# NICRA Annual Report 2019-20

#### I. Module I: NRM

Table. Performances of demonstration of in-situ moisture conservation technologies

Technology demonstrated	No. of farmers	Area (ha)	Yield (q/ha)	Economics of	demonstration	(Rs/ha)
recunology demonstrated				Gross Cost	Net Return	BCR
Green manuaring (dhanicha) in rice	11	03	37.7	33000	31090	1.94
Brown manuaring in rice						
Summer Ploughing in rice						
Azolla in Paddy						
Zero Tillage in wheat / Maize/ Others crops						
Repair of bund	14	04	39.6	36000	31320	1.87
Horticultural production through land embankment development						
Organic mulching in vegetables						
Mulching in Brinjal	06	0.3	218	95000	123000	2.29
Maize in Ridge & Furrow system	10	03	42.8	29000	30920	2.07
Total	41	10.3				

Mention the variety and Enclosed 2/3 photos

Table. Performances of water harvesting and recycling for supplemental irrigation

Technology demonstrated	No. of	Area	Output		nomics of ration (Rs/ha)	
reemotogy actions a acc	farmers	(ha)/Unit	(q/ha)	Gross Cost	Net Return	BCR
Renovation of pond for fish production and irrigation						
Renovation of canal						
5% Model						
Bora bandh						
Renovation of Well for irrigation						
Bund making leveling in paddy field						
New water harvesting structure						
Raising of land embankment						
Ground water recharge						
Desiltation of defunct water harvesting structures						
Renovation of irrigation channel						
Newly Check dam				_		
Renovation of common pond						
Repairing of checkdam	63	0.2	41.4	32000	38380	2.2
Total	63	0.2	•	•	•	•

Enclosed 2/3 photos

Table. Performance of artificial ground water recharge technologies demonstrated

Technology demonstrated	No. of	Area (ha)	Output (q/ha)	Economics of demonstration (Rs./ha)			
Technology demonstrated	farmers	THE (MA)	Guspus (4 ma)	Gross Cost	Net Return	BCR	
Field bunding for rice							
Water management through bunding of rice							
Ground water recharge through SRI by sub-soiler							
Any intervention not covered in above							
Total							

Enclosed 2/3 Photos

Table. Performance of different water saving irrigation methods

Technology demonstrated	No. of	Area (ha)	Output	Economics of demonstration (Rs./ha)			
	farmers		(q/ha)	Gross Cost	Net Return	BCR	
Irrigation system (micro Irrigation system)							
Application of biofertilizer in Greengram	50	20	6.2	14000	17000	2.2	
Vermi-compost from biodegradable wastes							
Production of crops on farm bund	10	0.4	6.1	17000	13500	1.8	
RBF in crops							
LEWA in crops							
Sprinkler irrigation in crops							
Any intervention not covered in above							
Total	60	20.4					

Mention the variety and Enclosed 2/3 photos

**Table. Performance of other demonstrations** 

Technology demonstrated	No. of Area		Output	Economics of demonstration (Rs./ha)			
reemiology demonstrated	farmers	(ha)	(q/ha)	Gross Cost	Net Return	BCR	
Demo 1							
Demo 2							
Demo 3							
Others if any							
Total							

Enclosed 2/3 photos

Table: Rainwater harvesting structures developed

RWHstructures	No.	Storage capacity (cu.m)	No. of farmers	Protective irrigation potential (ha)	Increase in cropping intensity (%)
Desilting Pond					
New Pond created					
Pond Renovation					
Canal					
Checkdam					
5% model					
Pyne					
Well					
Inlet Channel					
Desiliting drainage channel					
Bora bandh (Temporary check dam)					
Repaired well					
Jalkund					
Small ditches for jute retting					
Landshaping and rain water harvesting structure					
Total					

# Enclosed 2/3 photos

# Module II: Crop Production Table. Performance of different drought tolerant varieties

Technology demonstrated	No. of	Area	Yield(q/ha)		% increas	Economics of demonstration (Rs./ha)			
Crops with varieties	farmers	(ha)	(ha) Demo Loc		e	Gross Cost	Net Return	BCR	
Drought tolerant short duration Rice var. Sahabhagidhan	45	18	26.3	22.6	16.3	24000	14420	1.6	
Drought tolerant medium duration Rice var. Swarna Shreya	05	02	34.8	31.2	12	28000	31160	2.11	
More if any									
Total	50	20			•				

Table. Performance of different salt tolerant paddy varieties

Technology demonstrated (Crops with varieties)	No. of farmers	Area (ha)	Yiel (q/h		% increase		s of demonstra (Rs./ha)		
(Crops with varieties)			Demo	Loca l		Gross Cost	Net Return	BCR	
Crop I									
Crop 2									
Crop 3									
More if any									
Total									

Enclosed 2/3 photos

Table. Performance of different flood tolerant varieties

<i>T</i> . 1. 1			Yie	eld		Feonomics of	demonstration	n (Rs./ha)		
Technology demonstrated	No. of	Area	(q/l	na)	%	Economics of				
(Crops with varieties)	farmers	(ha)	Dem o	Loca l	increase	Gross Cost	Net Return	BCR		
Flood tolerant medium var. Bina-11 in medium land	25	10	32.4	28.2	14.8	28000	27080	1.97		
Crop 2										
Crop 3										
More if any										
Total	25	10								

Mention the variety and Enclosed 2/3 photos

Table. Performance of advancement of planting dates in different crops

Technology	No. of	Area	Yie (q/l	eld ha)	. %	Economics of demonstration		n (Rs./ha)
demonstrated	farmers	(ha)	Dem o	Loca l	increase	Gross Cost	Net Return	BCR
Rice-( Pratikshya) Greengram	12	04	38.6	36.2	6.6	33000	32000	2.0
(IPM 02-14)	12	04	5.8	5.2	11.5	14000	15000	2.0
Crop 2								
Crop 3								
More if any								
Total	12	04						

Table. Performances of water saving technologies

Technology demonstrated	No. of Area			Yield (q/ha)		Economics of demonstration (Rs./ha)			
	farmers	(ha)	Demo	Loca l	increase	Gross Cost	Net Return	BCR	
Water saving technology through SRI									
Aerobic Rice									
Direct seeded brown manured rice									
DSR	15	05	22.3	18.6	20	20000	17910	1.9	
Sowing of rice / wheat / Maize with ZTD machine									
Others if any									
Total	15	05							

Mention the variety and Enclosed 2/3 photos

# Performance of Community nurseries

Technology	No. of	Area	Yic (q/1	eld ha)	%	Economics of demonstration (Rs./ha		
demonstrated	farmers	(ha)	Dem o	Loca l	increase	Gross Cost	Net Return	BCR
Crop I								
Crop 2								
Crop 3								
More if any								
Total								

Mention the variety and Enclosed 2/3 photos

 $Table.\ Performance\ of\ different\ location\ s\ pecific\ intercropping\ systems$ 

Technology demonstrated	No. of farmers	Area (ha)	Yie (q/l	eld ha)	% increase	Economics o (R	f demonstra s./ha)	tion
			Dem o	Loca l		Gross Cost	Net Return	B C R
Maize+ Cowpea intercropping in 2:2 ratio	05	01	38.4 32.6	42.8	66	40000	57880	2. 45
Crop 3 + Crop 4 More if any								
Total	05	01						

Table. Performance of different crop diversification in NICRA villages

Technology	No. of	Area	Yic (q/l	eld ha)	%	Economics of demonstration (Rs./ha)			
demonstrated	farmers	(ha)	Dem o	Loca l	increase	Gross Cost	Net Return	BC R	
medium duration Pigeonpea var.PRG- 176	20	08	10.8	8.3	30.1	30000	24000	1.8	
Maize in Ridge & Furrow system Crop 3	10	03	42.8	39.2	9.1	29000	30920	2.07	
More if any									
Total	30	11							

Mention the variety and Enclosed 2/3 photos

Table. Performance of other demonstration under crop production module

Technology demonstrated			Yield(q/ha)		% increase	Economics (Rs./ha)	of demon	stration
	No. of farmers	Area (ha)	Demo	Local		Gross Cost	Net Return	BCR
YMV tolerant Greengram var. IPM 02-14	50	20	6.2	4.8	29.2	14000	17000	2.2
Short duration Blackgram varPU-31	30	12	5.6	4.2	27.2	16000	17600	2.1
High value cash crop- Sweetcorn-Sugar-75	05	01	Rs 5/cob (40000cobs)	Rs.2/ cob	150	75000	125000	2.67
Heat tolerant Tomato var. Chiranjibi	08	01	256	218	17.4	105000	99800	1.95
Oyster mushroom cultivation for higher income	10	10 units	1.6 kg/bed	1.2kg /bed	33.3	30	34	2.13
Total	103	34/10 units						

Mention the variety and Enclosed 2/3 photos

#### **Module III: Livestocks and Fisheries**

Table. Performance of different fodder demonstration in community lands

Technology demonstrated	No. of	Unit/ Area	Output % increas e			Economics of demonstration (Rs/ha)		
demonstrated	farmers	(ha)	Demo	Local		Gross Cost	Net Return	BCR
Fodder 1	15	05 unit	2920 lt. milk/yr	2628 lt. milk/yr	11.1	45000	42600	1.95
Fodder 2								
Total	15	05 unit						

Table. Performance of improved fodder

Technology demonstrated	No. of farmers	Unit/ Area (ha)	Yield (	q/ha)	% increase	Economics (Rs./ha)	of demon	stration
			Dem o	Loca l		Gross Cost	Net Return	BCR
Fodder 1								
Fodder 2								
Total								

Mention the variety and Enclosed 2/3 photos

Table. Performance of various vaccination camps organized

Technology demonstrated	No. of farmers	Unit/ No./ Area	indicators	Measurable indicators of output* (q/ha)  Demo Local		Economics of demonstration (Rs./ha)		
		(ha)	Demo			Gross Cost	Net Return	BCR
Vaccination camp against FMD Cattle	16	42 nos	949lt. milk/yr	840lt. milk/yr	13	15000	13470	1.9
Vaccination for PPR in goat	04	52 nos	Body wt(90day s) 6.6kg	5.4kg	23	700	1280	2.8
Deworming	30	62nos	912lt. milk/yr	840lt.mi lk/yr	8.5	15000	12300	1.82
Mineral mixture	10	20 nos	1131	985	14.8	16000	17930	2.12
Proper De-worming								
Vaccination camp against other diseases								
Total	60	176 nos.						

Enclosed 2/3 photo

Table. Performance of composite and cat fish in the renovated ponds

Technology demonstrated	No. of farmers	Unit/ No. / Area (ha)	indicators	Measurable indicators of output* (q/ha)		Economics of demonstration (Rs./ha)			
		Tirea (ma)	Demo	Local	increase	Gross Cost	Net Return	BCR	
Composite fish culture by stocking of yearlings of Catla, Rohu and Mrigal	03	1.2	38.4	24.9	19.7	190000	232000	2.2	
Cat Fish 2									
More if any									
Total	03	1.2							

Enclosed 2/3 photo

Table. Performance of livestock demonstration in NICRA adopted villages

Technology demonstrated	No. of farmers	Unit/ No. / Area	indic	surable ators of t* (q/ha)	% increase		es of demonstration (Rs./ha)		
		(ha)	Demo	Local		Gross Cost	Net Return	BCR	
Breed 1									
Breed 2									
If any more									
Total									

Enclosed 2/3 photo

Table. Performance of improved shelters for poultry and dairy animals

Technology demonstrated	No. of farmers	Unit/ No. / Area (ha)	Measurable indicators of output (q/ha)		% increase	Economi	cs of demor	stration (	Rs./ha)
		(па)	Demo	Local		Gross Cost	Gross Return	Net Return	BCR
Cement flooring, Straw thatched roof, with mosquito repellent net for better hygienic for cattle	03	03 unit	1022	912	12	18000	30660	12660	1.7
Shelter 2									
Total	03	03 unit							

Enclosed 2/3 photo

# **Module III: Institutional Intervention**

Table. Details of the various institutional interventions

Interventions	No.of KVKs	Details of	activity		No.	Unit/ No. /Area (ha)
		Name of crops / Commodity groups / Implements	Quantity(q) / Number / Rent / Charges	Technology used in seed / fodder bank & function of groups	of far mer s	
Seed bank	Ganjam-1	Rice-Sahabhagidhan, Swarna Shreya	23q	Rogouing, drying	72	46ha
Fodder bank						
Commodity groups						
Custom hiring centre		Power tiller, sprayer, reaper, diesel pump set, weeder, Thresher cum winnower, MB Plough, seed cum fertilizer drill			88	34ha
Collective marketing						
Climate literacy through a village level weather station						
Total			23q		160	80

#### **Village Climate Risk Management Committee (VCRMC)**

Monthly once VCRMC meeting have been conducted with all members. Various issue like Kharif & Rabi programme, Var., Pesticides, NRM activities & custom hiring centre were discussed & the resolutions have been recorded in the register. Weather advisory & crop advisory were also discussed & its impact has been reviewed by the members.

### **Custom Hiring Centres:**

Detail activities of CHC with fund generation during the year with Photographs of Farm implements and Machinery at NICRA Adopted villages

Name of Implement	Revenue generated(Rs.)	
	200	
M.B. plough	300	
Power sprayer	300	
Diesel Pump set	600	
Power weeder	420	
Sprinkler	400	
Power tiller	6000	
Seed cum fertilizer drill	360	
Multi crop thresher	600	
Reaper	4800	
Thresher cum winnower	840	
Total	Rs. 14,620	

Table. Revenue generated through Custom hiring Centres and VCRMC in KVKs

	Revenue generate	d(Rs.)
Name of KVK	From Custom Hiring Centres (2019-20)	Total under VCRMC
Cooch Behar		
Malda		
South 24 Parganas		
Port Blair		
Ganjam 1	14620	-
Kalahandi		
Kendrapara		
Sonepur		
Jharsuguda		
Total	14620	

**Capacity Building** 

Thematic area	Topic of the training	No. of Courses	No. of beneficiaries		
			Male	Female	Total
Natural Resource Management					
Crop Management					
Nutrient Management					
Integrated Crop Management					
Crop Diversification					
Resource conservation Technology	Vermicomposting, use of Bio-Fertilizer in diff. crop		14	11	25
Pest and disease management	Management of Pest & diseases in Rice		16	09	25
	Management of Pest & diseases in Pulses		18	07	25
Nursery raising	Nursery raising, Grafting techniques of veg. & fruits		15	10	25
Employment Generation	Income generation activities		0	25	25
Nutrition garden					
Repair & Maintenance of farm machinery & Implements					
Integrated Farming System					
Livestock and Fishery Management	Application of Floating feed in Pisciculture		17	08	25
Fodder and feed management					
Lac cultivation					
Farm implements and machineries					
Value addition					
Employment generation					
Others if any					

# **Extension Activities**

Name of the activity	Number of Programmes	No. of beneficiaries			
		Male	Female	Total	
Agro advisory Services	13	25	09	34	
Awareness	02	41	23	64	
Diagnostic visit	14	74	32	106	
Exposure visits	01	20		20	
Field Day	03	126	24	150	
Group Discussion	14	88	36	124	
Method demonstrations	04	48	16	64	
KMAS Services	48	84	28	112	
Farmers day					
SHG	04		46	46	
Campaign					
Popular extension literature					
Animal Health Camp	01	19	7	26	
World earth day					
Krishak Chaupal					
Kishan Gosthi					
Woman health and nutrition					
Technology week					
NICRA Workshop at ATARI, Kolkata					
Scientist visit to field	32	194	84	278	
NICRA workshop at CRIDA,Hyderabad	01				
Total	137	719	305	1024	

Enclosed 2/3 photographs

Table- SHC card distribution at NICRA adopted villages

KVK	Year	No of soil samples collected	No. of samples analysed	SHC is sued	No of Farmers involved
Ganjam-1	2019-20	24	24	108	108

**Enclosed 2/3 Photographs** 

Table: Convergence of Ongoing Development Programmes/Schemes in NICRA implementing KVKs

KVK	Development Scheme /Programme	Nature of work	Amount (Rs.)
Ganjam-1	AICRP on Goat, OUAT	Goat improvement	90000
	Woman empowerment by CIWA, Bhubaneswar	Training, exposure visit, Demonstration	90000

**Enclosed 2/3 Photographs** 

Dignitaries visited NICRA Villages during 2019-20

Name of KVK	Name of VIPs/Experts	Date of visit
Ganjam-1	Dr. B. N. Sadangi, Scientist CIWA, Bhubanes war	09.08.2019
	Dr.Dr.K.S. Das, Principal Scientist, ATARI, Kolkata	23.11.2019
	Prof. P.K Roul, DEE, OUAT, BBSR	18.12.2019

Enclosed 2/3 Photographs

# **Expenditure Statement of NICRA-TDC Budget during 2019-20**

KVK	FINAL RE				Expenditure	Closing Balance 01.04.20
	Contingencies	TA	NRC	Total		
Coochbehar						
Malda						
South 24 Parganas						
Port Blair						
Ganjam 1	750000	40000	41000	831000	831000	Nil
Jharsuguda						
Kalahandi						
Kendrapara						
Sonepur	_					_

Sd/-Senior Scientist & Head KVK, Ganjam-1