ACTION PLAN 2020-21

1. Name of the KVK: Krishi Vigyan Kendra, Puri

Address	Telephone		E mail
Krishi Vigyan Kendra, At/Po- Sakhigopal, Dist-Puri, Pin-752014, Odisha	06752273960	06752273960	kvkpuri.ouat@gmail.com, purikvk@yahoo.co.in

2.Name of host organization:

Address	Telephone		E mail
	Office	FAX	
Orissa University of Agriculture & Technology Bhubaneswar-751003 Odisha, India.	(0674)-2397970/ 2397818/ 2397719/ 2397669 / 2397719 / 2397919 / 2397868		registrarouat@gmail.com

3.Training programme to be organized (April 2020 to March 2021)

(a) Farmers and farmwomen

Thematic area	Title of Training	No.	Duration	Venue On/Off	Tentative Date	No. of Participants								
						SC		ST		Other		Total		
						M	F	M	F	M	F	M	F	T
Agronomy	Scientific production practices of boro rice cultivation	F & FW	01											25
Agronomy	Production technology of rice in saline soil	F & FW	01											25
Agronomy	Integrated weed management in paddy	F & FW	01											25
Agronomy	Scientific production practices of blackgram	F & FW	01											25
Agronomy	Scientific production practices of greengram	F & FW	01											25
Horticulture	Management of fruit nursery	F & FW	01											25
Horticulture	Scientific methods of off season Tomato cultivation	F & FW	01											25
Horticulture	Scientific cultivation Practices of Spine gourds	F & FW	01											25

Horticulture	Marigold cultivation for Income Generation	F & FW	01											25
Horticulture	Improved methods of vegetable nursery raising	F & FW	01											25
Horticulture	Pineapple cultivation as intercrop in Coconut Orchard	F & FW	01											25
Horticulture	Offseason Vegetable cultivation	F & FW	01											25
Horticulture	Scientific Beetle vine Cultivation	F & FW	01											25
Plant Protection	Stem Borer management in Paddy	F & FW	01											25
Plant Protection	BPH / WBPH management in Paddy	F & FW	01											25
Plant Protection	Integrated management practices of Neckblast in Paddy	F & FW	01											25
Plant Protection	Integrated pest management of YMV in Greengram	F & FW	01											25
Plant Protection	Red palm weevil and eryophid management in coconut	F & FW	01											25
Plant Protection	Integrated management of nematode in Betel vine	F & FW	01											25
Plant Protection	Management of Spodoptera in Groundnut	F & FW	01											25
Plant Protection	Integrated management of Thrips and mites in Chilli	F & FW	01											25
Plant Protection	IPM measures to control shoot and fruit borer in Brinjal	F & FW	01											25
Plant Protection	Leaf miner management in Tomato	F & FW	01											25
Agril. Engineering	Technique of MAT type nursery raising	F & FW	01											25

	for using 6-row Self Propelled Rice Transplanter													
Agril. Engineering	Use of Drum Seeder for Direct seeded Rice Cultivation	F & FW	01											25
Agril. Engineering	Operation & maintenance of Dry land Power Weeder	F & FW	01											25
Agril. Engineering	Calibration of Seed cum fertilizer drill for sowing Greengram	F & FW	01											25
Agril. Engineering	Principles of working operation of Tractor drawn Groundnut Thresher	F & FW	01											25
Agril. Engineering	Care and maintenance of Drip irrigation system in Pointed gourd	F & FW	01											25
Agril. Engineering	Use of mulching in horticultural crops	F & FW	01											25
Agril. Engineering	Operation and maintenance of low cost weeding implements in field crops	F & FW	01											25
Agril. Engineering	Operation and maintenance of different types of Potato digger	F & FW	01											25
Agril. Engineering	Cost benefit of Whole straw Paddy thresher for bundle straw production	F & FW	01											25
Home Science	Mushroom cultivation for household nutritional security and income generation	F & FW	01											25
Home Science	Preparation of Paper bags by SHG members for marketing of mushroom	F & FW	01											25
Home Science	Methods of seedling raising in using different media	F & FW	01											25

Home Science	Use of Grain storage Bags	F & FW	01											25
Home Science	Management of Chicks Brooding	F & FW	01											25
Home Science	Semi-intensive backyard poultry management	F & FW	01											25
Home Science	Crop planning & management of Nutri-Sensitive Organic Kitchen Garden	F & FW	01											25
Home Science	Preparation of Vermicompost from Kitchen waste	F & FW	01											25
Home Science	Post harvest management of vegetables	F & FW	01											25
Home Science	Preparation of Pickles from Oyster Mushroom	F & FW	01											25
Fishery	Pre stocking pond management practices	F & FW	01											25
Fishery	Stocking and post stocking pond management	F & FW	01											25
Fishery	Composite fish culture	F & FW	01											25
Fishery	Short term culture of Minor carps in Seasonal rainfed ponds	F & FW	01											25
Fishery	Multiple stocking and multiple harvesting in pond culture	F & FW	01											25
Fishery	Feeding management for carp culture	F & FW	01											25
Fishery	Fish diseases and their management	F & FW	01											25
Fishery	Culture practices of Amur carp with IMC	F & FW	01											25
Fishery	Fattening of crabs in Brackish water ponds	F & FW	01											25
Fishery	Integrated fish Farming	F & FW	01											25

Agril. Extension	Enriching farmers profitability through FPO formation & management	F& FW	01											25
Agril. Extension	Up gradation of farmers skill through electronic media	F& FW	01											25
Agril. Extension	Various marketing opportunities & production planning in vegetables	F& FW	01											25
Agril. Extension	Team management skills for enhancing effectiveness of team	F& FW	01											25
Agril. Extension	Role of ICT for the benefits of farmers in digital india	F& FW	01											25
Agril. Extension	Entrepreneurship development of farmers in rural setup	F& FW	01											25
Agril. Extension	Various governmental schemes related to major enterprises in the district	F& FW	01											25
Agril. Extension	Doubling farmers' income through IFS	F& FW	01											25
Agril. Extension	Role of ITKs in promotion of organic farming in the district	F& FW	01											25
Agril. Extension	Leadership skills development in agriculture	F& FW	01											25

(b) Rural youths

Thematic area	**Title of Training**	**No.**	**Duration**	**Venue On/Off**	**Tentative Date**	**No. of Participants**								
						SC		**ST**		**Other**		**Total**		
						M	**F**	**M**	**F**	**M**	**F**	**M**	**F**	**T**
Plant Protection	Honey bee cultivation	1	02											20
Plant Protection	Production of biopesticide	1	02											20
Ag.Engg.	Custom hiring of self propelled Paddy Reaper	1	02											20
Ag.Engg.	Repair and	1	02											20

	maintenance of threshing implements in Paddy													
Ag.Engg.	Repair and maintenance of Powertiller	1	05											10
Home Science	Integrated farming for doubling farmers income	1	02											20
Home Science	Entrepreneurship development through Beekeeping	1	02											20
Home Science	Food processing and preservation for income generation and to minimize post harvest loss	1	05											10
Fishery	Carp seed production technique	1	03											20
Fishery	Breeding and culture of ornamental fish	1	03											20
Fishery	Rearing of carp fry, fingerlings and yearlings	1	05											10
Agril. Extension	Agri -business skills development among poultry farmers for maximizing farm income.	1	02											20
Agril. Extension	Entrepreneurship development through duck farming	1	02											20

(c) Extension functionaries

Thrust area/ Thematic area	**Title of Training**	**No.**	**Duration**	**Venue On/Off**	**Tentative Date**	**No. of Participants**								
						SC		**ST**		**Other**		**Total**		
						M	**F**	**M**	**F**	**M**	**F**	**M**	**F**	**T**
Plant Protection	Integrated disease and	1	02											20

	pest management in Paddy													
Plant Protection	Integrated disease and pest management in vegetables	1	02											20
Ag.Engg.	Safety precautions while using Tractor and Powertiller	1	02											20
Ag.Engg.	Fertigation Technology	1	02											20
Home Science	Sensitization of SHG members to promote income generation activities	1	02											20
Home Science	Nutritional management of farm family during COVID-19 situation	1	02											20
Fishery	Fish health management	1	02											15
Fishery	Role of probiotics in Aquaculture	1	02											15
Agril. Extension	Application of new media in extension	1	02											20
Agril. Extension	Status, challenges and issues of IPRs in agricultural innovation	1	02											20

Abstract of Training: Consolidated table (ON and OFF Campus)

Farmers and Farm women

Thematic Area	No. of Courses	No. of Participants									Grand Total		
		Other			SC			ST					
		M	F	T	M	F	T	M	F	T	M	F	T
I. Crop Production													
Weed Management	1												25
Resource Conservation Technologies													
Cropping Systems													
Crop Diversification													
Integrated Farming													
Water management													
Seed production													
Nursery management													
Integrated Crop Management	4												100
Fodder production													
Production of organic inputs													
Others, (cultivation of crops)													
TOTAL	**5**												**125**
II. Horticulture													
a) Vegetable Crops													
Integrated nutrient management													
Water management													
Enterprise development													
Skill development													
Yield increment													
Production of low volume and high value crops													
Off-season vegetables	1												25
Nursery raising	2												50
Exotic vegetables like Broccoli													
Export potential vegetables													
Grading and standardization													
Protective cultivation (Green Houses, Shade Net etc.)													
Others, if any (Cultivation of Vegetable)	2												50
TOTAL													
b) Fruits													
Training and Pruning													
Layout and Management of Orchards													
Cultivation of Fruit	1												25
Management of young plants/orchards													
Rejuvenation of old orchards													
Export potential fruits													
Micro irrigation systems of orchards													
Plant propagation techniques													
Others, if any(INM)													
TOTAL													
c) Ornamental Plants													

Thematic Area	No. of Courses	No. of Participants									Grand Total		
		Other			SC			ST					
		M	F	T	M	F	T	M	F	T	M	F	T
Nursery Management													
Management of potted plants													
Export potential of ornamental plants													
Propagation techniques of Ornamental Plants													
Others, if any	1												25
TOTAL													
d) Plantation crops													
Production and Management technology	1												25
Processing and value addition													
Others, if any													
TOTAL	**8**												**200**
e) Tuber crops													
Production and Management technology													
Processing and value addition													
Others, if any													
TOTAL													
f) Spices													
Production and Management technology													
Processing and value addition													
Others, if any													
TOTAL													
g) Medicinal and Aromatic Plants													
Nursery management													
Production and management technology													
Post harvest technology and value addition													
Others, if any													
TOTAL													
III. Soil Health and Fertility Management													
Soil fertility management													
Soil and Water Conservation													
Integrated Nutrient Management													
Production and use of organic inputs													
Management of Problematic soils													
Micro nutrient deficiency in crops													
Nutrient Use Efficiency													
Soil and Water Testing													
Others, if any													
TOTAL													
IV. Livestock Production and Management													
Dairy Management													
Poultry Management													
Piggery Management													
Rabbit Management													
Disease Management													

Thematic Area	No. of Courses	No. of Participants									Grand Total		
		Other			SC			ST					
		M	F	T	M	F	T	M	F	T	M	F	T
Feed management													
Production of quality animal products													
Others, if any (Goat farming)													
TOTAL													
V. Home Science/Women empowerment													
Household food security by kitchen gardening and nutrition gardening	2												50
Design and development of low/minimum cost diet													
Designing and development for high nutrient efficiency diet													
Minimization of nutrient loss in processing	1												25
Gender mainstreaming through SHGs													
Storage loss minimization techniques	1												25
Enterprise development	3												75
Value addition	1												25
Income generation activities for empowerment of rural Women	2												50
Location specific drudgery reduction technologies													
Rural Crafts													
Capacity building													
Women and child care													
Others, if any													
TOTAL	**10**												**250**
VI.Agril. Engineering													
Installation and maintenance of micro irrigation systems	1												25
Use of Plastics in farming practices	1												25
Production of small tools and implements	1												25
Repair and maintenance of farm machinery and implements	3												75
Small scale processing and value addition													
Post Harvest Technology	2												50
Others, if any	2												50
TOTAL	**10**												**250**
VII. Plant Protection													
Integrated Pest Management	6												150
Integrated Disease Management	2												50
Bio-control of pests and diseases	2												50
Production of bio control agents and bio pesticides													
Others, if any													
TOTAL	**10**												**250**
VIII. Fisheries													
Integrated fish farming	1												25
Carp breeding and hatchery management													

Thematic Area	No. of Courses	No. of Participants									Grand Total		
		Other			SC			ST					
		M	F	T	M	F	T	M	F	T	M	F	T
Carp fry and fingerling rearing	2												50
Composite fish culture & fish disease	5												125
Fish feed preparation & its application to fish pond, like nursery, rearing & stocking pond	2												50
Hatchery management and culture of freshwater prawn													
Breeding and culture of ornamental fishes													
Portable plastic carp hatchery													
Pen culture of fish and prawn													
Shrimp farming													
Edible oyster farming													
Pearl culture													
Fish processing and value addition													
Others, if any													
TOTAL	**10**												**250**
IX. Production of Inputs at site													
Seed Production													
Planting material production													
Bio-agents production													
Bio-pesticides production													
Bio-fertilizer production													
Vermi-compost production													
Organic manures production													
Production of fry and fingerlings													
Production of Bee-colonies and wax sheets													
Small tools and implements													
Production of livestock feed and fodder													
Production of Fish feed													
Others, if any													
TOTAL													
X. Capacity Building and Group Dynamics													
Leadership development	1												25
Group dynamics	1												25
Formation and Management of SHGs													
Mobilization of social capital	2												50
Entrepreneurial development of farmers/youths	1												25
WTO and IPR issues													
Others, if any	2												50
(ICT)	1												25
Market led extension	1												25
IFS	1												25

Thematic Area	No. of Courses	No. of Participants									Grand Total		
		Other			SC			ST					
		M	F	T	M	F	T	M	F	T	M	F	T
ITK													
TOTAL	**10**												**250**
XI Agro-forestry													
Production technologies													
Nursery management													
Integrated Farming Systems													
TOTAL													
XII. Others (Pl. Specify)													
TOTAL	**63**												**1575**

Rural youth

Thematic Area	No. of Courses	No. of Participants									Grand Total		
		Other			SC			ST					
		M	F	T	M	F	T	M	F	T	M	F	T
Mushroom Production													
Bee-keeping	2												40
Integrated farming	2												40
Seed production													
Production of organic inputs													
Planting material production	1												20
Vermi-culture													
Sericulture													
Protected cultivation of vegetable crops													
Commercial fruit production													
Repair and maintenance of farm machinery and implements	1												20
Nursery Management of Horticulture crops													
Training and pruning of orchards													
Value addition	1												10
Production of quality animal products													
Dairying													
Sheep and goat rearing													
Quail farming													
Piggery													
Rabbit farming													
Poultry production													
Ornamental fisheries	1												20
Para vets													

Thematic Area	No. of Courses	No. of Participants									Grand Total		
		Other			SC			ST					
		M	F	T	M	F	T	M	F	T	M	F	T
Para extension workers													
Composite fish culture													
Freshwater prawn culture													
Shrimp farming													
Pearl culture													
Cold water fisheries													
Fish harvest and processing technology													
Fry and fingerling rearing	1												20
Small scale processing													
Post Harvest Technology													
Tailoring and Stitching													
Rural Crafts													
Enterprise development	1												20
Others if any (GROUP DYNAMICS)	1												20
TOTAL	**11**												**210**

Extension functionaries

Thematic Area	No. of Courses	No. of Participants									Grand Total		
		Other			SC			ST					
		M	F	T	M	F	T	M	F	T	M	F	T
Productivity enhancement in field crops													
Integrated Pest Management	2												40
Integrated Nutrient management													
Rejuvenation of old orchards													
Value addition													
Protected cultivation technology	1												20
Formation and Management of SHGs	1												20
Group Dynamics and farmers organization													
Information networking among farmers													
Capacity building for ICT application	1												20

Care and maintenance of farm machinery and implements	1												20
WTO and IPR issues	1												20
Management in farm animals													
Livestock feed and fodder production													
Household food security	1												20
Women and Child care													
Low cost and nutrient efficient diet designing													
Production and use of organic inputs													
Gender mainstreaming through SHGs													
Crop intensification													
Others if any Fish Health Mgnt Probiotics in Aquaculture	2												30
TOTAL	**10**												**190**

4. Frontline demonstration to be conducted*

a.

Sl.no	Crop	Thrust Area:	Thematic Area:	Season:	Farming Situation:
1	Paddy	Varietal substitution for better yield	Varietal evaluation	Rabi	Rainfed lowland Paddy
2	Paddy	Varietal substitution for better yield	Varietal evaluation	Kharif	Rainfed lowland Paddy-fallow
3	Paddy	IWM in Paddy	Weed Management	Kharif	Rainfed lowland paddy -greengram
4	Chilli	Reduced yield loss through IPM	IPM	Rabi	Medium land, irrigated, sandy loam
5	Paddy	Reduced yield loss through IPM	IPM	Rabi	Low land,irrigated, Clay loam
6	Betel vine	To popularize IDM in betelvine	IDM	Rabi	Low land,irrigated, Clay loam
7	Greengram	To promote farm mechanisation and agro processing	Farm mechanization	Rabi	Rainfed Low land Paddy - Greengram
8	Banana	To promote farm mechanisation and agro processing	Farm mechanization	Kharif	Irrigated Up land
9	Groundnut	To promote farm mechanisation and agro processing	Farm mechanization	Rabi	Irrigated Medium land Fallow-Groundnut
10	Pointed gourd	To promote micro irrigation with moisture conservation & weed control	Micro irrigation	Rabi	Irrigated Medium land Paddy-vegetables
11	Spine gourd	Varietal substitution of vegetable crops for better yield	Varietal substitution	Kharif	Irrigated medium land

12	Pineapple	Varietal substitution of fruits for better yield	Income generation, Varietal evaluation	Round the year	Medium Land
13	Marigold	Varietal substitution for better yield	Varietal substitution	Rabi	Irrigated –Medium land
14	Tomato	Varietal substitution of vegetable crops for better yield	Varietal substitution	Rabi	Irrigated –Medium Land
15	Fish	Species diversification	Production and management	Round the year	Pond based, Rainfed
16	Crab	Crab fattening	Production and management	Kharif	Rainfed brackish water
17	Fish	Integrated farming system	Production and management	Round the year	Pond based, Rainfed
18	Fish	Disease management	Disease management	Round the year	Pond based, Rainfed
19	Vegetables & Fruits	To address household food security	Nutritional food security	Round the year	Backyard
20	Poultry	To emphasize on entrepreneurship development	Income generation	Rabi	Semi intensive poultry farming. Backyard, Free ranging
21	Mushroom	To emphasize on entrepreneurship development	Income generation	Kharif	Backyard Coconut Orchard
22	Poultry	To emphasize on entrepreneurship development	Income generation	Rabi	Semi intensive poultry farming. Backyard,

b.

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	Paddy & var. CR Dhan 307(Maudamani)	4.0 ha, 8 Nos.	**Demonstration of Boro rice paddy var. CR Dhan 307(Maudamani) during Rabi** FP-Kalasura RP- Medium duration (135days) , height -100-110cm,released in 2014, exhibit moderately tolerance reaction to disease like Leaf Blast, Neack blast and Brown Spot, yield: 4.8t/ha Nursery - last week of October to mid September, time of sowing -25 Oct. to 15 Nov. Keep seedlings 18-20 cm high. Use of ash at interval of 15 days, cover of seedlings by plastic sheet in night and remove plastic sheet in day. Keep seedlings 5-6 cm in standing water, Place the seedlings 4-5 per hill at a spacing of 20x10-15 cm. Depending upon the soil condition, apply 120-150 kg N, 60-75 kg P2O5 and 50-80 kg K2O along with 20kg/ha of ZnSO4 . 12-15 irrigation	Effective panicles/m^2, No of Filled grains/Panicle, 1000 grain weight												8

2	Rice & Var. : Luna Suvarna	2 ha 10 Nos.	**Demonstration of salt tolerant rice variety : Luna Suvarna during kharif** **FP- Lalmedi(150days)** RP- Cultivation of saline tolerant variety Luna Suvarna(CR-DHAN-403) suitable to coastal saline soil , 150 days duration, Height: 135 cm, Avg yield: 3.5- 4.0 t/ha, Resistant to Blast, Tolerance to Stem Borer, BPH, Leaf folder. Sowing of green manure crop Dhaincha (*Sesbania aculeata*) seeds @ 25kg /ha and incorporating it in soil at 6th week before one week transplanting in the main field adds 4-5 t/ha green matter which results in addition of organic matter. As a result there is improvement of soil physical properties and reduction in soil salinity due to chelation of the free Na ion	Initial & Final soil test value(pH, EC) Effective panicles/m2, No of Filled grains /Panicle, 1000 grain weight													10
3	Rice	2ha 10 Nos.	**Demonstration of herbicides for weed management in transplanted rice during kharif** FP- Two handweeding at 45 and 65 DAS	Weed flora composition, Weed control efficiency Effective panicles/m2, No of Filled grains /Panicle, 1000													10

			RP- Pre émergence application of herbicide (Bensulfuron methyl 0.6%+ Pretilachlor 6.0%) @ 10 kg/ha at 3 DAT and post emergence application of penoxsulan 21.7SC @ 20g ai/ha at 15 DAT.	grain weight												
4	Chilli	1 ha 10 Nos.	**Demonstration of integrated management of thrips & mites in chilli** FP- Low yield due to high infestation of mites and thrips in chilli RP- Integrated management in combination with mechanical ,botanical and chemical measures Soil application of neem cake @2.5 qt/ha,Installation of Blue sticky traps @50nos/ha, & need based application of Difenthiuron @1gm/lt & Spiromesifen 240 SC @ 0.6ml/ lit alternately at 10 days interval	No of thrips/leaf , no of mites/sq.inch leaves													10
5	Paddy	1 ha. 10 Nos.	**Demonstration of Integrated management of Stem borer in Summer Paddy** FP- Spraying of triazophos/ propenophos/cypermethrin RP- Nursery treatment with cartap hydrochloride 4G@ 0.8 kg per hactare, + twice spraying of neem oil 3000ppm @3ml/lit and Indoxacarb	No of white ear heads / m^2 No of egg mass/m2, No. of dead heart/sq.mt													10

			18.5SL@1ml/litre at 50DAT at 15 days interval + twice release of T. chilonis @ 50,000/ha 7days after each spraying.													
6	Betel vine	0.4ha 5 Nos.	**Demonstration of Integrated management of Nematode in betel vine** FP- Use of Furadon/Chloropyriphos dust pesticides RP-Planting of Bengal yellow as trap crop, Soil application of VAM @ 15gm/plant and Neem cake @ 100gm/ sqr.mtr at 6" deep trench around the root zone	Percentage of infestation ,Leaf Yield/ha, No. of galls/plant,													10
7	Greengram	2.0ha 8 Nos.	**Demonstration of tractor drawn Multi crop Seed cum Fertilizer drill for mechanized line sowing of Greengram in Rabi season** FP- Broadcasting method of sowing seeds RP- Tractor drawn Multi crop Seed cum Fertilizer drill - Field capacity – 0.4ha/h, sowing of seeds in 9 row with the help of tractor operated Seed cum Fertilizer drill with vertical rotor feed mechanism and shovel type Furrow opener	FC (ha/h), Plant population /sq.m, Labour requirement (MDs/ha), No of missing plant per meter length													8

8	Banana	1.0ha 5 Nos.	**Demonstration of Dry Land Power Weeder in Banana Orchard** FP- Use of spade for weeding RP- (4-stroke Petrol engine) – Weeding, hoeing and ridging are possible for the row spacing of 60cm – 90cm. Capacity – 0.08ha/h	Field capacity(ha/h), Labour requirement(MDs/ha), Weeding index, plant injury (%), fuel consumption (lit / h)													10
9	Groundnut	2.0ha 10 Nos.	**Demonstration of Tractor drawn Groundnut Thresher** FP- Hand beating followed by plucking RP- Tractor operated Groundnut Thresher for different groundnut varieties- Threshing of groundnut pods can be done in the field itself without transporting to the threshing yard - 500-550 kg/h, Threshing efficiency – 85-90%	Threshing capacity(q/h), Labour requirement(MDs/q) percentage of broken pods, Threshing efficiency(%), Cleaning efficiency(%)														10
10	Pointed gourd	0.4ha 03 units	**Demonstration of Drip irrigation with mulching in Pointed gourd** FP- No mulching with flood irrigation RP- Use of 50 micron mulch film with drip irrigation (emitter discharge 4lph) operating for 70-80 minutes in	Irrigation interval, weeding cost, Irrigation water used (mm)													03

			winter and 80-155 minutes in summer in alternate days. Water use efficiency will be increased by 30-40%, yield enhancement (15-20)%														
11	Spine gourd & Var. Arka Neelachal Shree	1 ha 10 Units	**Demonstration of Spine gourd variety Arka Neelachal Shree** FP- Local Prevalent Var. RP- Use of variety Arka Neelachal Shree Excellent culinary quality. It has the yield potential of 4-5 kg fruits /plant. The number of fruits/vine varies 270-290 and fruit weight 11-13g. Fruit is soft seeded with soft spine. It is moderately tolerant to anthracnose and downy mildew	No. of fruits per plant, yield (q/ha)													10
12	Pineapple & var. Queen	1ha 10 Units	**Demonstration on Intercropping of Pine apple Queen var. in Coconut Orchard** FP- Sole cropping without intercrop RP- Cultivation of Pine apple Queen var. as a component crop in coconut Orchard Cultivation of pineapple in interspaces in coconut orchard. Planting in flat bed	No.of fruits/Unit Sq.mt No.of fruits/plant Avg. fruit weight(Kg), Yield (q/ha)													10

			with row to row spacing 2ft and plant to plant spacing 1ft leaving 2.5m distance from coconut plant. The average yield is 50-80 tonnes/ha depending upon spacing and cultural practices. Fruit weighs 0.9-1.3 kg. Suitable for table purpose													
13	Marigold & Var. Bidhan marigold-2	1ha 10 Units	**Demonstration of marigold variety Bidhan marigold- 2** **FP-** Use of Var. Seracole **RP-** Use of Var. Bidhan Marigold-2 Number of flowers per plant (128flowers/plant). The flowers are attractive, orange in colour, compact and found suitable for making garland, Flower dia- 4cm, Yield- 285 kg/plant	Flower diameter(cm), No. of flowers/ plant, Flower yield (q/ha)													10
14	Tomato & Var. Arka Rakhyak	2 ha 10 units	**Demonstration of triple resistant (early blight, bacterial wilt, leaf curl virus) tomato var. Arka Rakhyak** FP- Var. Chiranjiv RP- Tripple resistant tomato variety Arka Rakhyak High yielding F1 hybrid developed by crossing IIHR-	Wilt incidence (%), PDI of early blight,, Fruit wt(g), No of fruits per plant, Yield (q/ha)													10

			2834 X IIHR-2833. First F1 hybrid with triple disease resistance to ToLCV, BW and early blight. Fruits square round, large (90-100g), deep red colored and firm. Suitable for fresh market and processing. Yield: 75-80 t/ha in 140 days.													
15	Fish	6.0 ha, 20 units	**Demonstration of Java Punti, *Puntius gonionotus as intercrop* in composite fish culture** FP-Culture of IMC only RP- Incorporation of Java Punti with IMC i.e. stocking of Catla: Rohu: Mrigal: Java Punti::3:4:3:2 @ 10000 nos/ha.	Length & Weight, FCR, Plankton density													20
16	Crab	2.0 ha 5 units	**Demonstration on fattening of water crab, Scylla serrata** FP- Culture of crabs without proper stocking density RP- Fattening of water crabs by stocking the crabs @ 1 no./m² and feeding chopped trash fish @ 5 % body weight	Body weight, carapace hardness													5
17	Fish	4.0ha 10 Units	**Demonstration of pond based IFS for doubling farmers' income** FP- Practising only	Growth parameters of fish i.e. Length & Weight,													10

			pisciculture by stocking IMC fingerlings RP- Stocking of yearlings of IMC @ 5000 nos/ha, planting of papaya, banana and drumstick on pond dyke+ Mushroom+ Poultry	fruits/plant Kg/Bed Wt./Bird												
18	Fish	2.0 ha, 5 Units	**Demonstration on use of Ivermectin in controlling Argulosis** FP- Use of traditional fish feed and no use of chemicals for disease control RP- Application of Paracure I. V. (Ivermectin 2 % w/w) @ 250 gm/ 1 ton traditional fish feed fed @ 5-3% of body weight daily for 4 days to control Argulosis	Mortality % age, average body weight, DO, Plankton, Alkalinity													5
19	Vegetables & Fruits	4 ha 5 Units	**Demonstration of Nutrition Sensitive Organic Kitchen garden for better Health & additional income of farm family (COVID-19)** FP- Kitchen garden with 2/3 seasonal vegetables RP- Nutrition Sensitive Organic Kitchen garden (0.08ha) with multiple crops	Average per capita availability (g/day) RDA(%) Vegetable Production/annum(Kg) Vegetable Consumption/													5

			including annuals, perennials. Structured Garden with high yielding varieties of vegetables, leafy vegetables, curry leaf, coriander and intercropped with Medicinal Plants, Marigold and French beans. In the border, on the fences:-Cucurbits and tuber crops. Few perennials which are grown along the border. Moreover it is cultivated in a purely organic mode with a bunch of sustainable technologies such as use of bioinputs and natural resources	annum(Kg)													
20	Poultry & Breed Kadaknat h	400 Birds 10 Units	**Demonstration on backyard poultry breed Kadaknath** FP- Local breed rearing Banaraja RP- Rearing of Low Input type desi chicken Kadaknath Kadaknath birds body weight at 20 weeks 1170 gms, average annual egg production 190, production parameters show tolerance to acute stress conditions	Body weight at 1 month, 2 month 4 month and at start of laying, Egg production per annum													10

21	Mushroom	400 Beds 10 Units	**Demonstration of production of paddy straw mushroom with Crumbled straw** FP- Production of paddy straw mushroom from rotten straw in rainy season RP-Production of paddy straw mushroom with Crumbled straw Crumbled paddy Straw-5kg, pulse powder 3%, soaking period of straw-5hrs	Days to 1st pin head appearance, Weight of fruiting body (g/fruit) Biological efficiency (%)													10
22	Poultry	400 Chicks 2 Units	**Demonstration on artificial brooding management in chicks** FP- No management in brooding period RP- Artificial brooding of chicks Brooding management for 21 days with floor space of 0.3 sq.ft/bird with help of chick guards, artificial heat @ 1-3 watt per chick , feeders and drinkers @ 1 each per 50 chicks, vaccination with against RD on 7th day, 28 day, IBD on 14th day . Use of electrolytes, preventive antibiotics during brooding.	Chick mortality rate during brooding period, body weight at 21 days, survivability of birds till start of laying.													10

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
Training	Operation & maintenance of Dryland Power Weeder	1	F & FW	01	Off									25
Field day	Field Day on use of Power Weeder	1	F & FW	01	Off									50
Training	Calibration of Seed cum fertilizer drill for sowing Greengram	1	F & FW	01	Off									25
Field Day	Field day on use of Tractor drawn Seed cum fertilizer drill for sowing Greengram	1	F&FW	01	Off									50
Training	Principles of working	1	F&FW	01	Off									25

	operation of Tractor drawn Groundnut Threshers													
Field Day	Field Day on use of Tractor drwn Groundnut Threshers	1	F&FW	01	Off									50
Training	Care and maintenance of drip irrigation system in Pointedgourd	1	F&FW	01	Off									25
Field Day	Field Day on Use of Drip with mulching in Pointedgourd	1	F&FW	01	Off									50
Training	Stem borer management in Paddy	1	F&FW	01	Off									25
Field day	Field day on stem borer management in Paddy	1	F&FW	01	Off									50

Training	Thrips and mites management in Chilli	1	F&FW	01	Off									25
Field Day	Field Day on thrips management in Chilli	1	F&FW	01	Off									50
Field Day	Field Day on weed management in Paddy	1	F&FW	01	Off									50
Field Day	Field Day on salt tolerant rice varieties	1	F&FW	01	Off									50
Field Day	Field Day on boro rice	1	F&FW	01	Off									50
Field Day	Field Day on organic nutritional garden	1	F&FW	01	Off									50
Field Day	Field Day on Kadaknath poultry management	1	F&FW	01	Off									50
Field Day	Field Day on brooding management	1	F&FW	01	Off									50

	of poultry													
Field Day	Field Day on mushroom cultivation in loose straw	1	F&FW	01	Off									50
Field Day	Field Day on pine apple in coconut orchard	1	F&FW	01	Off									50
Field Day	Field Day on spine gourd cultivation	1	F&FW	01	Off									50
Field Day	Field Day on marigold cultivation	1	F&FW	01	Off									50
Field Day	Field Day on tomato variety Arka Rakhyak	1	F&FW	01	Off									50
Field Day	Field Day on crab culture	1	F&FW	01	Off									50
Field Day	Field Day on composite pisciculture	1	F&FW	01	Off									50
Field Day	Field Day on pond based IFS for doubling	1	F&FW	01	Off									50

	farmers' income													
Field Day	Field Day on use of Ivermectin in controlling Argulosis	1	F&FW	01	Off									50

* Repeat the above tables and information in Point no. 4 for EACH FLD being proposed.

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/ Kalachampa (Qtls.)	June-Jan	12 ha	Seed	480			
Blackgram	PU-31(Qtls.)		6 ha	Seed	15			
Papaya	Vinayak/Honeydew	July-Sept		Seedling	4000 no			
Coconut	Sakhigopal Local			Seedling	400 no			
Marigold	Serakole	Sept		Seedling	2000no			
Broccoli	KTS-1	Sept		Seedling	400 no			
Red cabbage	NS-1456/ NS-1460	Sept		Seedling	400 no			
Capsicum	N-10/ Carlifornia wonder	Sept		Seedling	1000no			
Tomato	Arka rakhyak	July		Seedling	5000 no			
Fish fingerling &	IMC, Amur carp, Java	June 2020-Feb 2021	0.2ha	fingerling & yearling	120,000 no			

yearling	punti							
ornamental fish	platy, molley, guppy	April-March	5 tanks	Fry of ornamental fish	1,000 no			
Vermicompost (qtl)	*E. foetida*	April-March	Tank-6ft Tank-4ft	Compost	10 q			
Vermiculture (kg)	*E. foetida*	April-March		Culture	10kg			
Paddy straw mushroom (kg)	*V.volvacea*	June-Oct	100 Beds	Mushroom	2 q			
Oyster mushroom (kg)	*P.sajarcaju*	Nov-Feb	100 Bags	Mushroom	2 q			
Honey(Kg)/ Colony (Nos.)	*Apis cerena indica*	April-March	5 Boxes	Honey	10kg			
Azolla (kg)				Azolla	50kg			

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 Produce	**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	20										
2.	KisanMela	2										
3.	KisanGhosthi	3										
4.	Exhibition	3										
5.	Film Show	12										
6.	Method Demonstrations	8										
7.	Farmers Seminar	2										
8.	Workshop	2										
9.	Group meetings	6										
10	Lectures delivered as resource persons	16										
11	Advisory Services	34										
12	Scientific visit to farmers field	120										
13	Farmers visit to KVK	1										
14	Diagnostic visits	56										
15	Exposure visits	5										
16	Ex-trainees Sammelan	2										
17	Soil health Camp	2										
18	Animal Health Camp	2										
19	Agri mobile clinic	1										
20	Soil test campaigns	2										
21	Farm Science Club Conveners meet	4										
22	Self Help Group Conveners meetings	2										
23	MahilaMandals Conveners meetings	2										
24	Celebration of important days (specify)	7										
25	Sankalp Se Siddhi	1										
26	Swatchta Hi Sewa	5										
27	Mahila Kisan Diwas	1										
28	Any Other (Specify)											
	Total	**323**										

7. Revolving Fund (in Rs.)

Opening balance of 2019-2020 (As on 01.04.2020)	Amount proposed to be invested during 2020-2021	Expected Return
6,93,330	**9,00,000**	**12,00,000**

8. Expected fund from other sources and its proposed utilization

Project	Source	Amount to be received (Rs. in lakh)

9. On-farm trials to be conducted*

OFT-1 (Agronomy)

i. **Season: Kharif, 2020 /I yr**

ii. **Title of the OFT: Assessment of deep water rice varieties in Kharif**
iii. **Thematic Area:** Varietal evaluation
iv. **Problem diagnosed: Lower** yield due to less tolerant of prevailing varieties to water logging

v. **Important Cause:** Unavailability of suitable deep water rice variety
vi. **Production system:** Paddy - Pulse
vii. **Micro farming system:** Rainfed low land, Rice -blackgram
viii. **Technology for Testing:** Rice varieties
ix. **Existing Practice:** Sarala
x. **Hypothesis: Technology options** May perform better than existing variety
xi. **Objective(s):** To know & show the potential of the three technology options under deep water conditon
xii. **Treatments:**
Farmers Practice (FP): Sarala
Technology option-I (TO-I): CR505
Technology option-II (TO-II): CR 506
Technology option-II (TO-II): CR 507

xiii. **Critical Inputs: Seeds**
xiv. **Unit Size: 0.5 acre**
xv. **No of Replications: 7**
xvi. **Unit Cost: 1000**
xvii. **Total Cost: 7000**
xviii. **Monitoring Indicator: Water submergence period, Effective panicles/m2, No of Filled grains /Panicle, 1000 grain weight**
xix. **Source of Technology (ICAR/ AICRP/ SAU/ Other, please specify): NRRI, Cuttack**

OFT-2 (Plant Protection)

i. **Season: Kharif, 2020 / I yr**
ii. **Title of the OFT: Assessment of integrated management practices of Neckblast in Paddy**

iii. **Thematic Area:** Integrated Pest management
iv. **Problem diagnosed: Low yield due to high incidence of Neckblast**

v. **Important Cause: Lack of awareness regarding integrated management practices**
vi. **Production system:Paddy-Pulse**
vii. **Micro farming system: Rainfed Lowland, Paddy-Greengram**
viii. **Technology for Testing: integrated management practices of Neckblast**
ix. **Existing Practice:** Spraying of tricyclazole @ 2ml / litre of water after the incidence of disease
x. **Hypothesis: $TO_2$is a proven technology and would be effective due to alternate spraying of new generations pesticides**
xi. **Objective(s): To prevent yield loss due to neck blast in Paddy**
xii. **Treatments:**

Farmers Practice (FP): Suitable chemical control measures are not adopted by farmer. Spraying of tricyclazole after the incidence of disease

Technology option-I (TO-I): Avoid dry nursery, late planting, burning of straw stubbles, remove weeds from the bunds and apply N in 3 splits.Seed treatment with Tricyclazole 75 WP @ 2gm/Kg of seed. Spraying of (Tricyclazole22% + Hexaconazole 3% SC) @ 2ml/ ltr thrice at weekly interval starting from booting stage.

Technology option-II (TO-II): Alternate spraying of Metominostrobin 20SC and Azoxystrobin 20SC @ 1ml/ltr at 10 days interval starting from booting stage

xiii. **Critical Inputs: TO_1 -** Tricyclazole 75 WP @ 2gm/Kg of seed. Spraying of (Tricyclazole22% + Hexaconazole 3% SC) @ 2ml/ ltr

TO_2 - Tricyclazole 75 WP @ 2gm/Kg of seed. Alternate spraying of Metominostrobin 20SC and Azoxystrobin 20SC @ 1ml/ltr

xiv. **Unit Size:0.2ha**
xv. **No of Replications: 5**
xvi. **Unit Cost: 1800**
xvii. **Total Cost: 9000**
xviii. **Monitoring Indicator: Cost of intervention. Additional income over additional investment Yield (q/ha),**

B:C ratio,

xix. **Source of Technology (ICAR/ AICRP/ SAU/ Other, please specify): TNAU, Coimbatore,2016, Nepal Agriculture Research Council, 2017**

OFT-3 (Plant Protection)

i. **Season: Kharif, 2020 / I yr**

ii. **Title of the OFT:** Assessment of management of rhinoceros beetle in Coconut

iii. **Thematic Area:** IPM
iv. **Problem diagnosed:** Lower yield due to less tolerant of prevailing varieties to water logging

v. **Important Cause:**
vi. **Production system:**

vii. **Micro farming system:** Rainfed Medium land

viii. **Technology for Testing:** Management of rhinoceros beetle in Coconut

ix. **Existing Practice:** Gamaxin and furadon granules
x. **Hypothesis:** $TO_2$is a proven technology and would be effective after treatment
xi. **Objective(s):**To prevent rhinoceros beetle in Coconut
xii. **Treatments:**

Farmers Practice (FP): Gamaxin and furadon granules.

Technology option-I (TO-I): Dusting of Carbofuran 3G @1Kg a.i/ha in manure pits, use of iron hooks, twice application of Phorate 10G @5gms mixed with sand (1:2)in three inner most leaves of the plant at 6 months interval, Installation of pheromone trap with rhino lure @ 12/ha

Technology option-II (TO-II): Spraying of 250ml of Metarrhizium culture+ 750ml of water in manure pit. use of iron hooks, Field release of Baculovirus innoculated adult @ 15 beetles/ha. Soak castor cake 1kg/5lit of water in small mud pots to attract and kill the adults. Application of Neem seed powder + sand(1:2) @ 150gm at the base of the 3 inner leaves of the plantTechnology option-II

xiii. **Critical Inputs:** (TO-I):Carbofuran 3G @1Kg a.i/ha, Phorate 10G @5gms mixed with sand (1:2), pheromone trap with rhino lure @ 12/ha
(TO-II): 250ml of Metarrhizium culture+ 750ml of water, Field release of Baculovirus innoculated adult @ 15 beetles/ha, castor cake 1kg/5lit of water, Neem seed powder + sand(1:2) @ 150gm at the base of the 3 inner leaves of the plant

xiv. **Unit Size: 0.2ha**
xv. **No of Replications: 10**
xvi. **Unit Cost:**
xvii. **Total Cost:**
xviii. **Monitoring Indicator:** Cost of intervention. Additional income over additional investment Yield (q/ha), B:C ratio,
xix. **Source of Technology (ICAR/ AICRP/ SAU/ Other, please specify):** CPCRI, Kasaragod, Kerala, TNAU, Coimbatore

OFT-4 (Agril.Engg.)

i. **Season: Rabi, 2020-21/Year-II**

ii. **Title of the OFT:** Assessment of Tractor drawn Whole straw Paddy Thresher for bundle straw production
iii. **Thematic Area:** Farm Mechanization
iv. **Problem diagnosed:** Non availability of Bundle straw

v. **Important Cause:** Large scale use of Tractor drawn axial flow thresher and combine harvester in Paddy leads to loose straw production which in turn reduces the availability of bundle straw in time. So an OFT would be done on Tractor drawn Whole straw Paddy thresher to test the efficacy.
vi. **Production system: paddy -** Greengram
vii. **Micro farming system:** Rainfed Low land, Paddy-Greengram
viii. **Technology for Testing:** Tractor drawn Whole straw Paddy Thresher
ix. **Existing Practice:** Use of Pedal Thresher
x. **Hypothesis:** Whole paddy bundles are carried horizontally towards the threshing unit. Only the earhead are threshed and the bundles as such discharged from the other end. It will supply the bundle straw in time**.**
xi. **Objective(s):** Bundle straw production for mushroom cultivation by involving less labour and time.
xii. **Treatments:**
Farmers Practice (FP): Use of Pedal Thresher

Technology option-I (TO-I): Power thresher cum winnower

Technology option-II (TO-II): Tractor drawn whole straw Paddy thresher

xiii. **Critical Inputs:** OFT will be conducted in association with AICRP on FIM, CAET, OUAT (Transportation cost)
xiv. **Unit Size: 0.1**
xv. **No of Replications: 5**
xvi. **Unit Cost: 500/-**
xvii. **Total Cost: 5000/-**

xviii. **Monitoring Indicator:** Threshing capacity(q/h), Labour requirement – (MDs/q) , Cost of operation (Rs/qtl), Cost of bundle straw (Rs.)

xix. **Source of Technology (ICAR/ AICRP/ SAU/ Other, please specify):**
Validated by AICRP on FIM,CAET,OUAT,2016
Validated by Implement Factory, BBSR,2001

OFT-5 (Agril.Engg.)

i. **Season: Kharif, 2020-21/Iyr**

ii. **Title of the OFT:** Assessment of 6-row Self propelled Rice transplanters for mechanized line transplanting in Kharif season
iii. **Thematic Area:** Farm mechanization
iv. **Problem diagnosed:** High labour cost and time involved in manual line transplanting**.**

v. **Important Cause:** Ease in mechanical transplanting and reduction in missing plant per meter length
vi. **Production system:** Paddy-Paddy
vii. **Micro farming system:** Irrigated Low land , Paddy - Paddy
viii. **Technology for Testing:** 6-row Riding type Rice Transplanter
ix. **Existing Practice:** Manual line transplanting with the help of thread
x. **Hypothesis:** Reduction in cost of operation by (50-60)% will be achieved in Riding type 6-row Rice Transplanter**.**
xi. **Objective(s):** Mechanized line transplanting in Paddy
xii. **Treatments:**
Farmers Practice (FP): Manual line Transplanting with the help of rope and guide

Technology option-I (TO-I): Self Propelled 8-row Rice Transplanter

Technology option-II (TO-II): 6-row Riding type Paddy Transplanter

xx. **Critical Inputs: OFT will be conducted in association with AICRP on FIM, CAET, OUAT (Transportation cost)**
xiii. **Unit Size:0.2ha**
xiv. **No of Replications: 5**
xv. **Unit Cost: 900/-**
xvi. **Total Cost: 4500/-**
xvii. **Monitoring Indicator: Field capacity(ha/h), Time saving, Labour requirement(MDs/ha), No of tillers/hill, No of seedlings/hill**

xviii. **Source of Technology (ICAR/ AICRP/ SAU/ Other, please specify):**
Released by AICRP on FIM, CAET, OUAT,2015 as transferrable technology
Validated by AICRP on FIM, CAET, OUAT, 2016

OFT-6 (Fishery)

i. **Season: Kharif, 2020 /I yr**

ii. **Title of the OFT: Assessment of growth performance of Amur carp ,** ***Cyprinus carpio haematopterus*** **in carp polyculture**

iii. **Thematic Area:** Production and management
iv. **Problem diagnosed: Low yield due to slow growth rate of common carp**

v. **Important Cause:** Slow growth rate of common carp affects the average yield from composite carp culture

vi. **Production system:** Pond based
vii. **Micro farming system:** Pond based, rainfed ecosystem
viii. **Technology for Testing:** Growth rate of Amur carp at different proportion
ix. **Existing Practice:** Stocking of Catla:Rohu:Mrigal = 3:4:3
x. **Hypothesis:** More yield could be obtained by adopting TO3 as the proportion of Amur carp is more in that case and the growth rate of Amur carp is more than Mrigal
xi. **Objective(s):** To assess the growth performance of Amur carp
xii. **Treatments:**

Farmers Practice (FP): Stocking of Catla:Rohu:Mrigal = 3:4:3

Technology option-I (TO-I): Stocking of Catla:Rohu:Mrigal:Amur carp= 3:4:2:1

Technology option-II (TO-II): Stocking of Catla:Rohu:Mrigal:Amur carp= 3:4:1:2

Technology option-II (TO-II): Stocking of Catla:Rohu:Amur carp= 3:4:3

xiii. **Critical Inputs: Fingerlings of Amur carp**
xiv. **Unit Size: 0.4 ha**
xv. **No of Replications: 7**
xvi. **Unit Cost: Rs 1500.00**
xvii. **Total Cost: Rs 10,500.00**
xviii. **Monitoring Indicator:** Average body weight, DO, Plankton, Alkalinity

xix. **Source of Technology (ICAR/ AICRP/ SAU/ Other, please specify):** NFDB News letter, 2016

OFT-7 (Fishery)

i. **Season: Round the Year, 2020-21/I yr**

ii. **Title of the OFT: Assessment of efficacy of different probiotics on growth performance of carps**

iii. **Thematic Area:** Disease management
iv. **Problem diagnosed: Low fish yield and more susceptible to diseases due to non use of probiotics**

v. **Important Cause: Fish is susceptible to disease incidence due to non use of probiotics**
vi. **Production system: Pond based**
vii. **Micro farming system: Pond based, rainfed ecosystem**

viii. **Technology for Testing: Efficacy of soil and water probiotics on growth of carps**
ix. **Existing Practice:** Feeding with artificial supplementary feed and no use of probiotics
x. **Hypothesis: soil and water quality parameters would be better by application of probiotics and hence disease incidence would be minimized leading to more fish yield**
xi. **Objective(s): To assess the efficacy of different probiotics on growth performance of carps**
xii. **Treatments:**

Farmers Practice (FP): Feeding with artificial supplementary feed (GNOC and rice bran at 1:1) and no use of probiotics

Technology option-I (TO-I): Application of Soil probiotic (Rid all) @ 1 kg/Ac-mt water area

Technology option-II (TO-II): Application of Water Probiotic (Water spell) @ 5 Lit/ Ac-mt water area

xiii. **Critical Inputs: Soil probiotics and water probiotics**
xiv. **Unit Size: 0.4 ha**

xv. **No of Replications: 07**
xvi. **Unit Cost: Rs 900.00**
xvii. **Total Cost: Rs 6300.00**
xviii. **Monitoring Indicator:** Length (mm) & Weight (gm), % of disease incidence, PH, alkalinity
xix. **Source of Technology (ICAR/ AICRP/ SAU/ Other, please specify):** College of Fisheries, OUAT

OFT-8 (Home Science)

i. **Season: Round the Year, 2020-21/II yr**

ii. **Title of the OFT: Refinement of packaging practices of Paddy straw mushroom**

iii. **Thematic Area:** Value addition
iv. **Problem diagnosed:** Distress Sale and low income due to short shelf life
v. **Important Cause:** Less income due to huge production
vi. **Production system:** Coconut Orchard intercropping
vii. **Micro farming system:** Homestead
viii. **Technology for Testing:** Different packaging material used to store chemilly treated paddy straw mushroom
ix. **Existing Practice:** Unwashed fresh fruit bodies in bud stage in polythene bags
x. **Hypothesis:** Avoid spoilage of mushroom within 24 hours of fruiting and enhance the shelf life for 48 hrs in paper bags
xi. **Objective(s):** To increase shelf life of paddy straw mushroom in budding stage
xii. **Treatments:**

Farmers Practice (FP): Unwashed fruit bodies in polythene bags

Technology option-I (TO-I): Fresh Mushrooms Buds washed with potassium meta bisulphite (KMS 0.1% and o.1% citric acid,) for 10 minutes and allowed to air dry on muslin cloth for 30 min and then packed in paper Bags punched with 10 holes stored at room temperature

Technology option-II (TO-II): Fresh Mushrooms Buds washed with potassium meta bisulphite (KMS 0.1%) and dipped in (o.1%)citric acid for 10 minutes and allowed to air dry on muslin cloth for 30 min and then packed in paper Bags punched with 20 holes (0.5 cm diameter) stored at room temperature

Technology option-III (TO-III): Cleaned Fresh Mushrooms Buds with packed in paper Bags punched with 20 holes (0.5 cm diameter) stored at room temperature

xiii. **Critical Inputs:** Citric Acid, KMS, Paper Bags, Poly propylene bags
xiv. **Unit Size:** 20 kg Mushroom Packaging
xv. **No of Replications: 10**
xvi. **Unit Cost: 800**
xvii. **Total Cost: 8000**
xviii. **Monitoring Indicator:** Sensory Evaluation, Weight loss(%), Shelf life(Hours)
xix. **Source of Technology (ICAR/ AICRP/ SAU/ Other, please specify):** PAU,2010, Farmer's Feedback

OFT-9 (Home Science)

i. **Season: Round the Year, 2020-21/II yr**

ii. **Title of the OFT: Assessment of different media for nursery raising of quality vegetable seedling production**
iii. **Thematic Area:** Income Generation
iv. **Problem diagnosed:** Low income of farm women due to under utilization of Coco-Peat

v. **Important Cause:** Plenty availability of Coconut waste as the coconut area is 9999ha
vi. **Production system:** Paddy-Vegetable
vii. **Micro farming system:** Homestead
viii. **Technology for Testing:** Use of different media for nursery raising
ix. **Existing Practice:** Use of FYM+ Sand+ Soil(1:1:1) for seedling raising
x. **Hypothesis:** Use of Arka Fermented Cocopeat for raising seedlings decrease the seedlings mortality and increase the income of farm women
xi. **Objective(s):** To produce vegetable seedling using Cocopeat
xii. **Treatments:** FP: Use of FYM+ Sand+ Soil(1:1:1) for seedling raising
TO_1: The seedling tray (pro tray) is filled with the growing medium (moistened coco peat). One seed per cell is sown and covered with medium. The entire stack of 10 protrays will be covered using polyethylene sheet to ensure conservation of moisture until germination. The seedlings would be ready in about 21-30 days for transplanting to the main field.
TO_2: Use of Arka Fermented Cocopeat for raising seedlings
i. **Critical Inputs:** Vegetable seeds, Protray,cocopeat
ii. **Unit Size:** 1000 seedlings
iii. **No of Replications: 10**
iv. **Unit Cost: 600**
v. **Total Cost: 6000**
vi. **Monitoring Indicator:** Seedling mortality(%), height of the seedling, age of the seedling for transplanting(Days)
vii. **Source of Technology (ICAR/ AICRP/ SAU/ Other, please specify):** TO_1:CIWA, Bhubaneswar
http://icar-ciwa.org.in/gks/index.php/wft/113-protrayseedling
TO_2: IIHR, Bangalore , https://iihr.res.in/production-technology-arka-fermented-coco-peat

Case Study:1 (1st. year) (Ag.Extension)
Title: Consumer preference study for various vegetables in the district
Expected output: Result of the study will help the farmers to plan market led production for better price and will enable the KVK for utilizing farmers' preference in selection of varieties for KVK intervention.
Identified vegetables: Brinjal, Chilli, Cucumber, Bittergourd, Okra

Name of the Vegetable	Parameters to be studied	Highly preferred	Moderately preferred	Less preferred
Brinjal	Colour: (Green/Black/Purple/ White)			
	Size: (Large/ Medium/ Small)			
	Shape: (Elongated/ Round/ Oval/ Oblong)			
	With thorn/ thorn less			
	Preference for specific production pockets			
Chilli	Colour: (Green/Black/White)			
	Size:(Large/ Medium/ Small)			
	Shape: (Round/Slender/ Medium robust)			
	Pungency			
	Aroma			
	Preference for specific production pockets			
Cucumber	Colour: (Green/ White)			
	Size: (Large/ Medium/Small)			
	Texture: (Smooth/Fine)			
	Preference for specific production pockets			
Bittergourd	Colour: (Dark green/ Green/ White)			

	Size: (Large/ Medium/Small)			
	Firm spine/ smooth spine			
	Preference for specific production pockets			
Okra	Colour: (Green/ Dark green/ Violet)			
	Size: (Large/ Medium/Small)			
	Soft/Hard			
	Preference for specific production pockets			

Case Study:2 (1st. year) (Ag.Extension)

Backyard Poultry: A study on current status, challenges faced by the smallholders for its sustenance and way forward .

Objectives:

1. To assess the current status & its contribution for community development
2. To identify major challenges confronting Backyard poultry sector
3. Suggesting ways that could help backyard poultry production and marketing for community development in the region

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.)
1	ARYA	8,00,000
2	ASCI	3,30,000
3	ATMA	1,00,000
4	RKVY	3 Crores Budget submitted for infrastructure

11. No. of success stories proposed to be developed with their tentative titles- 04 Nos.

12. Scientific Advisory Committee

Date of SAC meeting held during 2019-20	Proposed date during 2020-2021
05.02.2020	November-2020

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	210										15	150
Water Samples	278										55	-
Other (Please specify)												
Total	**488**										**70**	

14. Fund requirement and expenditure (Rs.)*

Heads	Expenditure (last year) (Rs.) up to 31.03.2019	Expected fund requirement (Rs.)
Contingency	17,00,000	18,00,000
T.A HRA	1,50,000 30,000	1,50,000 30,000
ARYA (R &O) TA	9,32,000	10,00,000
ARYA (Capital)	3,78,000	8,56,000
Total		

* 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

Crop/ Enterprise	Thematic Area	Technology demonstrated	Horizontal spread of technology			Photographs
			No. of villages	No. of farmers	Area in ha	
Paddy	Varietal Evaluation	Var.Swarna Sub-1	346	4684	6358	
Chilli	IPM	Soil application of neem cake @2.5 qt/ha,Installation of Blue sticky traps @50nos/ha, & need based application of Difenthiuron @1gm/lt & Spiromesifen 240 SC @ 0.6ml/ lit alternately at 10 days interval	18	67	17	

Crop/ Enterprise	Thematic Area	Technology demonstrated	Horizontal spread of technology			Photographs
			No. of villages	No. of farmers	Area in ha	
Greengram	IPM	Seed treatment with Imidacloprid 600FS@5ml/kg seed,Instalation of YST@25/ha, alternate spraying of Neem oil (300ppm)@2.5ltr/ha and Difenthiuron 50% WP@500gm/ha at 10 days interval at 40 DAS	36	112	48	
Pisciculture	Fish feed management	Application of Floating fish feed @ 1% body weight daily in composite carp culture	42	162	320	
Pisciculture	Composite carp culture	Stocking of grow out ponds with Catla:Jayanti Rohu:Mrigal fingerlings@ 3000:4000:3000 nos per ha	48	190	455	
Mushroom	Income generation	Cultivation in agro shade net house (75%) with substrate treatment in lime solution (2%)	42	156	-	

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