAR-NRRI, 2021, Source: ICAR- IARI, 2020

OFT-2

- i. **Season:** Kharif
- ii. **Title of the OFT:** Assessment of zinc deficiency in lowland rice
- iii. **Thematic Area:** Soil Science
- iv. **Problem diagnosed:** Low yield due to Zn deficiency
- v. **Production system:** Rice-pulse
- vi. **Micro farming system:** Low land
- vii. **Technology for Testing:** Technology option-I (TO-I): Soil Test Based Recommendation (STBR) NPK+ Zn @ 5 kg/ha
Technology option-II(TO-II): STBR NPK + 5t FYM ha⁻¹ + Zn @ 2.5 kg ha⁻¹
- viii. **Existing Practice:** FP-To be well defined with respect to that problem and practice
- ix. **Objective(s):** To create awareness about Zn deficiency and its application in proper dose
- x. **Treatments:**
Farmers Practice (FP): FP-To be well defined with respect to that problem and practice

Technology option-I (TO-I): Soil Test Based Recommendation (STBR) NPK+ Zn @ 5 kg/ha
Technology option-II(TO-II): STBR NPK + 5t FYM ha⁻¹ + Zn @ 2.5 kg ha⁻¹
- xi. **Critical Inputs:** Zinc, NPK fertiliser
- xii. **Unit Size:** 1ha
- xiii. **No of Replications:** 7
- xiv. **Unit Cost:**
- xv. **Total Cost:**
- xvi. **Monitoring Indicator:** No. of effective tillers /sq m, No. of filled grain per panicle, 1000 grain weight (gm) , Yield(q/ha), Economics
- xvii. **Source of Technology (ICAR/ AICRP/ SAU/ Other, please specify):** AICRP on LTFE, OUAT, Bhubaneswar, Odisha, 2017, AICRP on Micronutrient and Pollutant, OUAT, Bhubaneswar, Odisha, 2016

OFT-3

- i. Season: Rabi
- ii. Title of the OFT: **Assessment on brinjal varieties for wilt resistance**
- iii. Thematic Area: Varietal evaluation
- iv. Problem diagnosed: Low yield due to wilt incidence in kharif upland
- v. Production system: vegetable-vegetable
- vi. Micro farming system: Rainfed upland
- vii. Technology for Testing: **Technology option-I (TO-I): - Swarna Ajay**
Cultivation of bacterial wilt resistant brinjal var Swarna Ajay
Technology option-I I(TO1): – Swarna Shakti –
Cultivation of bacterial wilt resistant brinjal var Swarna Shakti
- viii. Existing Practice: Cultivation of hybrid variety- VNR-212 , kutmenda local
- ix. Objective(s): To identify wilt resistant high yielding variety
- x. Treatments:
Farmers Practice (FP): Cultivation of hybrid variety-VNR-212, kutmenda local
Technology option-I (TO-I): - Swarna Ajay
Plant height is 50-60cm, intermediate growth habit and broad plant spread, suitable for kharif/ rabi season, fruits are medium size, attractive purple colour, harvest takes place 55-60 days after transplanting, resistant to bacterial wilt and phomopsis blight, yields 70-75 tonnes/ ha
Technology option-II(TO-II): - Swarna Shakti
Plant height is 70-80cm, plant is erect and intermediate , suitable for kharif season, fruits are medium size, attractive purple colour, harvest takes place 55-60 days after transplanting, resistant to bacterial wilt and phomopsis blight, yields 70-75 tonnes/ ha
- xi. **Critical Inputs:** Brinjal seeds
- xii. **Unit Size:** 1 ha
- xiii. **No of Replications:** 7
- xiv. **Unit Cost:**
- xv. **Total Cost:**
- xvi. **Monitoring Indicator:**Wilt incidence (%), Fruit wt(g), No of fruits per plant, Yield (q/ha) , market price, consumer preference, Yield (q/ha), Cost of intervention. Additional income over additional investment , B:C ratio,
- xvii. **Source of Technology (ICAR/ AICRP/ SAU/ Other, please specify):** IIHR, 2019, ICAR-RCER-2018-19

OFT-4

- i. **Season: Rabi**
- ii. **Title of the OFT: Assessment on use of plant growth regulators to check flower and fruit drop in mango**
- iii. **Thematic Area:** Crop management
- iv. **Problem diagnosed:** Flower and fruit drop resulting in low yield
- v. **Production system:**
- vi. **Micro farming system:** Rainfed upland
- vii. **Technology for Testing:**
 - Technology option-I (TO-I): Foliar application of Triacantanol @3-5 ppm at panicle initiation, fruit set and marble stage of fruit growth
 - Technology option-II (TO-II): Application of NAA (20ppm) at pea size and marble size of fruit in mango
- viii. **Existing Practice:** VNR-212
- ix. **Objective(s): Control of flower and fruit drop to increase yield**
- x. **Treatments:**
 - i. Farmers Practice (FP): Spraying of Planofix-4ml/16 lit at flowering time and at pea size of fruit
 - ii. Technology option-I (TO-I):

Foliar application of **Triacantanol @ 3-5 ppm** at Panicle initiation, fruit set, and marble stage of fruit growth enhances fruit retention in mango . Godrej Vipul Booster can be used as a source of Triacantanol which contains 1000ppm of triacantanol.
 - iii. Technology option-II (TO-II):

Application of **NAA 20ppm** lt of watter i.e. 1st spray when tender fruits are of pea size, 2nd spray when fruits are of marble size (about 2cm diameter) reduce flower & fruit drop & improve fruit quality & yield in mango, improves fruit setting, yield & quality . Expected yield-60-70 kg/plt
- xi. **Critical Inputs:** Use of growth regulators
- xii. **Unit Size:**
- xiii. **No of Replications: 7**
- xiv. **Unit Cost:**
- xv. **Total Cost:**
- xvi. **Monitoring Indicator:** % decrease in flower drop, % decrease in fruit drop, fruit weight(gm), Avg. no. of fruits per plant , yield(q/ha), B:C ratio
- xvii. **Source of Technology (ICAR/ AICRP/ SAU/ Other, please specify):**

CHES, 2020, Source: Annual Report, OUAT, 2017-18

OFT-5

- i. **Season:** Kharif
- ii. **Title of the OFT:** Assessment of sheath blight management in rice
- iii. **Thematic Area:** IDM
- iv. **Problem diagnosed:** Low yield in rice due to heavy incidence of rice sheath blight
- v. **Production system:**
- vi. **Micro farming system:** merium land
- vii. **Technology for Testing:** Technology option-I (TO-I): -Seed treatment with Thiophenate methyl @1.5g/kg seed and alternate spraying of Trifloxystrobin 25%+ Tebuconazole 50%WG @ 200g/ ha and Thifluzamide 24SC @500 ml/ha from the appearance of the disease
Technology option-II(TO-II): Seed treatment with Carboxyn + Thiram @1.5 g/kg seed and alternate spraying of Propiconazole 13.9 EC +Difenconazole 13.9 EC @500 ml/ha and Azoxystrobin 23% SC@500 ml/ha at 15 days interval
- viii. **Existing Practice:** Spraying of Hexaconazole 5%EC @ 1.5ml/ltr of water
- ix. **Objective(s):** To control sheath blight incidence
- x. **Treatments:**
Farmers Practice (FP): Spraying of Hexaconazole 5%EC @ 1.5ml/ltr of water

Technology option-I (TO-I): -Seed treatment with Thiophenate methyl @1.5g/kg seed and alternate spraying of Trifloxystrobin 25%+ Tebuconazole 50%WG @ 200g/ ha and Thifluzamide 24SC @500 ml/ha from the appearance of the disease
Technology option-II(TO-II): Seed treatment with Carboxyn + Thiram @1.5 g/kg seed and alternate spraying of Propiconazole 13.9 EC +Difenconazole 13.9 EC @500 ml/ha and Azoxystrobin 23% SC@500 ml/ha at 15 days interval
- xi. **Critical Inputs:** Thiophenate methyl, Trifloxystrobin 25%+ Tebuconazole 50%, Thifluzamide 24SC, Carboxyn + Thiram, Propiconazole 13.9 EC +Difenconazole 13.9 EC, Azoxystrobin 23% SC
- xii. **Unit Size:** 0.5ha
- xiii. **No of Replications:** 7
- xiv. **Unit Cost:** 1500
- xv. **Total Cost:** 10,500
- xvi. **Monitoring Indicator:** Infected hills /m², PDI (%), Yield, B:C ratio
- xvii. **Source of Technology (ICAR/ AICRP/ SAU/ Other, please specify):** Dept. of plant pathology, PAU, 2016 ,DRR, 2015

OFT-6

i. **Season:** Rabi

ii. **Title of the OFT:** Assessment of IPM practices for management of melon fruit fly in bittergourd

iii. **Thematic Area:** IPM

iv. **Problem diagnosed:** High infestation of fruit fly in bittergourd during fruiting period

v. **Production system:**

vi. **Micro farming system:** Medium land

vii. **Technology for Testing:**

Technology option-I (TO-I): Soil application of chloropyriphos dust around the plant at 30DAG+ placement and spot application of Jaggery 100gm, spinosad (0.4ml) and water 1 ltr poison bait (BAT) and periodic removal and destruction of damaged fruits

Technology option-II (TO-II): Soil application of chloropyriphos dust around the plant at 30DAG+ installation of cue lure @ 20/ha (MAT) and periodic removal and destruction of damaged fruits

Existing Practice: Spraying of Profenophos @ 1ltr/ ha

viii. **Objective(s):** To reduce the pest load and increase yield

ix. **Treatments:**

i. Farmers Practice (FP): Spraying of Profenophos @ 1ltr/ ha

ii. Technology option-I (TO-I):- Soil application of chloropyriphos dust around the plant at 30DAG+ placement and spot application of Jaggery 100gm, spinosad (0.4ml) and water 1 ltr poison bait (BAT) and periodic removal and destruction of damaged fruits

iii. Technology option-II(TO-II): - Soil application of chloropyriphos dust around the plant at 30DAG+ installation of cue lure @ 20/ha (MAT) and periodic removal and destruction of damaged fruits

x. **Critical Inputs:** chloropyriphos dust, jiggery, Spinosad, cue lure, para pheromone trap

xi. **Unit Size:** 0.5 ha

xii. **No of Replications:** 7

xiii. **Unit Cost:** 1000

xiv. **Total Cost:** 7000

xv. **Monitoring Indicator:** No. of fruits affected/ plant , Cost of intervention, Additional income over additional investment, Yield, B:C ratio, % infestation

xvi. **Source of Technology (ICAR/ AICRP/ SAU/ Other, please specify):** RRTTS, ranital, Bhadrak, 2016

OFT-7

- i. **Season:** Kharif
- ii. **Title of the OFT:** Assessment of the improved techniques for cultivation of Paddy straw mushroom using crumpled straw (*Volvariella volvacea*)
- iii. **Thematic Area:** IGA
- iv. **Problem diagnosed:** Low yield from Paddy straw Mushroom from crumpled straw
- v. **Production system:**
- vi. **Micro farming system:** Homestead
- vii. **Technology for Testing:** Technology option-I (TO-I):- **Square compact bed size (30 × 30 cm)**
Mushroom production by using crumpled paddy straw 5kg, soaking of straw in water for 5hrs in 2% CaCo₃, 14-20days age spawn at 2% of dry substrate weight and coarsely ground horse gram powder (at 2% dry substrate weight)
Technology option-II (TO-II): - **Circular compact bed size -(45 cm diameter, 30 cm height)**
Mushroom production by using crumpled paddy straw 5kg, soaking of straw in water for 5hrs in 2% CaCo₃, 14-20days age spawn at 2% of dry substrate weight and coarsely ground horse gram powder (at 2% dry substrate weight)
- viii. **Existing Practice: Rectangular compact method Size-45x60x30cm**
Mushroom production by using crumpled paddy straw -5kg with normal practice (soaking in water 6hrs with 2% calcium carbonate), unknown age of spawn, 3% of dry substrate weight), pulse powder 3% dry substrate weight, BE-8-10%
- ix. **Objective(s):** To increase the yield of paddy straw mushroom following improved techniques.
- x. **Treatments:**
Farmers Practice (FP): **Rectangular compact method Size-45x60x30cm**
Technology option-I (TO-I):- **Square compact bed size (30 × 30 cm)**
Technology option-II (TO-II): - **Circular compact bed size -(45 cm diameter, 30 cm height)**
- xi. **Critical Inputs: Mushroom Spawn, polythene**
- xii. **Unit Size: 260 beds**
- xiii. **No of Replications: 13**
- xiv. **Unit Cost:**
- xv. **Total Cost: 10400/-**
- xvi. **Monitoring Indicator:** Average weight/botton (g), Pin head appearance (days), Biological efficiency(%), Yield(Kg/bed), Net income, BC Ratio
- xvii. **Source of Technology (ICAR/ AICRP/ SAU/ Other, please specify): Source:** Department of Plant Pathology, Tamil Nadu Agricultural University, Coimbatore, 2012

OFT-8

- i. **Season: Rabi**
- ii. **Title of the OFT:** Assessment on value added products from oyster mushroom for higher income.
- iii. **Thematic Area: IGA**
- iv. **Problem diagnosed:** Low Income From Oyster Mushroom by direct selling.
- v. **Production system:**
- vi. **Micro farming system: Homestead**
- vii. **Technology for Testing:** Technology option-I T O1 - Preparation of mushroom soup powder (Fresh mushroom 125 g, corn flour 50 g, milk powder 25 g, salt 8 g, sugar 3 g, black pepper 2 g, Oregano-2 g)
 1. Technology option-II T O2 - Arka mushroom chutney powder combines the traditional taste and nutritive goodness of mushrooms with traditional healing herbs like Brahmi, Moringa leaves and traditional nutritive seeds like flax seeds, sesame seeds, ground nut and coconut. It is a ready to eat powder and can be easily adopted in mid day meals . It has a shelf life of 3 months in airtight containers/pouches at ambient temperature (26-28°C) which can be extended at lower temperature.
 2. Technology option-II T O3 - Soaking of mushroom for 6-7 hrs in preservatives (0.6 gm potassium metabisulphite & 10 g citric acid/kg fresh mushroom diluted in one lit normal water) followed by drying in sun for 3 consecutive days
- viii. **Existing Practice:** Selling of fresh oyster mushroom
- ix. **Objective(s):** To give knowledge and skill on value addition of oyster mushroom for enhancing income.
- x. **Treatments:**
 1. Farmers Practice (FP): **Selling of fresh oyster mushroom**
 2. Technology option-I (TO-I):- **Preparation of mushroom soup powder**
 3. Technology option-II (TO-II): - **Preparation of Arka Mushroom chutney powder**
 4. Technology option-II (TO-III): - **Drying of oyster mushroom**
- xi. **Critical Inputs:** Chemical and preservatives, spices
- xii. **Unit Size:**
- xiii. **No of Replications:** 13
- xiv. **Unit Cost:**
- xv. **Total Cost:**
- xvi. **Monitoring Indicator:** Shelf life (Days),Yield (conversion ratio),Sensory Evaluation,Net income, BC Ratio
- xvii. **Source of Technology (ICAR/ AICRP/ SAU/ Other, please specify):** Source: AICRP on Mushroom, Annual Report, OUAT, 2020-21, Division of Post harvest technology and Engineering , IIHR Technical bulletin,2020, KVK, Palamau , 2012

OFT-9

- i. **Season:**
- ii. **Title of the OFT: Assessment of the performance of FPOs with varied levels of task and commodity to enhance profitability**
- iii. **Thematic Area:** Group dynamics
- iv. **Problem diagnosed:** Unorganized farmers fetching low price due to distress sale of farm produce
- v. **Production system:**
- vi. **Micro farming system:**
- vii. **Technology for Testing:**
 - Technology option-I (TO-I): FPO dealing with a single commodity with a single task i.e., Vegetable-Marketing
 - Technology option-II (TO-II): FPO dealing with multi-commodity with single task i.e., Pulses, Vegetable, Enterprises-Marketing
 - Technology option-III (TO-III): FPO dealing with multi-commodity with multi-task i.e., Pulses, Crops Vegetable, Enterprises- sorting, grading, packing, value addition, Branding, leveling and marketing
- viii. **Existing Practice:** Farmers marketing their produce through intermediaries
- viii. **Objective(s):** To assess the performance of FPOs
- ix. **Treatments:**
 - Farmers Practice (FP): Farmers marketing their produce through intermediaries
 - i. FPO dealing with a single commodity with a single task i.e., Vegetable-Marketing
 - ii. FPO dealing with multi-commodity with single task i.e., Pulses, Vegetable, Enterprises-Marketing
 - iii. FPO dealing with multi-commodity with multi-task i.e., Pulses, Crops Vegetable, Enterprises- sorting, grading, packing, value addition, Branding, leveling and marketing
- x. **Critical Inputs:** Structured schedule
- xi. **Unit Size: 80**
- xii. **No of Replications:**
- xiii. **Unit Cost:**
- xiv. **Total Cost:**
- xv. **Monitoring Indicator:** Farmers interest to become a member (Score out of 10) Easy to produce, Easy to sell, Business planning and market linkage with various national and multinational companies, Share capital contributed, Management quality/easy in management (Score out of 10)
Total share capital deposited in the bank, No of FIGs, No of members, Meeting status, Type of commodity, Volume of commodity, Annual turnover, Annual profit
- xvi. **Source of Technology (ICAR/ AICRP/ SAU/ Other, please specify):** Indian Research Journal of Extension Education 24(4):24-29,2021

OFT-10

- i. **Season:**
 - ii. **Title of the OFT: Assessment of different pulse production models**
 - iii. **Thematic Area:**
 - iv. **Problem diagnosed:** Varied performance of farmers under different model
 - v. **Micro farming system:**
 - vi. **Technology for Testing:** Technology option-I (TO-I): Approach under CFLD model of Krishi Vigyan Kendra
Technology option-II (TO-II): Model of pulse demonstration under National Food Security Mission of Agriculture dept.
- Existing Practice:** Farming by a group of farmers in their uplands
- vii. **Objective(s):** To study production model of pulse
 - viii. **Treatments:**
Technology option-I (TO-I): Approach under CFLD model of Krishi Vigyan Kendra
Technology option-II (TO-II): Model of pulse demonstration under National Food Security Mission of Agriculture dept.
 - ix. **Critical Inputs:** Structured schedule
 - x. **Unit Size:** 30
 - xi. **No of Replications:**
 - xii. **Unit Cost:**
 - xiii. **Total Cost:**
 - xiv. **Monitoring Indicator:** Coverage in acreage year-wise (for the last three years)No of the farmers adopted,Success of buyback procedures,Quantity of seeds procured /ha,Profit generated out of seed sale,Change in Knowledge
 - xv. **Source of Technology (ICAR/ AICRP/ SAU/ Other, please specify):** Proceeding-National Pulses Workshop -2019

10. List of Projects to be implemented by funding from other sources (other than KVK fund)

| Sl. No. | Name of the project | Fund expected (Rs.) |
|---------|---------------------|---------------------|
| 01 | CFLD | 7,00,000.00 |
| 02 | BGREI | 50,000.00 |
| 03 | ATMA | 80,000.00 |

11. No. of success stories proposed to be developed with their tentative titles: 2 nos

12. Scientific Advisory Committee

| Date of SAC meeting held during 2021 | Proposed date during 2022 |
|--------------------------------------|---------------------------|
| 17.12.2021 | |

13. Soil and water testing

| Details | No. of Samples | No. of Farmers | | | | | | | | | No. of Villages | No. of SHC distributed |
|------------------------|----------------|----------------|-----------|-----------|----------|------------|-----------|------------|-----------|------------|-----------------|------------------------|
| | | SC | | ST | | Other | | Total | | | | |
| | | M | F | M | F | M | F | M | F | T | | |
| Soil Samples | 500 | 109 | 22 | 34 | 0 | 308 | 27 | 451 | 49 | 500 | 14 | 500 |
| Water Samples | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Other (Please specify) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 500 | 109 | 22 | 34 | 0 | 308 | 27 | 451 | 49 | 500 | 32 | 500 |

14. Fund requirement and expenditure (Rs.)*

| Heads | Expenditure (last year) (Rs.) up to 31.03.2021 | Expected fund requirement (Rs.) during 2022-23 |
|---|--|--|
| i. Pay & allowance | | |
| ii. Contingency | 10,98,323.00 | 2200000.00 |
| iii. TA | 1,00,000.00 | 150000.00 |
| iv. HRD | 30,000.00 | 50000.00 |
| v. SCSP | 3,00,000.00 | 1000000.00 |
| Non-recurring (specify) | | |
| i. Works (Road, threshing floor, drying yard, vehicle and implement shed, irrigation system etc.) | | |
| ii. Furniture & Equipment | | |
| iii. Vehicle and tractor | | |
| iv. Library | 10,000 | 30,000 |
| TOTAL | 15,38,323.00 | 34,30,000.00 |

* Any additional requirement may be suitably justified.

15. Every KVK should bring a brief write-up supported by quality photographs about the technology having wide acceptability among the farming community of the district with factual data