



Annual Progress Report (NICRA 2022-23)

KrishiVigyan Kendra, Kendrapara

ICAR-ATARI, Kolkata, Zone-V

Odisha University of Agriculture and Technology, Bhubaneswar

NICRA Annual Report 2022-23

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)		
				Gross Cost	Net Return	BCR
Green manuring (dhanicha) in rice	10	2	14 t/ ha biomass			
Brown manuring in rice						
Summer Ploughing in rice	20	8				
Azolla in Paddy	10	1				
Zero Tillage in wheat / Maize/ Others crops						
Repair of bund						
Horticultural production through land embankment development	10	0.8				
Organic mulching in vegetables						
Mulching (in Brinjal)	10	1	325 qt.	140000	180000	2.28
Any intervention not covered in above						
Total						



Table. Performances of water harvesting and recycling for supplemental irrigation

Technology demonstrated	No. of farmers	Area (ha)/ Unit	Output (q/ha)	Economics of demonstration (Rs/ha)		
				Gross Cost	Net Return	BCR
Renovation of pond for fish production and irrigation	25	08	39.5	143000	228000	2.59
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						
Any intervention not covered in above						
Total						

Enclosed 2/3 photos

Table. Performance of artificial ground water recharge technologies demonstrated

Technology demonstrated	No. of farmers	Area (ha)	Output (q/ha)	Economics of demonstration (Rs./ha)		
				Gross Cost	Net Return	BCR
Field bunding for rice	22	10	44.3	51500	32372	1.71
Water management through bunding of rice						
Ground water recharge through SRI by sub-soiler						
Any intervention not covered in above						
Total						



Table. Performance of different water saving irrigation methods

Technology demonstrated	No. of farmers	Area (ha)	Output (q/ha)	Economics of demonstration (Rs./ha)		
				Gross Cost	Net Return	BCR
Irrigation system (micro Irrigation system)						
Application of biofertilizer in rice/crops						
Vermi-compost from biodegradable wastes	20	20 unit	25 / unit	4000/ unit	12200 /unit	4.05
Production of crops on farm bund						

RBF in crops						
LEWA in crops						
Sprinkler irrigation in crops						
Any intervention not covered in above						
Total						



Table. Performance of other demonstrations

Technology demonstrated	No. of farmers	Area (ha)	Output (q/ha)	Economics of demonstration (Rs./ha)		
				Gross Cost	Net Return	BCR
Ridge and furrow method of cowpea cultivation	10	01	84	81200	142000	2.74
Demo 2						
Demo 3						
Others if any						
Total						

Enclosed 2/3 photos

Table: Rainwater harvesting structures developed

RWH structures	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					
Desilting 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 Crops with varieties	No. of farmers	Area (ha)	Yield(q/ha)		% increase	Economics of demonstration (Rs./ha)		
			Demo	Local		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 salt tolerant paddy varieties

Technology demonstrated (Crops with varieties)	No. of farmers	Area (ha)	Yield (q/ha)		% increase	Economics of demonstration (Rs./ha)		
			Demo	Local		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

Technology demonstrated (Crops with varieties)	No. of farmers	Area (ha)	Yield (q/ha)		% increase	Economics of demonstration (Rs./ha)		
			Demo	Local		Gross Cost	Net Return	BCR
Cultivation of flood tolerant rice variety Swarna Sub-1	30	15	44.2	32.1	37.6	47000	32560	1.69
Cultivation of flood tolerant rice variety CR 1009 Sub-1	25	10	45.1	34.8	29.6	47000	34180	1.72
Total	55	25						

Mention the variety and Enclosed 2/3 photos

Table. Performance of advancement of planting dates in different crops

Technology demonstrated	No. of farmers	Area (ha)	Yield (q/ha)		% increase	Economics of demonstration (Rs./ha)		
			Demo	Local		Gross Cost	Net Return	BCR
Crop 1								
Crop 2								
Crop 3								
More if any								
Total								

Mention the variety and Enclosed 2/3 photos

Table. Performances of water saving technologies

Technology demonstrated	No. of farmers	Area (ha)	Yield (q/ha)		% increase	Economics of demonstration (Rs./ha)		
			Demo	Local		Gross Cost	Net Return	BCR
Water saving technology through SRI								
Aerobic Rice								
Direct seeded brown manured rice								
DSR								
Sowing of rice / wheat / Maize with ZTD machine								
Others if any								
Total								

Mention the variety and Enclosed 2/3 photos

Performance of Community nurseries

Technology demonstrated	No. of farmers	Area (ha)	Yield (q/ha)		% increase	Economics of demonstration (Rs./ha)		
			Demo	Local		Gross Cost	Net Return	BCR
Low cost poly tunnel for seedling raising	15	0.01	12000 nos from 0.01 ha	4000 nos from 0.01 ha	66.6	10000	15000	2.5
Crop 2								
Crop 3								
More if any								
Total								



Table. Performance of different location specific intercropping systems

Technology demonstrated	No. of farmers	Area (ha)	Yield (q/ha)		% increase	Economics of demonstration (Rs./ha)		
			Demo	Local		Gross Cost	Net Return	BCR
Rice + Black gram Paira cropping	40	20	62.3	39.4	38.5	66000	46140	1.69
Maize + Black gram intercropping (2:2) for moisture conservation	6	1	68.9	-	-	69600	57355	1.82
More if any								
Total								



Table. Performance of different crop diversification in NICRA villages

Technology demonstrated	No. of farmers	Area (ha)	Yield (q/ha)		% increase	Economics of demonstration (Rs./ha)		
			Demo	Local		Gross Cost	Net Return	BCR
Cultivation of Pumpkin var. Arjun	10	1	310	285	8.06	65200	120800	2.85
Cultivation of Sweet corn F1 variety - Sugar-75	10	1	110	-	-	58200	91800	2.6

Cultivation of greengram var IPM-2-14 in post flood situation	20	8	5.2	3.9	33.3	18000	13200	1.75
Cultivation of Sunflower as crop diversification	10	0.4	18	-	-	26500	32287	2.21
More if any								
Total	50	10.4						



Table. Performance of other demonstration under crop production module

Technology demonstrated	No. of farmers	Area (ha)	Yield(q/ha)		% increase	Economics of demonstration (Rs./ha)		
			Demo	Local		Gross Cost	Net Return	BCR
Cultivation of Heat tolerant and ToLCV & BW resistant tomato Variety Arka ananya	10	2	513	425	20.7	76200	132400	2.73
Cultivation of Okra on Pond dyke	5	0.1	126	-	-	62800	72000	2.14
Cultivation of Cucurbits in grow bag	10	0.4	178	-	-	90100	94400	1.74
Total	25	2.5						



Module III : Livestocks and Fisheries

Table. Performance of different fodder demonstration in community lands

Technology demonstrated	No. of farmers	Unit/Area (ha)	Output (q/ha)		% increase	Economics of demonstration (Rs./ha)		
			Demo	Local		Gross Cost	Net Return	BCR
Fodder 1								
Fodder 2								
Total								

Mention the variety and Enclosed 2/3 photos

Table. Performance of improved fodder

Technology demonstrated	No. of farmers	Unit/Area (ha)	Yield (q/ha)		% increase	Economics of demonstration (Rs./ha)		
			Demo	Local		Gross Cost	Net Return	BCR
Hybrid Napier CO5	06	0.4	140	-	-	38000	32000	1.84
Fodder 2								
Total								



Table. Performance of various vaccination camps organized

Technology demonstrated	No. of farmers	Unit/No./Area (ha)	Measurable indicators of output* (q/ha)		% increase	Economics of demonstration (Rs./ha)		
			Demo	Local		Gross Cost	Net Return	BCR
Vaccination camp against FMD Cattle & PPR against goat								
Vaccination for PPR in goat and Ranikhet in Poultry.								
Deworming	28	1 no.	-	-	-	-	-	-
Mineral mixture								
Proper De-worming								

Vaccination camp against other diseases	40	1 no	-	-	-	-	-	-
Total								

Enclosed 2/3 photo

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

Technology demonstrated	No. of farmers	Unit/ No. / Area (ha)	Measurable indicators of output* (q/ha)		% increase	Economics of demonstration (Rs./ha)		
			Demo	Local		Gross Cost	Net Return	BCR
Cat Fish 1								
Cat Fish 2								
More if any								
Total								

Enclosed 2/3 photo

Table. Performance of livestock demonstration in NICRA adopted villages

Technology demonstrated	No. of farmers	Unit/ No. / Area (ha)	Measurable indicators of output* (q/ha)		% increase	Economics of demonstration (Rs./ha)		
			Demo	Local		Gross Cost	Net Return	BCR
Stress tolerant duck breed Khaki Campbell	15	300 no.	1.9 kg in 8 month	0.8 kg in 8 month	137.5	100	242	3.42
Stress tolerant poultry breed Kadaknath	12	240 no.	1.1 kg in 8 month	0.8 kg in 8 month	37.5	100	285	3.85
Breed up gradation through Sirohi Buck	01	01	-	-	-	-	-	-
Total	28	541						



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	Economics of demonstration (Rs./ha)			
			Demo	Local		Gross Cost	Gross Return	Net Return	BCR
Improved Goat Housing System	4	4	6% (Disease occurrence)	24% (Disease occurrence)	75				
Improved Cow Shed	3	3	7% (Disease occurrence)	25% (Disease occurrence)	72				
Portable poultry housing system	8	8	10% (Disease occurrence)	25% (Disease occurrence)	60				
Total	15	15							



Module III: Institutional Intervention

Table. Details of the various institutional interventions

Interventions	No. of KVKs	Details of activity			No. of farmers	Unit/ No. /Area (ha)
		Name of crops / Commodity groups / Implements	Quantity(q) / Number / Rent / Charges	Technology used in seed / fodder bank & function of groups		
Seed bank		Rice	16 q	Flood tolerant Rice variety Swarna Sub 1	04	0.4
Fodder bank						
Commodity groups						
Custom hiring centre						
Collective marketing						
Climate literacy through a village level weather station						
More if any						
Total						



Village Climate Risk Management Committee (VCRMC)

A short note of activities with photographs

Custom Hiring Centres:

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

Sl. No.	Name of the implement	Unit	No. of farmers utilized during 2022-23	Revenue generated
01	Power tiller	15 ha	24	7500
02	Reaper	12 ha	32	7200
03	Thresher cum winnower	38 days	26	3800
04	Motor pump	42 hr	14	3360
05	Power sprayer	82 hr	18	1640

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

Name of KVK	Revenue generated (Rs.)	
	From Custom Hiring Centres (2022-23)	Total under VCRMC
Cooch Behar		
Malda		
South 24 Parganas		
North 24 Parganas		
Purulia		
Kalimpong		
Murshidabad		
Port Blair		
Ganjam 1		
Kalahandi		
Kendrapara	23500/-	
Bhadrak		
Bolangir		
Keonjhar		
Dhenkanal		
Puri		
Jagatsinghpur		
Total		

Capacity Building

Thematic area	Topic of the training	No. of Courses	No. of beneficiaries		
			Male	Female	Total
Natural Resource Management	In-situ moisture conservation practices for vegetable crops	01	16	09	25
	Mulching in Brinjal	01	20	05	25
	Green manuring to improve soil health	01	18	07	25
	Production of vermi compost	01	15	10	25
Crop Management	Management of Rice based Paira cropping	01	18	07	25
	Cultivation of flood tolerant rice varieties Swarna Sub 1 and CR 1009 Sub 1	01	21	04	25
	Cultivation of Cucurbitaceous crops in grow bag in flood prone area	01	15	10	25
Nutrient Management	INM in vegetables	01	22	03	25
Integrated Crop Management					
Crop Diversification	Cultivation of Sunflower as crop diversification	01	17	08	25
	Scientific Cultivation of Sweet corn as crop diversification	01	18	07	25
	Cultivation of different exotic vegetables	01	14	11	25
Resource conservation Technology					
Pest and disease management	Scientific use of traps and trap crops for pest management	01	16	09	25
Nursery raising	Seedling production under low cost poly house	01	14	11	25
Employment Generation					
Nutrition garden					
Repair & Maintenance of farm machinery & Implements					
Integrated Farming System					
Livestock and Fishery Management	Multiple harvesting through yearling stocking	01	18	07	25
Fodder and feed management	Low cost poultry feed preparation	01	16	09	25
	Azolla as a feed supplement during feed scarcity	01	20	05	25
Lac cultivation					
Farm implements and machineries					
Value addition					
Employment generation					
Others if any					

Enclosed 2/3 Photographs

Extension Activities

Name of the activity	Number of Programmes	No. of beneficiaries		
		Male	Female	Total
Agro advisory Services	10	-	-	250
Awareness	02	72	28	100
Diagnostic visit				
Exposure visits	01	24	16	40
Field Day	02	78	22	100
Group Discussion				
Method demonstrations				
KMAS Services				
Farmers day				
SHG	03	-	36	36
Campaign	01	21	04	25
Popular extension literature				
Animal Health Camp	01	24	12	46
World earth day				
Krishak Chaupal				
Kishan Gosthi				
Woman health and nutrition				
Technology week				
NICRA Workshop at ATARI, Kolkata				
Scientist visit to field				
Others if any				
Total				

Enclosed 2/3 photographs

Table- SHC card distribution at NICRA adopted villages

KVK	Year	No of soil samples collected	No. of samples analysed	SHC issued	No of Farmers involved

Enclosed 2/3 Photographs

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

KVK	Development Scheme/Programme	Nature of work	Amount (Rs.)

Enclosed 2/3 Photographs

Dignitaries visited NICRA Villages during 2022-23

Name of KVK	Name of VIPs/Experts	Date of visit

Enclosed 2/3 Photographs

- Success stories of NICRA Village Farmers with photographs
- Newspaper coverage
- Publication

Expenditure Statement of NICRA-TDC Budget during 2022-23

KVK	FINAL RE				Expenditure	Closing Balance 01.04.20
	Contingencies	TA	NRC	Total		
Cooch Behar						
Malda						
South 24 Parganas						
North 24 Parganas						
Purulia						
Kalimpong						
Murshidabad						
Port Blair						
Ganjam 1						
Kalahandi						
Kendrapara						
Bhadrak						
Bolangir						
Keonjhar						
Dhenkanal						
Puri						
Jagatsinghpur						