Annual Action Plan Format (2022-23) [For New KVKs]

NATIONAL INNOVATIONS IN CLIMATE RESILIENT AGRICULTURE - TECHNOLOGY DEMONSTRATION COMPONENT

A. Basic information

S.No.	Item	Detail
1.1	Zone	Zone V
1.2	Name of KVK (district)	Bhadrak
1.3	Name of Tehsil	Dhamnagar
1.4	Name of Village	Fatepur
1.5	Climatic vulnerability	Flood

C. Predominant farming systems of the village and suitable low cost resilient practices for each of the farming situations

S No	Farming situation	Predominant crops grown	Extent of cultivated area in the village	% of the total cultivated area in the village	*Low cost resilient practices that can be scaled up	Proposed area to be covered during 2021-22
1	Rainfed- medium land- Animal	Rice	171ha	85	Application of biofertilizer, azolla in rice	2acres
					IPM practices in rice for stem borer, BPH, leaf folder	5 acres
		Sugarcane	12 ha	30	Demonstration on value addition and packaging of jaggery for higher income	5 families
		Green gram	20 ha		Zero tillage practices in green gram	5 acres.
					IPM practices for YMV	5 acres
					Hermetic storage bag for safe storage of grain/seed	20 nos
		Mushroom	100 bed		Income generating activity	20 families
		Fishery	-		Fish Production in community tank	2nos
					Round the year yearling production	3nos
					Lining of pond bottom with silpaulin on seasonal fund	2nos
					Demonstration on commercial floating pellet feed for fish production	2nos
					Preparation of farm made feed.	3nos
		Poultry	100 nos		Backyard poultry Improved shelters for poultry	20 families

2	Rainfed – lowland-animal	Rice	54 ha	27	Drill seeded direct seeded flood tolerant rice cultivation	10 acre
		Black gram	40	13	Hermetic storage bag for safe storage of grain/seed	30nos
		Poultry	100 nos		Improved bird for backyard poultry	20 families
					Improved shelters for poultry	
		Mushroom	100 beds		Income generating activity	20 families
		Fishery	-		Fish Production in community tank	2nos
					Commercial floating pellet feed for fish production	2nos
					Lining of pond bottom with sipaulin on seasonal pond	2nos
		Vegetables	21	6	Staking management in cucurbits.	1 acre
			21	6	Organic mulching in vegetables	5 acre
			21	6	Community nursery	1 nos
					Planting of low input and high value crops in unutilized pond dykes	1 acre
		Sweet corn/baby corn	-		Crop diversification to sweet corn and baby corn	2.5 acre.
		Fishery	-		Fish production in community tank	
					Round the year yearling production	3 nos
		Poultry	100nos		Improved bird for backyard poultry.	

NICRA Activity plan-2022-23

Farming System Typologies	Module	Climatic constraint to address	Demonstrations/Activity	No.of participating farmers
Rainfed- medium Land- animal	NRM activity	Low yield of crops due to inadequate water sources during frequent drought	New pond creation	5
	Resource conservation technology	Low yield in rice due to improper nutrient management	Azolla in rice.	5
			Zero Tillage in green gram	5
		Low yield due to weed growth and moisture loss.	Organic mulching in vegetables	5

	Crop production	Frequent flood affecting kharif rice cultivation.	Drill seeded direct seeded flood tolerant rice cultivation. Variety-Swarna sub 1,CR 1009 sub 1	17
		Submergence of vegetable crop due to flood.	Crop diversification to other crop (sweet corn or Baby corn)	40
		Stem borer, leaf folder and BPH infestation in paddy	IPM practices in rice.	10
		YMV attack in green gram	IPM practices in green gram.	10
	Income generating activity	Low Income generating opportunity from Homestead	Income generating activity- Mushroom production	30
	Livestock & fishery	• Insignificant income from community pond.	Fish Production in community tank.	2
		• Under utilisation of community pond.	Round the yearling production	1
		• Low profit due to high cost of	Preparation of farm made Feed	3
		commercial feed.	Lining of pond bottom with silpaulin on seasonal fund.	1
			Demonstration on commercial floating pellet feed for fish production.	3
		Slow growth and low productivity of animals	Vaccination camp against FMD Cattle & PPR against goat	
		Slow growth of poultry birds	Improved bird for backyard poultry.	8
		Slow growth of poultry birds	Improved poultry shed	15
	Custom hiring centre	High cost involved in purchase and hiring of agricultural equipment.	Equipments: Seed cum fertilizer drill, Mini power tiller, pump set, sugarcane bud chipper, rain gauge	
Rainfed- lowland - animal	Crop production	Frequent flood affecting kharif rice cultivation	Drill seeded direct seeded flood tolerant rice cultivation. Variety-Swarna sub 1, CR 1009 sub 1.	17
		Stem borer, leaf folder and BPH infestation in paddy	IPM practices in rice.	10
		Loss of seed viability and losses due to stored grain pests	Hermetic storage bag for safe storage of grain.	20
	Income generating activity	Low Income generating opportunity from Homestead.	Mushroom production	20
	Livestock &fishery	Insignificant income from community pond	Fish production in community tank	2
			Round the yearling production	2
			Preparation of farm made Feed	6
			Lining of pond bottom with silpaulin on seasonal fund	2
		Slow growth of poultry bird.	Improved bird for backyard poultry Improved poultry shed	15

		Slow growth and low productivity of animals	Vaccination camp against FMD Cattle & PPR against goat. Improved goat breed (sirohi)	
	Custom hiring centre	High cost involved in purchase and hiring of agricultural equipment.	Equipments: Seed cum fertilizer drill, Mini power tiller, pump set, sugarcane bud chipper, rain gauge	
	Resource conservation	Low water use efficiency in vegetable crop	Sprinkler irrigation	15
	technology	Low yield in rice due to improper nutrient management.	Azolla in rice.	5
			Zero Tillage in green gram	5
Irrigated- medium-Land-		Low yield due to weed growth and moisture loss.	Organic mulching in vegetables	5
animal		Indiscriminant use of commercial fertilizer reducing soil health condition.	Application of biofertilizer in rice/crops	10
		Indiscriminant use of commercial fertilizer reducing soil health condition	Vermicompost from biodegradable wastes	10
	Crop production	Inadequate and poor quality of seedlings.	Community nursery	20
		YMV infestation in balck gram and green gram	IPM practices	10
		Loss of seed viability and losses due to stored grain pests .	Hermetic storage bag for safe storage of grain	20
		Low income from pond dyke.	Planting of low input and high value crops in unutilized pond dykes	15
	Livestock &fishery	Slow growth and low productivity of animals	Vaccination camp against FMD Cattle & PPR against goat.	
	Custom hiring centre	High cost involved in purchase and hiring of agricultural equipment.	Equipments: Seed cum fertilizer drill, Mini power tiller, pump set, sugarcane bud chipper, rain gauge	

1. Non-recurring contingencies – Equipment

Procurement of farm machinery/ implements for Custom Hiring Centre (CHC)

S.No.	Item	Unit cost* (Rs)	No. of units	Amount (Rs)
1	Rain gun	15000	1	15000
2	Chaffcutter	15000	1	15000
3	Dal processing mill	70000	1	70000
Total				100000

2. Module 1 – NRM interventions

A) Repair / Renovation of existing water harvesting structures & drainage channels etc.

S. No.	Intervention	Dimensions	No. of beneficiaries	Convergence value, if any (Rs)	Value of farmers share, if any(Rs)	Cost to project (Rs)
1	New Pond		5			
	creation					

B) In situ conservation – Resource Conservation Technologies (RCTs)

Item (specify)	Unit cost	No. of	Cove	erage	Amount (Rs)	Remarks
	Rs/acre	demos	Area (acres)	No. of farmers		
	Α	В	С	D	AxC	
Azolla in paddy	1000/demo	5	1	5	5000	For Insitu moisture conservation
Zero Tillage in green gram	2500	5	5	5	13500	For Insitu moisture conservation
Organic mulching in vegetables	7000	2	2	2	14000	For Weed control and moisture conservation
Vermicompost from biodegradable wastes (7'x4'x3')	10000/tank	1		1	10000	Reduces the of chemical fertilizers and improves soil health.
Total					42500	

3.0 Module II – Crop production interventions

A) Stress tolerant / improved varieties

Intervention	Description		Cost No. of Coverage			Amount	
	Crop	Var(s)	(Rs)/ acre	demos	Area (ac)	No. of farmer	(Rs)
			Α	В	С	D	AxC
Crop diversification (to other crops)	Sweet corn/ Baby corn	Sugar 75	3000	25	2.5	25	8000
Total							8000

B) Improved agronomic practices and other crop interventions

Intervention	Intervention		No. of	Co	verage	Amount	Remarks
			demos	Area	No. of	(Rs)	(Purpose of
				(ac)	farmers		intervention)
		A	В	С	D	A x C	
Water saving	DSR	3100	30	10	30	31000	Low cost of
paddy							cultivation and
cultivation							adaptability to
methods							climatic risk.
	Aerobic						
	SRI						
Community nur	rsery in vegetable	200000	1	0.1	10	20000	Production of
crop.							quality
							seedlings
Critical inputs for Integrated							
crop manageme	ent (specify crop)						

Critical inputs for Integrated Farming systems (specify inputs and crops)(fish cost)	30000	1	2	20	30000	Planting of low input and high value crops in unutilized pond dykes and fish
IPM practices for management of stem borer,BPH and leaf folder in kharif rice	3500	5	10.0	10	17250	production. For crop protection in flood effected area
IPM for YMV management in pulses like green gram,blackgram	2000	5	5.0	5	10000	For crop protection in flood effected area
Harvesting and post harvesting related interventions (Hermetic storage bags)	120/bag	40	40	40	4800	Storage from storage pests
Income generation activities (Mushroom etc)	60/ bed	30	-	30	18000	For income fromhomestead
Staking management in cucurbits	15000	10	0.5	10	7500	Reduce incidence of fruit rot
Total					138800	

C. Livestock / Fisheries units

Α	В	С	D	E	F	G
Enterprise/unit*	Unit cost (Rs)	Convergence share in unit cost, if any** (Rs)	Project share in unit cost (Rs)	No. of units	Cost to Project (D x E) (Rs)	Remarks (purpose of intervention& farmers covered)
Fish production in community tank	8000		8000	3	24,000	Income from allied agriculture activities
Round the year yearling production	5500		5500	3	16500	Income from allied agriculture activities
Lining of pond bottom with silpaulin on seasonal pond	14000		14000	1	14000	Income from allied agriculture activities
Vaccination camp against FMD Cattle & PPR against goat	6000				6000	
Poultry	500		500	30	15000	Income from allied agriculture activities
Poultry shed	8000		8000	1	8000	
Total					76300	

D Feed demonstrations for crop residue management / stress management: silage / feed blocks/ mineral mixture (MM) blocks / feed enrichment

Details of feed demo*	Unit cost of demo (Rs)	No. of demos	Amount (Rs)	Remarks (purpose of intervention& farmers covered)
Demonstration on commercial floating pellet feed for fish production	9500	2	19000	low profit due to use of commercial feed
Demonstration on preparation of farm made feed for fishery	4500	2	9000	low profit due to use of commercial feed
Total			28000	

^{*}Specify fodder & animal type for demos; here indicate cost of demo, if any; cost of establishment of new units to be given in item 2.0 (equipment), if any.

6.0. Capacity Building & Training Programmes

A. Training Courses

Theme	Title of training course	Proposed month	No. of participants	Cost to project (Rs.)
IPM	IPM in Chillifor leaf curl	Nov	30	3052
	virus			
	IPM in Sugarcane for	Sept	30	3052
	early shoot borer &Red			
	rot in sugarcane			
Mushroom	Mushroom production	july	30	3052
	technology			
Fishery	Preparation of farm	June	30	3052
	made feed			
	Preparation oftablesize	Aug	30	3052
	fish			
Horticulture	Cultivation of high value	jan	30	3052
	and low input crops on			
	pond dykes			
Other	Awareness program, soil	March	100	5000
extension	test campaign (soil health			
activities	card & soil testing)			
	Inauguration mela		200	30000
	Publication			10000
Total				63312

B. Exposure Visits

Place of visit	Purpose of visit	Proposed month	No. of participants	Cost to project (Rs.)
OUAT, Bhubaneswar	To aware about technologies for minimizing effect of climatic vulnerability	March	20	20000
Total				20000

7.0 Contractual Manpower (SRFs)

Name with contact numbers	Salary (Rs.)	No. of months	Amount (Rs.)
Bhanumati Dhinda	31000 + HRA	12	390600
Total			

Summary of budget Estimates for 2021-22 (Tentative)

S.N.	Item	Amount (Rs)
1.	Procurement of farm machinery/implements for CHC	1,00,000
2.	Repair/ Renovation of existing water harvesting structures & drainage channels etc.	
3.	In situ conservation – Resource Conservation Technologies (RCTs)	42500
4.	Crop production interventions	8000
5.	Improved agronomic practices and other crop interventions	138800
6.	Year round fodder production strategies (annual/perennial fodder) in the village	-
7.	Feed demonstrations for crop residue management / stress management: silage / feed blocks/mineral mixture blocks / feed enrichment (vaccination to cattle)	28000
8.	Improved housing /shelter for protection against extreme weather	-
9.	Livestock/fisheries units	76300
10.	Establishment of fodder banks (hay)	-
11.	Establishment of seed banks	-
12.	Training courses& capacity building programme	63312
13.	Field days	-
14.	Exposure visits	20000
15.	Up-scaling of successful interventions	-
16.	Contractual manpower (SRFs)	390600
17.	Media products to be developed	-
18.	Any other contingencies (TA etc)	40000
19.	Hiring of vehicle	40000
20.	office	20000
21.	Total	967512

Date:

Signature of PI/PC, NICRA- KVK

Fund sanctioned-9,10,000 Operational -7,70,000 TA-40,000 Equipment-1,00,000