

NICRA Annual Report 2018-19
KVK, Kendrapara, Odisha

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
Organic mulching in vegetables	12	2.5	320	88000	104000	2.18
Mulching	-	-	-	-	-	-
Any intervention not covered in above	-	-	-	-	-	-
Low cost poly house for raising of vegetable seedling during heavy rain	10	10 nos	Mortality of seedling only 6 %	9000	15000	2.66
Total	22	-		-		

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	-	-	-	-	-	-
Renovation of canal	-	-	-	-	-	-
Total	-			-		

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	-	-	-	-	-	-
Water management through bunding of rice	-	-	-	-	-	-
Total	-	-		-		

Table: KVK wise 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	-	-	-	-	-
Total	-	-	-	-	-

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	-	-	-	-	-	-	-	--
Total	-	-	-					

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	-	-	-	-	-	-	-	-
Total	-	-	-					

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	16	6.4	44.5	-	100 % Due to flood Swarna variety total damaged	40000	31200	1.78
Total	16	6.4	44.5	-	-	-	-	-

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
Yam cultivation in medium home stead land	12	1.6	184	146	26 %	214000	154000	1.71
EFY cultivation in medium home stead land	14	0.8	410	368	11.41	402000	213000	1.40
Total	26	2.4	-	-	-	-	-	-



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 potato in post flood condition in river bank Variety - KufriSinduri	32	5.4	182	152	17 %	76000	106000	2.39
Cultivation of Mustard in post flood condition in river bank Variety - Anuradha	12	2.2	9.2	7.5	22.60 %	22000	24000	2.1
Cultivation of Black gram in post flood condition in medium land Variety - PU 31	13	3.4	6.9	5.7	21 %	16000	18500	2.15
Cultivation of Horse gram in post flood condition in medium land Variety - Urmi	18	4.6	9.6	7.8	23 %	12000	16800	2.4

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 cucumber, sponge gourd and bitter gourd in grow bag to save the crop in flood situation	4	0.10	78	Damaged	100 %	34000	44000	2.30
Heat tolerant Tomato variety Chiranjibi	08	01						
Nutritional gardening	25	1.0						
Total	112	17.7	-	-	-	-	-	-



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	-	-	-					

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
Cultivation of Hybrid napier	04	0.4	1200 qt/ha	-	-	185000	415000	3.24
Total	-	-	-	-	-	-	-	-



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
Introduction of improved breeds buck Beetal	5	5 nos farmers	29 kg	21 kg	38 %	2400	4850	3.02
Demonstration of Kadaknath poultry variety	10	10 nos farm women (50 nos)	400 gm. in 8 month	800 gm. in 8 month	50 % in body weight	1150	2450	3.31
Total	15							



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
Low cost improved Goat housing system	8	8 nos	8 % disease incidence	20 % disease incidence	60 % disease controlled				
Low cost improved poultry housing system	2	2 nos	12 % disease incidence	21 % disease incidence	43 % disease controlled				
Total	10	10 nos							



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 Swarna sub - 1	26q	The farmers returned just double the quantity of seed he has taken from the bank after harvesting. The	24	01

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		
				seeds will be procured for the bank by selling that seed.		
Fodder bank		Hybrid napier	28t/yr	Managed by the group	04	0.4
Commodity groups						
Custom hiring centre						
Collective marketing						
Climate literacy through a village level weather station						
Total					28	

Village Climate Risk Management Committee (VCRMC)

VCRMC are constituted with nine nos of members, out of which three members are women from SHGs and involved in farming, small scale income generation activities etc. Remaining farmers (six nos) comprise of landless, marginal, small and progressive farmers of that village. The identification and prioritization of different activities are planned in the village meeting in the presence of VCRMC members facilitated by KVK team (all scientists including PI & Co – PI) and SRF.

Custom Hiring Centre:

We have now worked in four villages (Krushanadaspur, Kosotipali, Dasmankul and Ratanpur) and the implements from Kosotipali are brought to KVK . Now we have planned to establish the custom hiring centre at Ratanpur this year (within end of July, 2019)

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

Name of KVK	Revenue generated (Rs.)	
	From Custom Hiring Centres (2018-19)	Total under VCRMC
Cooch Behar		
Malda		
South 24 Parganas		
Port Blair		
Ganjam 1		
Kalahandi		
Kendrapara	Nil	24,800
Sonepur		
Jharsuguda		
Total		24,800

Capacity Building

Thematic area	Topic of the training	No. of Courses	No. of beneficiaries		
			Male	Female	Total
Natural Resource Management					
Crop Management	Broad Based Furrow method of vegetable cultivation	01	14	11	25
Nutrient Management	Integrated Nutrient Management in potato	01	16	9	25
	Organic farming	01	19	6	25
Integrated Crop Management					
Crop Diversification	Cultivation of Yam and EFY	01	18	7	25
Resource conservation Technology					
Pest and disease management	Use of traps for management of pest in vegetables	01	22	3	25
Nursery raising					
Employment Generation					
Nutrition garden	Lay out and importance of nutritional garden	01	0	25	25
Repair & Maintenance of farm machinery & Implements					
Integrated Farming System					
Livestock and Fishery Management					
Fodder and feed management					
Lac cultivation					

Thematic area	Topic of the training	No. of Courses	No. of beneficiaries		
			Male	Female	Total
Farm implements and machineries					
Value addition					
Employment generation	Bee keeping	01	12	9	25
Others if any					



Extension Activities

Name of the activity	Number of Programmes	No. of beneficiaries		
		Male	Female	Total
Agro advisory Services				
Awareness				
Diagnostic visit				
Exposure visits				
Field Day	02	72	28	100
Group Discussion	8	74	24	98
Method demonstrations	06	62	18	80
KMAS Services				
Farmers day				
SHG				
Campaign				
Popular extension literature				
Animal Health Camp				
World earth day				
KrishakChaupal				
KishanGosthi				
Woman health and nutrition				
Technology week				
NICRA Workshop at ATARI, Kolkata				
Scientist visit to field				
Focus group discussion	01	12	0	12
Soil health camp	01	37	13	50
Total				

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
Kendrapara	2018-19	24	24	24	24

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

Development Scheme /Programme	Nature of work	Amount (Rs.)
Demonstration on green manuring by District Agriculture Department	Supplied dhanicha at subsidy rate for promotion of green manuring	320,000
Village concrete road	Road constructed by PWD department from village entrance to end of the village	2,40,000
Cloth for work	Repair of village	1,20,000
Tube well for drinking water	Establishment new tube well for clean drinking water	3,68,000
Animal health camp	Deworming and vaccination of large and small rumants	30,000
Pulse and oil seed minikit programme	Oil seed (Ground nut, mustard) and pulse minikit Green gram)	55,000
Cluster demonstration	NFSM cluster demonstration (green gram)	40,000

Dignitaries visited NICRA Villages during 2018-19

Name of KVK	Name of VIPs/Experts	Date of visit
Kendrapara	Miss. Riya Bhattacharya, SRF, NICRA, ICAR ATARI Kolkata	17.11.2018
Kendrapara	Mrs. Jhumur Basak, SRF, CFLD, ICAR ATARI Kolkata	17.11.2018

Success stories of NICRA Village Farmers with photographs

Low cost portable poultry housing system

Generally the farmers are rearing local poultry birds which are low body growth (0.750 kg to 1.00 kg /year) and low egg laying capacity (55 to 65 nos /year) birds and also they are susceptible to different diseases like Coccidiosis, Sodium deficiency, Coillbacillosis, Ascariasis, IBD, RD and MD etc. leading to higher mortality, sometimes 100% mortality i.e. Kukudamadak in local language. In this situation Sri. Subash Chandra Mohanty started rearing of banaraja and kadaknath poultry with proper vaccination schedule. As banaraja birds are higher body growth and egg laying capacity than the local bird with .750 kg to 1.250 kg body wt. in three months and 170-180 nos eggs /year. The birds sold @ Rs.200/- per kg. and egg @ Rs.8/-. In the other hand the Kadaknath birds are highly nutritive rich and sold @ Rs.500/ per kg and the eggs are sold @ Rs. 8/- to Rs.-10/- per egg. The poultry birds are rearing as backyard poultry without proper shelter neither in night nor in adverse climatic condition, but it is a highly profitable enterprise with low investment, not required specific skilled and one can start any time with regular profit and the BC ratio is not less than 3.0 if properly taken care of the enterprise.

Sri. Mohanty observed that the mortality of the birds are high during the heavy rain, flood situation and high temperature due to the lack of proper shelter as easily the birds are suffered from diseases like nasal infection, ILT, IBT, Coccidiosis, Influenza. To overcome this problem Sri Mohanty designed that low cost poultry housing system with affordable price for the farmers i.e. Rs.3,200/- (Rupees two thousand two hundred only) with (12X6) feet size. The unit also transport easily one place to another place as per the climatic condition. Now other farmers of NICRA village and adjacent villages are adopted such type of shelter for poultry birds.



Expenditure Statement of NICRA-TDC Budget during 2018-19

KVK	FINAL RE				Expenditure	Closing Balance 01.04.19
	Contingencies	TA	NRC	Total		
Coochbehar						
Malda						
South 24 Parganas						
Port Blair						
Ganjam 1						
Jharsuguda						
Kalahandi						
Kendrapara	7,94,800	40,000	30,000	8,64,800	8,64,800	Nil
Sonepur						

Sd/-
Senior Scientist & Head
KVK, Kendrapara