# **ACTION PLAN 2023-24**

# 1. Name of the KVK:Bolangir

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At.Larkipali, (RE Farm)	06652250195	kvkbolangir.ouar@gmail.com
PO.Rajendra College, Bolangir-767002 (Odisha)		bolangirkvk@yahoo.com

### **2.**Name of host organization:

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

### **3.**Training programmes to be organized (April 2023 to March 2024)

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

### (a) Farmers and farmwomen (65 nos.)

Thematic	Title of Training	No.	Days	Venu	Tentative			N	0. 0	f Par	ticip	ants		
area				e On/	Date	S	C	S'	T	Otl	her		Tota	ıl
				Off		M	F	M	F	M	F	M	F	T
СР	Brown manuring& green manuring technique in rice	1	1	OFF	20.06.2023	5	1	4	1	11	3	20	5	25
СР	Integrated weed management in cotton	1	1	OFF	29.06.2023	5	1	4	1	11	3	20	5	25
СР	Pre and Post emergence herbicide for weed management in rice and their mode of action.	1	1	OFF	13.07.2023	5	1	4	1	11	3	20	5	25
СР	Use of CLCC in Paddy for proper nitrogen management	1	1	OFF	16.07.2023	7	1	3	0	8	6	18	7	25
СР	Bio-fortified rice varieties & their agronomic practices	1	1	OFF	20.07.2023	2	0	4	1	14	4	20	5	25
СР	Nutrient management in maize based inter cropping system	1	1	OFF	24.08.2023	7	1	0	0	13	4	20	5	25
СР	Integrated Nutrient Management of finger millet for higher productivity	1	1	OFF	25.08.2023	5	1	4	1	11	3	20	5	25
СР	Seed treatment of pulses through microbial culture	1	1	OFF	19.09.2023	4	2	5	1	10	3	19	6	25
СР	Agronomic practices of sweet corn	1	1	OFF	22.09.2023	5	1	4	1	11	3	20	5	25

	cultivation													
СР	Method and use bio decomposer	1	1	OFF/ ON	20.10.2023	4	2	5	1	10	3	19	6	25
СР	Integrated Weed Management in maize	1	1	OFF	22.11.2023	4	2	5	1	10	3	19	6	25
СР	Nutrient management in sesame	1	1	OFF	24.01.2024	5	1	4	1	11	3	20	5	25
СР	Effect of Foliar spray of nutrients (DAP and MOP) in green gram	1	1	OFF	25.01.2024	4	2	5	1	10	3	19	6	25
SFM	Application of balanced fertilizer for management of leaf reddening in Bt cotton	1	1	OFF	31.07.2023	5	1	4	1	11	3	20	5	25
SFM	Nutrient management practices in cotton	1	1	OFF	21.08.2023	5	1	4	1	11	3	20	5	25
SFM	Foliar application of nano urea fertilizer in transplanted rice	1	1	OFF	31.08.2023	5	1	4	1	11	3	20	5	25
HOV	Scientific cultivation of Kharif Tomato	1	1	OFF	01.08.2023	5	0	3	0	17	0	25	0	25
HOV	Scientific cultivation of Kharif onion	1	1	OFF	04.08.2023	5	3	3	1	9	4	17	8	25
HOV	Production technology of pod vegetables	1	1	OFF	13.10.2023	4	2	5	1	10	3	19	6	25
HOV	Quality seedling production of vegetables portray	1	1	OFF	27.10.2023	4	2	5	1	10	3	19	6	25
HOV	Use of growth regulators on vegetables	1	1	OFF	02.11.2023	5	0	3	0	17	0	25	0	25
HOV	Agrotechniques for bittergourd cultivation	1	1	OFF	16.11.2023	5	0	3	0	17	0	25	0	25
HOV	Physiological disorder in cole crops	1	1	OFF	16.12.2023	5	0	3	0	17	0	25	0	25
MET	Draught mgmt. strategies	1	1	OFF	12.10.2023	5	3	3	1	9	4	17	8	25
MET	Climate smart agriculture in rainfed areas	1	1	OFF	19.10.2023	4	2	5	1	10	3	19	6	25
MET	Contingency crop planning for extreme weather condition	1	1	OFF	26.10.2023	5	3	3	1	9	4	17	8	25
MET	Climate smart agriculture	1	1	OFF	04.11.2023	4	2	5	1	10	3	19	6	25
MET	Judicious use of water in rainfed agriculture	1	1	OFF	23.11.2023	5	3	3	1	9	4	17	8	25

MET	Effect of weather on	1	1	OFF	21.12.2023	4	2	5	1	10	3	19	6	25
MET	crop production Effect of weather on	1	1	OFF	28.12.2023	5	3	3	1	9	4	17	8	25
	crop production													
MET	Effect of weather on insect pest of different crops	1	1	OFF	11.01.2023	4	2	5	1	10	3	19	6	25
LPM	Feeding management	1	1	OFF	12.04.2023	5	3	3	1	9	4	17	8	25
LPM	in anestorus cows  Methods of straw	1	1	OFF	09.05.2023	4	2	5	1	10	3	19	6	25
LPM	treatment and feeding strategies in cows	1	1	OFF	09.05.2023	4	2	3	1	10	3	19	0	25
LPM	Fodder (Hybrid Napier &Paragrass) cultivation strategies and feeding management in dairy cows	1	1	OFF	06.06.2023	5	3	3	1	9	4	17	8	25
LPM	Housing management in goats	1	1	OFF	05.07.2023	4	2	5	1	10	3	19	6	25
LPM	Feeding management in pregnant does to prevent low milk yield after parturition	1	1	OFF	08.08.2023	5	3	3	1	9	4	17	8	25
LPM	Spineless cactus cultivation as an alternate fodder in dry and degraded soil	1	1	OFF	07.09.2023	4	2	5	1	10	3	19	6	25
LPM	Azolla cultivation strategies and feeding strategies for dairy cows	1	1	OFF	15.09.2023	5	3	3	1	9	4	17	8	25
LPM	Brooding management in chicks	1	1	OFF	06.10.2023	5	3	3	1	9	4	17	8	25
LPM	Importance of bypass fat and mineral mixture feeding in dairy cow	1	1	OFF	11.10.2023	4	2	5	1	10	3	19	6	25
P & T	Feeding management in composite pisciculture	1	1	OFF	18.10.2023	5	3	3	1	9	4	17	8	25
LPM	Artificial brooding management in chicks to lower rate of chick mortality	1	1	OFF	06.11.2023	4	2	5	1	10	3	19	6	25
LPM	Rearing of improved backyard chicken variety in backyard system	1	1	OFF	14.11.2023	4	2	5	1	10	3	19	6	25
P & T	Piscicultue in composite tanks	1	1	OFF	06.12.2023	5	3	3	1	9	4	17	8	25
Group Dynamics	Group based input management practices	1	1	OFF	11.08.2023	4	2	3	3	8	5	15	1 0	25

	for farmer groups													
Group Dynamics	Group Management in SHGs and Farmers clubs	1	1	OFF	16.09.2023	5	2	4	3	8	3	17	8	25
Resource Manageme nt	Mobilization of Social Capital	1	1	OFF	03.10.2023	3	2	5	2	9	4	17	8	25
Market led production	Market led production strategy	1	1	OFF	10.11.2023	2	1	4	3	8	7	14	1 1	25
FPO	Management of Farmers Producer Organisations	1	1	OFF	17.11.2023	4	3	3	2	8	5	15	1 0	25
Group Dynamics	Formation and Management of WSHG	1	1	OFF	15.12.2023	3	3	4	2	8	5	15	1 0	25
Entreprene urship	Entrepreneurship development & Management	1	1	OFF	12.01.2024	5	2	3	1	8	6	16	9	25
Enterprene urship	Entrepreneurship development on value added products	1	1	OFF	10.2.2024	3	2	4	3	8	5	15	1 0	25
ICT in agriculture	ICT in Agriculture	1	1	OFF	23.03.2024	3	2	4	3	8	5	15	1 0	25
Farm mechaniza tion	Use of mechanical weeders in rice	1	1	OFF	9.08.23	5	3	3	1	9	4	17	8	25
Drudgery reduction	Small implements for farm women	1	1	OFF	21.08.23	3	2	4	3	8	5	15	1 0	25
Precision farming	Utility of mulching in vegetable	1	1	OFF	12.09.23	4	2	5	1	10	3	19	6	25
Farm mechaniza tion	Different line sowing implements for cereal and pulses	1	1	OFF	26.09.23	2	1	4	3	8	7	14	1 1	25
Micro irrigation	Utility of micro irrigation	1	1	OFF	10.10.23	3	2	4	3	8	5	15	1 0	25
Farm	Use of mini dal mill	1	1	OFF	18.10.23	2	1	4	3	8	7	14	1	25

mechaniza tion													1	
Value addition	Value addition of tomato	1	1	OFF	15.11.23	3	2	4	3	8	5	15	1 0	25
Value addition	Value addition of oyster mushroom	1	1	OFF	13.12.23	2	1	4	3	8	7	14	1	25
Micro irrigation	Use of sprinkler irrigation in pulse	1	1	OFF	20.12.23	3	2	4	3	8	5	15	1 0	25
Farm mechaniza tion	Use of solar dryer	1	1	OFF	22.11.23	3	2	4	0	11	5	15	1 0	25
Farm mechaniza tion	Use of different rice harvesting machineries	1	1	OFF	4.01.23	2	1	4	3	8	7	14	1	25

# (b) Rural youths (12 nos.)

Thematic	Title of Training	No.	Days	Venue	Tentative			No	. of	Parti	cipa	ants		
area				On/Off	Date	S	C	S'	Т	Otl	ıer	,	Tota	ıl
						M	F	M	F	M	F	M	F	T
СР	Preparation and use of organic inputs for Natural farming	1	2	ON	28- 29.10.2023	2	1	0	0	10	2	12	3	15
СР	Successful models of 1 ha integrated farming system	1	2	ON	23- 24.11.2023	1	1	2	1	7	3	10	5	15
SFM	Vermicomposting production technology	1	3	ON	17- 19.08.2023	2	1	0	0	9	2	12	3	15
HOV	Grafting techniques in Solanaceous vegetables	1	3	ON	18- 19.12.2023	2	1	0	0	9	2	12	3	15
HOF	Modern techniques for cultivation of Apple ber	1	3	ON	06- 07.01.2024	2	1	0	0	9	2	12	3	15
LPM	Scientific goat farming for better profit generation	1	3	ON	17- 19.08.2023	2	0	1	0	10	2	12	3	15
LPM	Feeding housing and disease management in dairy cows	1	3	ON	18- 20.09.2023	1	1	2	1	7	3	10	5	15

LPM	Small scale poultry farming for income generation	1	3	ON	26- 28.09.2023	2	1	0	0	9	3	12	3	15
P&T	Pond and feeding management in composite fish farming	1	2`	ON	17- 18.10.2023	2	1	0	0	9	3	12	3	15
Market led production	Market led production strategies for better price	1	2	ON	14.9.23 & 15.9.23	2	1	1	1	6	4	9	6	15
Bee Keeping	Scientific method of Bee Keeping	1	3	ON	09.10.23 to 11.10.23	3	1	2	1	5	3	10	5	15
Entreprene urship Developme nt	Potential entrepreneurship avenues in vegetable production	1	2	ON	12.12.23 & 13.12.23	2	1	2	2	5	3	9	6	15
Farm mechanizat ion	Utility of Improved machinaries for rice cultivation	1	3	On	17.8.2023 to 19.8.23	-	-	-	-	1 3	2	1 3	2	1 5
Value addition	Value addition of tomato	1	3	On	19.12.2023 to 21.12.2023	-	3	-	-	-	1 2	-	1 5	1 5
Drudgery reduction	Small implements for farm women	1	3	On	18.01.23 to 20.01.23	-	5	-	-	-	1 0	-	1 5	1 5

## (c) Extension functionaries (7 nos.)

Thematic area	Title of Training	No.	Da		Tentative			N	0. 0	f Par	ticipa	ants		
				On/Off	Date	S	С	S'	Γ	Ot	hr		Tota	1
						M	F	M	F	M	F	M	F	T
СР	Climate resilience agriculture	1	1	ON	07.12.2023	2	0	1	0	7	0	10	0	10
СР	Crop diversification in rainfed areas	1	1	ON	28.12.2023	2	0	1	0	7	0	10	0	10
СР	Importance of millets and its improved agro techniques	1	1	ON	18.01.2023	2	0	2	0	6	0	10	0	10
Enterprise Management	Agri and horti based entrepreneurship development	1	1	ON	11.12.23	2	0	1	0	7	0	10	0	10

ICT in agriculture	Role of social media in agriculture extension	1	1	ON	20.01.24	2	0	1	0	7	0	10	0	10
LPM	Recent trends in livestock disease management (Mastitis, Milk fever and FMD)	1	1	ON	22.11.2023	2	0	1	0	7	0	10	0	10
LPM	Antiparasitic resistance in livestock and strategies to control	1	1	ON	21.12.2023	2	0	2	0	6	0	10	0	10
LPM	Low cost feeding management in livestock	1	1	ON	05.01.2023	2	0	2	0	6	0	10	0	10
Custom hiring	Importance of Custom hiring center	1	1	On	20.9.2023	-	-	-	-	12	3	12	3	15
Farm mechanization	Precision farming	1	1	On	22.2.2024	-	4	-	-	-	11	-	15	15

# 4. Frontline demonstration to be conducted\* (17nos.)

FLD 1	Demonstration on nutrient management in cotton
Code	=
Crop	Cotton
Thrust Area	Poor yield due to poor nutrient management
Thematic Area	Integrated Nutrient management
Season	Kharif 2023-24
Farming Situation	Irrigated medium land
FLD 2	Demonstration on nutrient management in ragi
Code	=
Crop	Ragi
Thrust Area	Poor yield due to poor nutrient management in ragi
Thematic Area	Integrated Nutrient Management
Season	Kharif2023-24
Farming Situation	Irrigated medium land
FLD 3	Demonstration on weed management in Rice
Code	23FAG03(K)
Crop	Rice

Thrust Area	Low yield due to high weed infestation
Thematic Area	Weed management
Season	Kharif 2023-24
Farming Situation	Rainfed Medium land
FLD 4	Demonstration on weed management in maize
Code	=
Crop	Maize
Thrust Area	Low yield and low income due to heavy weed infestation
Thematic Area	Weed management
Season	Kharif 2023-24
Farming Situation	Rain-fed medium land
FLD 5	Demonstration on Maize hybrid -Kalinga raj (OMH 14-27)
Code	=
Crop	Maize hybrid
Thrust Area	Low yield from existinghybrid
Thematic Area	Varietal Substitution
Season	Kharif 2023-24
Farming Situation	Irrigated medium land
FLD 6	Demonstration on IWM in cotton
Code	23FAG36(K)
Crop	Cotton
Thrust Area	Low yield due to high weed infestation
Thematic Area	Weed management
Season	Kharif 2023-24
Farming Situation	Rain-fed medium land
FLD 7	Demonstration on Nutrient management in onion
Code	23FHO19 (R)
Crop	Onion
Thrust Area	Low yield due to improper nutrient management
Thematic Area	Integrated Nutrient Management
Season	Rabi 2023-24
Farming Situation	Irrigated medium land
FLD 8	Demonstration on Bypass fat and mineral mixture feeding for sustained milk production
Code	-
Commodity	Cow
Thrust Area	Productivity in dairy cows
Thematic Area	Livestock Production and Mangement
Season	2023-24 (Kharif)
Farming Situation	Home stead and grazing
FLD 9	Demonstration on dietary supplementation of probiotics and concentrate
	on juvenile growth of goats
Code	-
Commodity	Goat
Thrust Area	To hasten body weight gain in kids through supplements
Thematic Area	Livestock production and management
Season	2023-24
Farming Situation	Semi intensive (Homestead and grazing)
FLD 10	Demonstration of Kalinga Pallishree bird in backyard system
Code	23FAS01(R)
Commodity	Poultry bird
C GIIIII G GIV)	

Thrust Area	Developed backyard variety production in backyard system
Thematic Area	Livestock production and management
Season	Rabi 2023-24
Farming Situation	Backyard
FLD 11	Demonstration on deworming and supplement feeding on body weight
	gain of kids
Code	-
Commodity	Goats
Thrust Area	To fasten body weight gain in goats
Thematic Area	Livestock production and management
Season	2023-24 (Rabi)
Farming Situation	Semi intensive
FLD-12	Demonstration of the effectiveness of short technology videos on
	technology adoption
Code	23FEE01
Commodity	Mushroom
Thrust Area	ICT
Season	Round the year
Farming Situation	Homestead
FLD-13	Demonstration of usefulness of crop/livestock calendar for improving the
	technical knowledge of farmers and application of technology.
Code	23FEE02
Commodity	Groundnut
Thrust Area	ICT
Season	Rabi
Farming Situation	Irrigated medium land
FLD-14	Demonstration on tractor drawn Puddler
Code	23FAE01 (K)
Commodity	Rice
Thrust Area	Farm mechanization
Season	Kharif
Farming Situation	Rainfed medium land
FLD-15	Demonstration on plastic punnets for storage of paddy straw mushroom
Code	23FAE02 (K)
Commodity	Mushroom
Thrust Area	Post Harvest Management
Season	Kharif
Farming Situation	Homestead
FLD-16	Demonstration on drip irrigation with mulching in tomato
Code	23FAE01 I
Commodity	Tomato
Thrust Area	Micro-irrigation
Season	Rabi
Farming Situation	Irrigated medium land
FLD-17	Demonstration on vertical conveyor reaper
Code	23FAE04 (K)
Commodity	Rice
Thrust Area	Farm mechanization
Season	Rabi
Farming Situation	Irrigated medium land

FLD No.	Crop & variety / Enterpr	Prop osed Area	Technology package for demonstration	Parameter (Data) in relation to technology demonstrated	Cost of Cultivation (Rs.)		Ter	ntativ	ve No.	of f	armo	ers /	demo	onstr	ation	
	ises	(ha)/			Name	Dem		SC		ST		Oth	ıer	Tot	al	
		Unit (No.)			of Input	0	o c a l	M	F	M	F	M	F	M	F	T
1	Cotton	10	The spraying of urea increases the contents of protein and free amino acid in boll shell of Bt cotton which leads to improve the insect resistant and spraying of MgSO4 reduces the leaf cupping and interveinalchlorosis in cotton plant. The spraying of urea and MgSO4 manage the leaf reddening in cotton plant.	No of bolls/plant and weight of boll/plant	Urea and MgS O4	4,0		2	0	1	0	7	0	1 0	0	10
2	Ragi	10	Application of lime @ 0.25LR (applied 15 days before sowing) along with 50%N-P2O5-K2O (30-20-20 kg ha-1) resulted in significantly higher grain yield in ragi as compared to 100% recommended dose. N was applied in three splits, 25, 50 and 25 per cent basal, at tillering and flowering stages respectively. P and K were applied as basal doses.	No of leaves/hill, no of tillers/hill, panicle length and panicle weight	Lime and NPK	15, 000		2	0	1	0	7	0	1 0	0	10
3	Rice	10	Application of Cyhalofop butyl + Penoxulam @ 135g/ha at 20 DAT	Effective panicles/ m2, No of filled grains /Panicle, Yield (q/ha)	Cyhal ofop butyl+ Penox ulam @ 135g ai/ha at 20 DAT	150 00	0	2	0	1	0	7	0	1 0	0	10
4	Maize	10	Pre-emergence application of Atrazine 50 % wp @1.0 kg ai/ha	Plant height, no grains/row, no	Atrazi ne 50	150 00	0	2	0	1	0	7	0	1 0	0	10

			followed by Tembotrine 115 ml at 21 DAS( 4-5 leaf stage)	rows/plant,cob length, no of cobs/Plant, Yield (q/ha), No of Weeds/m <sup>2</sup> ,Weed flora	% wp @1.0 kg ai/ha follow ed by Temb otrine 115 ml ai/ha											
5	Maize	10	Growing of hybrid maize Kalinga raj	Plant height, no grains/row, no rows/plant,cob length, no of cobs/Plant, Yield (q/ha)	Hybri d Maize : Kalin ga raj @20 kg/ha	150 00	0	2	0	1	0	7	0	1 0	0	10
6	Cotton	10	Pre-emergence application of pendimethalin @ 1.0 kg a.i./ ha as pre-emergence with post emergence application of Quizalofop-p-ethyl @ 50g a.i./ ha at 20 DAS and one hand weeding at 45 DAS.	No of bolls/plant and weight of boll/plant, No of Weeds/m², Weed flora	Pendimethal in @ 1.0 kg a.i./ ha as PEFb post emerge nce applica tion of Quizal ofoppethyl @ 50g a.i./ ha at 20 DAS	150 00	0	2	0	1	0	7	0	1 0	0	10

7	Onion	10	Application of 110:40:60:40 kg per NPKS /ha along with soil and foliar application of ZnSO4	Bulb weight, Bulb diameter, Yield	NPK S, FYM and Zn	15, 000		1	1	1	0	6	1	8	2	10
8	Cow	10	Grazing+ concentrate +Bypass fat @15-20 gm/kg milk/day +Mineral mix @50g/cow/day	Milk yield, Quality of milk (lactometer reading)	Bypa ss fat and miner al mixtu re	Rs 10/c ow/ day	-	2	0	1	0	5	2	8	2	10
9	Goat	10	After 6-8 hrs of free grazing feeding of kid with probiotics @ 3g/goat/day and concentrate @ 1.5% of bw for 6 months  Feeding of probiotics along with concentrate increases feed efficiency and will support body weight gain	Weight gain, Health status	Conc entrat e and probi otics	Rs. 2/g oat/ day	-	1	1	1	1	3	3	5	5	10
10	Poultry	10	Rearing of day old Kalinga Pallishree chick with proper brooding (feeding upto 21 days and vaccination upto 28 days) and further rearing in backyard system	Rate of chick mortality, weight gain in 1m, 2m, 3m age, Age of egg lying, Avg egg production in 6m and 1yr	chick s Devel oper feed	Rs. 700 /far mer	-	2	0	1	0	5	2	8	2	10
11	Poultry	10	Deworming of kids along with Vit B12 supplementation and also Concnetrate feeding Concentrate @1.5% of BW	Growth rate, Incidence of diarrhea	Dewo rming medi cine, Vita min B12, Conc entrat e	Rs. 100 0/ 5 kids for 2 mo nths	-	2	1	1	0	5	1	8	2	10

12	Mushroo m	5	Preparation of small videos (0.5-2.0 minutes) on different activities of production process of selected commodities and the same will be sent through WhatsApp to the identified group of farmers.	Effectiveness, adoptability, easiness of handling	Vide o recor der, Came ra, It acces sories											5
13	Groundn ut	25	Providing crop calendar with multi colour pictorial, concise and Season specific message, very informative and particular information regarding specific technology for improving the technical know how of farmers.	Adoption percentage, constraints.	Crop calen dar print leafle t in color											25
14	Rice	2 ha	Use of tractor drawn puddler	Puddlingindex(%), Cost of operation(Rs/ha)	tracto r draw n puddl er	400 00	-	1	1	1	1	3	3	5	5	10
15	Mushroo m	20 units	Pre-cooling 6 kg paddy straw mushroom at 14°C for 2h followed by packing in 75 µ HIPS punnet (24 no of punnets with 250 g sample) can be transported to distant markets in modified EPS cabinet with 6 kg ice placed in the separate side compartment	Shelf life (no. of days), Additional income over additional investment	Plasti c punn ets, EPS Cabin et	100 00		-	5	-	-	-	5	-	1 0	10
16	Tomato	1 ha	Use of 50 micron mulch film with	Irrigation interval,	Drip,	400		1	1	1	1	3	3	5	5	10

			inline drip irrigation(emitter discharge 4 lph ) operating for 1 hr-2hr daily and water use efficiency will be increased by 30-40% yield enhancement (15-20)%		mulc hing	00								
17	Rice	4 ha	Use of vertical conveyor reaper	Labour required(mandays/ha), cost of operation(Rs/ha),	Verti cal conve yor raepe r	100 00	2	0	4	0	0	4	1 0	10

# **Extension and Training activities under FLD:**

Activity	Title of Activity	No	Client	Durati	Venue			No	. of Pa	rticip	ants (t	tentativo	e)	
			ele	on	On/	S	SC	S	T	Ot	her		Tota	l
					Off	M	F	M	F	M	F	M	F	Т
Training	Nutrient management practices in cotton	1	F/FW	1 day	Off	5	1	4	1	11	3	20	5	25
Training	IWM in Rice	1	F/FW	1 day	Off	2	0	4	1	14	4	20	5	25
Training	Nutrient management in maize based inter cropping system	1	F/FW	1 day	Off	7	1	0	0	13	4	20	5	25
Training	Integrated Nutrient Management of finger millet for higher productivity	1	F/FW	1 day	Off	5	1	4	1	11	3	20	5	25
Training	Agronomic practices of hybrid maize cultivation	1	F/FW	1 day	Off	5	1	4	1	11	3	20	5	25

Training	Integrated Weed Management in maize	1	F/FW	1 day	Off	4	2	5	1	10	3	19	6	25
Training	Nutrient management practices in ragi	1	F/FW	1 day	Off	5	1	4	1	11	3	20	5	25
Training	Feeding management in anestrous cows	1	F/FW	1 day	Off	4	2	5	1	10	3	19	6	25
Training	Proper feeding and housing management in goats	1	F/FW	1 day	Off	5	3	3	1	9	4	17	8	25
Training	Rearing of improved backyard chicken variety in backyard system	1	F/FW	1 day	Off	4	2	5	1	10	3	19	6	25
Training	Artificial brooding management in chicks to lower rate of chick mortality	1	F/FW	1 day	Off	4	2	5	1	10	3	19	6	25
Training	Management of FPOs	1	F/FW	1 day	Off	3	2	4	3	8	5	15	10	25
Field Day	Nutrient management in Ragi	1	F/FW	1 day	Off	7	1	3	2	13	4	23	7	30
Field Day	IWM in maize	1	F/FW	1 day	Off	7	1	3	2	13	4	23	7	30
Field Day	IWM in Rice	1	F/FW	1 day	Off	7	1	3	2	13	4	23	7	30
Field Day	Hybrid Maize Kalinga Raj	1	F/FW	1 day	Off	7	1	3	2	13	4	23	7	30
Field Day	IWM in Cotton	1	F/FW	1 day	Off	7	1	3	2	13	4	23	7	30
Field Day	Probiotic and conc feeding in goats	1	F/FW	1 day	Off	7	1	3	2	13	4	23	7	30
Field Day	Bypass fat and mineral mixture feeding in cows	1	F/FW	1 day	Off	7	1	3	2	13	4	23	7	30
Field Day	LIT Bird rearing in backyard system	1	F/FW	1 day	Off	7	1	3	2	13	4	23	7	30

Field Day	Artificial brooding in chicks	1	F/FW	1 day	Off	7	1	3	2	13	4	23	7	30
Field Day	Demonstration on tractor drawn Puddler	1	F/FW	1 day	Off	10	1	3	2	10	4	23	7	30
Field Day	Demonstration on plastic punnets for storage of paddy straw mushroom	1	F/FW	1 day	Off	0	8	0	5	10	7	23	7	30
Field Day	Demonstration on vertical conveyor reaper	1	F/FW	1 day	Off	5	3	3	2	13	4	23	7	30
Field Day	Demonstration on drip irrigation with mulching in tomato	1	F/FW	1 day	Off	2	6	3	2	13	4	23	7	30
Field day	Nutrient management in onion	1	F/FW	1 day	Off	2	6	3	2	13	4	23	7	30

# $\textbf{5.} \quad \textbf{a) Seed and planting material production by utilization of instructional farm (Crops / Enterprises)}$

Name of the	Variety /	Period	Area	Area Details of Production											
Crop / Enterprise	Туре	From To	(ha.)	Type of Produce	Expected Production (quintals)	Cost of inputs (Rs.)	Expected Gross income (Rs.)	Expected Net Income (Rs.)							
Paddy	Pooja	July to Dec	5	Foundation	220	500000	7,15,000	2,15,000							
Paddy	SwarnaShreya	July to Dec	2	Foundation	90	160000	2,92,500	1,32,500							
Vegetable	Tomato, Brinjal, Cauliflower, cabbage, Brocoli, Chilli	Oct to Feb	-	Seedlings	100000 nos.	60000	100000	40000							
Onion	Line 883	July to Aug	-	Seedlings	150000 nos.	2000	10000	8000							

Poultry	Aseel/Kavery/LIT	Aug	to	-	Chicks	2000 nos.	130000	210000	80000
	brooded chicks	Marck							
Vermicompost	Vermicompost	July	to	-	Vermicompost	20q	12000	40000	30000
		March				_			
Vermin	Eiseniafetida	July	to	-	Vermin	15 kg		7500	7500
		March							

## 6. Extension Activities

Sl. No.	A -41-141 - 1/ C-141-141	No. of	Total ( Approx)		
	Activities/ Sub-activities	activity	Male	Female	Total
1.	Field Day	12			360
2.	Kisan Mela	2			400
3.	Kisan Ghosthi	4			100
4.	Exhibition	4			1000
5.	Film Show	5			200
6.	Method Demonstrations	10			100
7.	Farmers Seminar	2			100
8.	Workshop	1			50
9.	Group meetings	12			300
10.	Lectures delivered as resource persons	20			500
11.	Advisory Services	48			1000
12.	Scientific visit to farmers field	65			1600
13.	Farmers visit to KVK				
14.	Diagnostic visits	48			700
15.	Exposure visits	5			100
16.	Ex-trainees Sammelan	4			80
17.	Soil health Camp	3			120
18.	Animal Health Camp	4			140
19.	Agri mobile clinic	2			40
20.	Soil test campaigns	3			120
21.	Farm Science Club Conveners meet	1			25
22.	Self Help Group Conveners meetings	10			200
23.	Mahila Mandals Conveners meetings	1			30
24.	Celebration of important days (World				2500
	food day, Women in agril day, World	5			
	soil day,Kisan diwas etc)				
25.	Sankalp Se Siddhi	1			50
26.	Swatchta Hi Sewa	10			200
	Mahila Kisan Diwas	1			30
28.	Any Other (Specify)				
	Total	273			10045

# 7. Revolving Fund (in Rs.)

Opening balance of	Amount proposed to be	Expected
2023-24 (As on 01.04.2023)	invested during 2023-24	Return
923314.9	900000	600000

# $\textbf{8.} \ \ \textbf{Expected fund from other sources and its proposed utilization}$

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

## 9. On-farm trials to be conducted\* (8 nos.)

### OFT-1

Season	Kharif 2023
Title of the OFT	Assessment of nano urea liquid fertilizer in transplanted rice
Problem Diagnosed	Low yield due to Improper use of urea fertilizer
Important cause	No soil testing
<b>Production System</b>	Rice-Rice
Micro farming	Irrigated medium land
situation	
Technology for testing	TO1:50 % recommended N + 100 % P and K as basal application and two sprays Nano
	urea @ 0.2 % tillering and PI stage
	TO2: 75 % recommended N + 100 % P and K as basal application and two sprays Nano
	urea @ 0.2 % at tillering and PI stage
<b>Existing practice</b>	100 % N (25 % basal + 50 % tillering stage + 25 % PI stage) as conventional urea
	application + 100 % P and K
Hypothesis	TO1:To know the effect of Nano urea by applying with 50 % recommended N with
	100 % P,K which will increase the nitrogen use efficiency and extent to saving 50 %
	nitrogen
	TO2:To know the effect of Nano urea by increasing the recommended N i.e 75 % with
	100 % P,K
Objectives	Proper nitrogen management
Treatment	TO1:50 % recommended N + 100 % P and K as basal application and two sprays Nano
	urea @ 0.2 % tillering and PI stage
	TO2: 75 % recommended N + 100 % P and K as basal application and two sprays Nano
	urea @ 0.2 % at tillering and PI stage
Critical Inputs	Borax and Molybdenum
Unit Size	1 ha
No. of Replication	7
Unit cost	500
Total Cost	3500
Monitoring Indicator	Initial and post harvest soil test value, plant height in different stages, no of
	tillers/plant, yield, economics, B: C ratio
Source of Technology	Annual report AAU, 2019-20

### OFT-2-Code-23OAG01(R)

Season	Rabi 2023-24
Title of the OFT	Assessment of Decomposer for in-situ residue management in Rice
Problem Diagnosed	Low yield due to nutrient loss from soil
Important cause	Lack of availability of suitable technology for rice residue management
<b>Production System</b>	Rice based
Micro farming situation	Rainfed Medium land & upland
Technology for testing	TO <sub>1</sub> : NRRI decomposer@10 capsules in 100 L of cow dung slurry + 2 % jaggery solution + 0.5% urea solution kept for 7 days and sprayed for 1 ha (NRRI, 2021)  TO <sub>2</sub> : PUSA decomposer @ 4 capsules in 25L of water with 2 % jaggery solution and pulse powder for 1 ha (IARI,2020)
<b>Existing practice</b>	Harvesting of rice in combine harvester and burning of residue in the field
Hypothesis	Decomposer can hasten the decomposition of rice strawmore quickly than natural process and also adding more organic matter in to the soil.
Objectives	To find out proper insitu decomposer of rice residue.
Treatment	TO1: Use of NRRI decomposer TO2: Use of PUSA decomposer
Critical Inputs	NRRI decomposer @ 10 capsules/ha and PUSA decomposer@ 4 capsules/ha
Unit Size	1ha
No. of Replication	10
Unit cost	Rs.1000
Total Cost	Rs.10000
Monitoring Indicator	Decomposition period, soil organic carbon before and after, ease of cultivation of next crop.
Source of Technology	NRRI,2021 and ICAR- IARI, 2020

## OFT- 3- Code-23OAG03(K)

Season	Kharif 2023-24
Title of the OFT	Assessment of Aromatic rice varieties for higher profitability
Problem Diagnosed	Low yield due to existing variety.
Important cause	Non-availability of Aromatic rice
<b>Production System</b>	Rice-Rice cropping system
Micro farming situation	RainfedLow land
<b>Technology for testing</b>	TO <sub>1</sub> : Rice variety Kalikati@ 5 kg/ha (OUAT,2020)
	TO <sub>2</sub> : Rice variety Gangabali@ 5 kg/ha (OUAT,2020)
Existing practice	Cultivation of local aromatic rice varieties like kalajeera
Hypothesis	Fulfilling the demand of Aromatic rice.
	The aroma and productivity of boththe varieties "Kalikati" and "Gangabahali" should
	be better.
Objectives	To find out suitable aromatic rice variety for Balangir district.
Treatment	TO1: Rice variety "Kalikati"
	TO2: Rice variety "Gangabahali"
Critical Inputs	Varity Kalikati"@ 5 kg/ha &"Gangabahali" @ 5 kg/ha
Unit Size	0.2ha
No. of Replication	7
Unit cost	2000
Total Cost	14000
Monitoring Indicator	Organoleptic test, EBT/m <sup>2</sup> , No of filled grains/panicle, test weight, yield & economics
Source of Technology	Source: OUAT, 2020)

### **OFT-4- Code-23OHO04 (R)**

Season	Rabi 2023-24
Title of the OFT	Assessment of disease resistance tomato varieties
Problem Diagnosed	Low yield due to high pest incidence
Important cause	High pest decreases the yield
<b>Production System</b>	Rice-Vegetable
®Micro farming situation	RainfedMedium and up land
Technology for testing	TO1: Var. ArkaAbhed
	TO2: Var. ArkaSamrat
Existing practice	Var. Sakshyam
Hypothesis	To1- Multiple disease resistant (Lear curl, Bacterial wilt, early blight and late blight)
	To2- Triple disease resistant var (Leaf curl, early blight and bacterial wilt)
Objectives	To find out suitable variety for Balangir district.
Treatment	TO1: Var. ArkaAbhed
	TO2: Var. ArkaSamrat
Critical Inputs	Seeds of different varieties
Unit Size	0.1 ha
No. of Replication	7
Unit cost	2000
Total Cost	14000
Monitoring Indicator	Yield, fruit/plat and pest incidence
Source of Technology	IIHR,2018

### **OFT-5- Code-23OHO23(S)**

Season	Summer 2023-24
Title of the OFT	Assessment of use of plant growth regulators to check flower and fruit drop in mango
Problem Diagnosed	Low yield due to flower and fruit drop
Important cause	Flower and fruit drop leads to lower production
<b>Production System</b>	Orchard
Micro farming situation	Upland
Technology for testing	TO1: Application of NAA 20PPM at peas size and marble size of fruits  TO2: foliar application of triacontanol @ 3ppm at panicle initiation, fruit stage and marble stage of fruit, godrejvipul booster can be used as a source of Tricontanol which contains 1000ppm of Tricontanol.
<b>Existing practice</b>	Spraying of planofix 4ml/16L at flowering time and at peas size of fruits
Hypothesis	To1- NAA decreases flower drop To2- Tricontanol decreases fruit dropping at initial stage
Objectives	To decrease flower and fruit drop in mango
Treatment	TO1: NAA @ 20 PPM TO2: Triacontanol @ 3ppm
Critical Inputs	NAA and Triacontanol
Unit Size	0.125 ha
No. of Replication	7
Unit cost	2000
Total Cost	14000
Monitoring Indicator	Fruit Weight Fruit size ,yield
Source of Technology	OUAT 2017-18 and CHES, 2021

### OFT-6

Season	Throughout the year 2023-24 (Rabi)
Title of the OFT	Assessment of different feed regime on milk production in dairy cows
Problem Diagnosed	High grain cost leading to high cost of production and otherwise low milk production
	due to no grain feeding
Important cause	High commercial grain cost
<b>Production System</b>	Dairy
Micro farming	Homestead and grazing
situation	
Technology for testing	TO-1: Grazing + Straw @ 6-8 kg/day + Local available oil cake @ 100g/day
	TO2: Grazing + Straw @ 6-8 kg/day + Local available pulse residue (Gandhiri) @
	250g/day + Maize @ 250g/day
Existing practice	Grazing, heavy straw feeding and occasional concentrate feeding
Hypothesis	Feeding with locally available oil cake
	Feeding with locally available pulse residue and Maize
Objectives	Testing different feed regimes for dairy cow as an alternative to commercial grain to
	decrease cost of production of milk
Treatment	TO 1: Oil cake are good source of protein
	TO 2 : Pulse residues are source of protein and maize is source of carbohydrate
Critical Inputs	Oil cake, Gandhiri, Maize
Unit Size	1
No. of Replication	10
Unit cost	1500
Total Cost	15000
<b>Monitoring Indicator</b>	Milk yield/day, Lactation length, Health status
Source of Technology	Annual Report ICAR-ATARI, Kolkata, 2014

### OFT-7- Code-23OAS01

Season	Throughout the year 2023-24 (Kharif)
Title of the OFT	Assessment of two different ethno-veterinary formulations for treatment of lumpy skin disease in cattle.
<b>Problem Diagnosed</b>	Incidence of Lumpy Skin Disease leading to morbidity and lower milk production
Important cause	Viral infection delayed cure leading to hampered milk production
<b>Production System</b>	Dairy
Micro farming situation	Homestead and grazing
Technology for testing	Herbal low cost treatment for faster relieve from the affection
<b>Existing practice</b>	No supportive treatment. Medicine upon exacerbation of the situation
Hypothesis	Low cost of herbal treatment prompts the livestock owners to opt for the strategies.  Timely treatment lead to quick relieve from the affection
Objectives	To relieve the livestock from the affection to restore the milk production
Treatment	TO <sub>1</sub> :Prepare a paste by mixing betel leaves 10 nos., black pepper- 10 gm., salt-10 gm Mix this paste with jaggery. Day-1: Feed this one dose to infected animal every 3 hr interval. Day-2: Feed three doses daily from second day onwards for 2 weeks TO <sub>2</sub> : Ingredients: Garlic- 2 pearls, coriander-10 g, Cumin-10 gm, Tulsi-1 handful, Dry cinnamon leaves- 10 g, Black pepper-10 g, Betel leaves- 5 nos, Shallots- 2 bulbs, Turmeric powder- 10 g, Chirata leaf powder-30 g, Sweet basil-1 handful, Neem leaves-1 handful, Aeglemarmalos(Bel) leaves-1 handful, Jaggery-100 g.  Mix all the ingredients. Day-1: Feed this one dose to infected animal every 3 hr interval. Day-2: Feed two doses daily in the morning and evening from second day till conditions resolve
Critical Inputs	Betel leaf, Black pepper, salt, Jaggery Garlic, Coriander, Cumin, Tulsi, Dry cumin leaf, Shallot, Turmeric powder, chirata leaf, sweet basil, neem leaf, bel leaf
Unit Size	10
No. of Replication	10
Unit cost	1000
Total Cost	10000
Monitoring Indicator	Time of recovery, Milk production status
Source of Technology	NDDB, 2022

### OFT-8-Code-23OEE01

Season	Through out the year 2023-24
Title of the OFT	Assessment of the performance of FPOs with varied levels of task and commodity to enhance net return of the farmer
Problem Diagnosed	Unorganised farmers fetching low price due to distress sale of farm produce
Important cause	Lack of knowledge on adopting the option of task and commodity
<b>Production System</b>	Cereal and Vegetable based
Micro farming situation	Vegetable based (Irrigated) Rice-pulse based (Rainfed)
Existing practice	Farmers marketing their produce through intermediaries
Hypothesis	Suitable option of different combination of task and commodity will increase the income of farmers
Objectives	To identify the level of task and commodity to enhance the net return of the farmers
Treatment	FP:Farmers marketing their produce through intermediaries TO <sub>1</sub> : Farmers dealing with a single commodity through collective marketing with a single/number of agencies Source: FPO NABARD 1019-20 TO <sub>2</sub> : Farmers dealing with multi-components like pulse/vegetables/enterprises with a single task like marketing of produce Source: FPO NABARD 1019-20 TO <sub>3</sub> : Farmers dealing with multi-components like pulse/vegetables/enterprises with multi-tasks like sorting, grading, packing and marketing Source: FPO NABARD 1019-20
Critical Inputs	Banner, Leaflets
Unit Size	
No. of Replication	3
Unit cost	3000
Total Cost	9000
Observation parameters	Farmer's interest to become a member, Easy to sell, Business planning and market linkage with various trading organizations, national and multinational companies, Share capital contributed, Management pattern, Annual turnover
Source of Technology	OUAT,Bhubaneswar

### OFT-9-Code-23OEE02

Season	Through out the year 2023-24					
Title of the OFT	Assessment of effectiveness of different extension methods to access information on rice production					
Problem Diagnosed	Poor accessability to accurate & timely information on technical knowledge/advisory in rice production					
Important cause	Lack of knowledge on different apps on production or management packages					
<b>Production System</b>	Rice and Vegetable based					
Micro farming situation	Rainfed and irrigated					
Technology for testing	Timely Availability / delivery of technology, suitability of technology, ease in handling the extension method, retention and retrieval of information					
Existing practice	Farmers getting information from peer group, input dealers, extension functionaries, mass media and KMA					
Hypothesis	The clarity on production technology will be increased through effective media use					
Objectives	To increase knowledge on production technology through effective media					
Treatment	<b>FP:</b> Farmers getting information from peer group, input dealers, extension functionaries, mass media and KMA					
	TO <sub>1</sub> : FP + Short Video Lecture+ Focus Group discussion					
	TO <sub>2</sub> : FP + Using of "rice Xpert" App.					
Critical Inputs	Short video production					
Unit Size	2					
No. of Replication	5					
Unit cost	1500					
Total Cost	15000					
Observation	Timely Availability / delivery of technology, suitability of technology, ease in					
parameters	handling the extension method, retention and retrieval of information					
Source of Technology	OUAT,Bhubaneswar					

## **OFT 10- Code-23OAE01 (K)**

Season	Kharif 2023				
Title of the OFT	Assessment of different Wet Land Power Weeders in Paddy				
Problem Diagnosed	Labour intensive, Drudgery prone and time consuming operation in manual weeding				
Important cause	Unavailability of labour				
<b>Production System</b>	Rice based				
Micro farming situation	Rainfed medium land				
Technology for testing	TO1: MandwaWeeder				
	TO2: Wet Land Power Weeder				
Existing practice	Manual				
Hypothesis	Mechanical weeding will be cost effective				
Objectives	To reduce the cost of weeding				
Treatment	FP: Manual wedding				
	TO <sub>1</sub> : MandwaWeeder				
	TO <sub>2</sub> : Wet Land Power Weeder				
Critical Inputs	Mandawaweeder, wet land paddy weeder				
Unit Size	1 ha				
No. of Replication	7				
Unit cost	5000				
Total Cost	35000				
Observation parameters	Field capacity (ha/h), Weeding Index(%), Labour utilization (man days/ha), Plant damage(%)				
Source of Technology	AICRP on ESA, CAET, OUAT, 2011 & 2013				

## **OFT – 11- Code- 23OAE02 (R)**

Season	Rabi, 2023-24					
Title of the OFT	Assessment on different maize dehusker-cum-shellers					
Problem Diagnosed	Labour intensive, Drudgery prone and time consuming operation					
Important cause	Labour scarcity					
<b>Production System</b>	Rice-Maize					
Micro farming	Irrigated medium land					
situation						
Technology for testing	TO1 : hand operated maize sheller					
	TO2 : electric maize dehusker cum sheller					
Existing practice	Manual					
Hypothesis	Use of mechanical shellers will reduce labour cost					
Objectives	To reduce cost of shelling					
Treatment	TO1 : hand operated maize sheller					
	TO2 : electric maize dehusker cum sheller					
Critical Inputs	Hand operated maize sheller, electric maize dehusker cum sheller					
Unit Size	-					
No. of Replication	7					
Unit cost	t 3000					
Total Cost	21000					
Observation	Capacity(kg/h), Shelling efficiency(%), Breakage(%), Cost of shelling(Rs./kg), Labour					
parameters	requirement (man-days/ha)					
Source of Technology	AICRP ON FIM CAET, OUAT, 2018-19					

# Soil and Water testing

Details	No. of Samples	No. of Farmers									No. of Villages	No. of SHC to be distributed
	Samples	SC		ST		Other		Total				20 0.2502.22 0.000
		M	F	M	F	M	F	M	F	T		
Soil Samples	1000	200		100		4700		5000		5000	25	5000
Water Samples	-	-	-	-	-	-	-	-	-	-	-	-
Others	-	-	-	-	-	-	-	-	-	-	-	-
Total	1000	200		100		4700		5000		5000	25	5000

## Funds requirement and expenditure

Heads	Expenditure (last year) up to 31.03.2023	Expected fund requirement 2023-24
TA	86681	100000
Office Expenses/ POL etc.	240000	300000
Training (FW/RY/IS)	180000	250000
FLD	90000	150000
OFT	39458	50000
SCSP Contingency	1873000	1500000
HRD	4100	10000
NR( Books)	10000	10000
NR	170000	200000
Swachata activities	16950	20000
CFLD (Oil seed)	180000	180000
CFLD (Pulses)	88800	270000
NICRA	90900	1300000
Kisanbhagidariprathamikatahamari	100000	100000
GaribKalyanSammelan	212328	200000
Agristart up conclave	14238	-
Training on Pump technician	30000	-
* Additional reqt. At New adm. Building		
Total	4236455	4640000