# **Annual Report (NICRA-TDC) - 2017-18**

#### Name of the KVK and village:- Ganjam-I, Chopara

**Module-1: Natural Resource Management Interventions** 

Interventions	Technology demonstrated	Critical inputs provided	No. of farmers	Area under the villa	-	Measur indicators		Economic	(Avera		
	crop and variety*	0	in the demonst			yields* ( (Avera	q/ha)	Gross Cost	Gross Return	Net Return	BCR
		systems, seed etc)	ration	After	Before	Demo	Local	-			
				intervention	intervention		practice				
In-situ moisture	Moisture	Tractor hiring									
conservation	conservation										
measures	in Paddy –		20	6.0	2.0	Paddy-39.7	37.1	30100	58359	28259	1.94
	Summer		20	0.0	2.0	1 addy-39.7	37.1	30100	36339	20239	1.74
(BBF/Ridge&furrow/cont	ploughing by										
	MB plough										
trenching/mulcing/conser		Seed									
vation furrow/bunding											
etc)	& furrow		14	5.0	2.0	Maize-43.2	37.4	26200	51840	25640	1.98
	method in										
	upland										
	Green	Seed	10	3.0	1.0	Paddy- 38.6	34.4	31100	56742	25642	1.82
	manuring by										
	Sunhemp.										
	(Sunhemp-										
	paddy)										
Water harvesting and	, ,	cement, stone	42	Paddy	05 ha.						
recycling for				irrigation-		D- 11 20 1	27.2	20100	57.477	20255	1.07
supplemental irrigation				21ha.		<b>Paddy-39.1</b>	37.2	29100	57477	28377	1.97
(Community											
ponds/farmponds/jalkunds/ checkdams/polybag	Renovation of	Stone, cement.	18	Vegetable-2.0	1.5						
	Defunct Well-	sand	10	. 1501110110 2.10	1.0						
checkdams/wens etc)	Defance Wen					Brinjal-184	162	65000	147200	82200	2.26
	03 nos.					-					

	Poly mulching in Tomato by 50 micron Polythene	Seedling, polythene	03	0.15	-	Tomato-264	232	60000	132000	72000	2.2
Improved drainage in flood prone areas											
Conservation tillage where appropriate like zero tillage/ minimum tillage etc											
Artificial ground water recharge measures											
Water saving irrigation methods (Drip/sprinkler/raingun											
etc) Crop residue											
incorporation instead of burning											
Any other											

<sup>\*</sup>Mention crop being taken up in each demonstrations

**Module 2: Crop Production Interventions** 

Interventions	Technology demonstrate d along with crop and	Critical input (Variety, Fertilizer/ Machinery,	No. of farmers benefitte d	Area taken up (ha)	Measu indica Crop (q/l	ators yield ha)	increase in yield over		(Rs./ (Aver	rage)			(Ave		ŕ
	variety*	etc)			Demo	Local		Gross Cost	Gross Return			Gross Cost	Gross Return	Net Return	BCR
Short duration varieties demonstrated								Cost	- Court	Account.		Cost	- Court	Tectur II	
Drought tolerant varieties demonstrated	Paddy - Sahabhagi dhan	Seeds,Pesticides	10	4.0	23.60	19.20	23	17900	34692	20280	1.94	16800	28224	17780	1.7
	Variety-II														
Demonstration on management of Blast disease in Paddy under changing climate	treatment with Vitavax	Vitavax power & Tricyclazole	10	4.0	38.80	35.60	9	27600	57036	29436	2.1	27100	52332	25232	1.93
management of Brown Plant hopper	Alley making, spraying of		25	10	37.60	27.10	39	28100	55272	27172	1.96	27100	39837	12637	1.47
Introducing flood tolerant varieties	Crop-I, Variety-I Variety-II														
Advancement of planting dates of rabi crops in areas															

	4		1					1	1		ı	ı	I I		
with terminal heat	į I														
stress															
Water saving paddy															
cultivation methods	S														
(SRI, aerobic, direct	t														
seeding)															
Frost management in															
horticultural crops	3														
through fumigation															
Community															
nurseries for delayed															
monsoon															
Custom hiring	,														
centres for timely															
planting															
Location specific															
intercropping															
systems with high	L														
sustainable yield															
index															
Moisture tolerant	Groundnut,	Rhizobium,	10	02	21.40	17.60	21.5	42700	85600	42900	2.0	38100	70400	12637	1.84
Groundnut var. Devi	var- devi ,seed	seed, pesticides													
in Rabi season	treatment with	-													
	Rhizobium @														
	20gram/kg of														
	seed 01 hour														
	before sowing														
Demonstration on	Blackgram -	Seed,	25	10	4.9	3.2	53.1	13400	24500	11100	1.83	11400	16000	4600	1.4
High yielding Short		Rhizibium,													
duration heat tolerant	treatment with	foliar													
Blackgram var. PU-	Rhizobium @	nutrient,pesticid													
31	20gram/kg of	es													
	seed 01 hour														
	before														
	sowing,Foliar														
	application														
	of NPK														
	OI NPK														

	(19:19:19) @ 10 gram/lt at 25 & 40 DAS.,														
incidence during high temperature	IPM-02-seed treatment with	foliar nutrient,pesticid es	25	10	5.8	4.3	34.8	13000	23200	10200	1.79	10400	17200	6800	1.65

<sup>\*</sup>Make a separate row for each crop and variety demonstrated

**Module-3: Livestock & Fisheries** 

Interventions	Technology	Critical	No. of	Unit/	Measu	ırable	%	Econo	omics of	demonst	ration	Econo	mics of	demonst	ration
	demonstrate	input	farmers	No./	indica	tors of	increase		(Rs.	/ha)			(Rs.	/ha)	
	d	(Variety,		Area	outp	out*	over		(Ave	rage)			(Ave	rage)	
		Breed,		(ha)	(Ave	rage)	local								
		etc)			Demo	Local		Gross	Gross	Net	BCR	Gross	Gross	Net	BCR
								Cost	Return	Return		Cost	Return	Return	
Use of community lands															
for fodder production															
during droughts / floods															
Introduction of new															
fodder crops or new															
varieties															
Improved fodder/feed															

storage methods															
Preventive vaccination	Deworming	Vaccine – fenbendaz ole @7.5/kg/b ody wt.	12	106ani mals(G oat)	Body wt. (gm/m onth)	840	15.4	2800	5892	3092	2.10	2800	5424	2624	1.94
	Animal health camp	Vaccine, dewormin	52	642 animals (cattle, goat)											
cold stress/ water	flooring with	stone,mos	04	16 animals											
Introduction of															
improved breeds  Management of fish ponds / tanks during water scarcity and excess water															
Improved feeding like location specific mineral mixtures or mineral bricks		Mineral	10	20 animals	Lactation (lt/yr)	1210	14	28000	41400	13400	1.48	26000	36300	10300	1.4
Composite fish culture by stocking of yearlings		Yearling ,feed	05	02ha	31.20	25.73	21.2	312000	130540	181460	2.39	257300	119670	137630	2.15

Mrigal	Catla, Rohu and Mrigal @ 5000 nos/ha at a ratio of 3:4:3 with proper water quality management							

<sup>\*</sup> Output is in terms of litres (\*milk), number (eggs), kgs (meat), kg/ha (fodder yield)

**Module-4: Institutional Interventions** 

Interventions	5	Details of activ	rity	Critical input (Breed /	No. of farmers	Unit / No. /
	Name of crops /variet Commodity groups Implements		Technology used in seed / fodder bank & function of groups	Variety / Medicine doses)	involved	Area (ha)
Seed bank						
Fodder bank						
Commodity groups						
	Sprinkler	Rs5/Pipe	40 hr			
	Power sprayer	Rs.20/hr	32 hr			
Custom	Diesel Water pump Set	Rs.30/hr	20 hr	On Hiring	71	28
hiring centre	MB plough	Rs.20 /hr	16 hr	basis		
	Mini weeder	Rs.20/hr	36 hr			
	Reaper	Rs.100/hr	16 hr			

	Power thresher cum winnower	Rs.40/hr	12 hr		
	Power tiller	Rs.40/hr	44 hr		
Collective marketing					
Climate literacy through a village level weather station					
Any other (Pl specify)					

# Module-5: Capacity Building taken up (HRD)

Sl.	Thematic area	Title of training	No. of Courses	No. of ber	neficiaries	Dat	te
No.				Male	Female	from	to
1	ICM	Off season Tomato cultivation	01	18	07	21.10.17	
2	IPM	IPM in Paddy	01	21	04	24.10.17	
3	ICT	Role of farmer club in climate smart agriculture	01	18	07	30.10.17	
4	Resouce conservation	Resouce conservation	01	21	04	22.02.2018	
5	Integrated crop management	IPM in Pulse crops	01	19	06	03.03.2018	04.03.2018

6	Planting material production	Management of Nursery, grafting technique	01	18	07	19.03.2018	20.03.2018
7	Production & management	Composite Pisciculture	01	22	03	26.03.2018	

#### **Module-6: Extension Activities**

Name of the activity	Details about	Number of	Time of the programme conducted	No. of bei	neficiaries	Remarks
	the activity	programmes		Male	Female	
Exposure visit of farmers	Exposure visit of farmers	Ganjam-1	01(28.03.2018)	50		Centre of Excellance,Deras Horticulture farm, Bhubaneswar & KVK, PURI
Field days	Field days	Ganjam-1	02(13.09.17& 18.10.17)	52	15	Blast & BPH Management in Paddy
Method demonstrations	Method demonstrations	Ganjam-1	04 ( 22.06.17,18.07.17,18.10.17,06.12.17)	68	17	Seed treatment, Weedicide application, alley making)
Awareness	Awareness	Ganjam-1	02(18.07.17 & 27.07.17)	53	23	On PMFBY, soil health management
Others (if any)				·		

Note: 1) Please don't change format heads. 2) All the required specific information should be given.

#### 7. Rainfall characteristics for the year 2017-18

Kharif 2017		JUNE	JULY	AUGUST	SEPTEMBER	ANNUAL
Rainfall received in	(mm)	181	287	270	216	1332
No. of dry spells	>10days					
during kharif season 2017	>15days					
2017	>20days					
No. of intensive rain spells (2017)	>60 mm per day					
	Water logging observed (days)					
Any other extreme events observed during the season						

# 7A. Day-wise rainfall distribution in the village during Kharif 2017

			Day													
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Rainfall	June	33.0	2.0	2.0	0.0	11.4	6.2	5.4	0.0	0.0	0.0	7.2	0.0	0.0	0	0.0
(mm)	July	6.20	0	0.0	0.0	0.0	0.0	4	8.2	38.4	0.0	3.0	5.0	56.4	26.0	26.4
	August	13.0	25.0	3.0	19.2	0.0	8	0.0	10.0	46.0	0.0	19.0	0	10.0	4.4	0.0
	September	19.0	4.0	16.0	9.6	10.8	0.0	0.0	44.0	6.0	0	0.0	0.0	15.2	7.0	3.0

		Day															
		16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
Rainfall	June	4.0	0.0	0.0	0.0	0.0	0.0	22.0	0	0.0	54.4	3	0.0	0.0	31.0	0.0	
(mm)																	
(=====)	July	13.2	14.6	28.0	15.0	0.0	0.0	0.0	13.2	0.0	0	5.2	5.0	14.2	5.2	0	0.0
	August	0.0	0.0	7.0	8.2	0.0	0.0	0.0	0.0	36.0	46.0	0	0.0	9.4	0	6	0
	September	0	0	16.6	15.6	12.4	0.0	0.0	0	0	2	26.4	5	0	0	4	

8. Impact of contingency measures taken up in the village (Relate the dry spells with crops and their growth stages)

S. No	Dry spell ( no. of days)	Duration (from to)	Crop name	 Intervention taken up*	Number of farmers involved	Im	Impact on crop yields (q/ha)		
						Farmers' practice	Demo	Increase over farmers' practice	
1									
2									
3									

<sup>\*</sup> List the interventions taken up for each crop

# 9. Adoption of successful interventions in the NICRA village & the adjoining villages

Successful			Extent of adoption	on in the village in ha.		
interventions including crops and varieties	2012	2013	2014	2015	2016	2017
Drought resistant short duration Paddy var. Sahabhagi dhan	-	4	9	17	22	28
Maize in Ridge & furrow system	-	2	3	4	5	5
Crop diversification from Paddy to Maize & contingent crop pigeon Pea in upland	-	2	5	7	9	11
Sowing of short duration YMV tolerant Green gram var.	-	3	12	18	28	36
Sowing of short duration Heat tolerant Black gram var.		2	5	9	11	14
Yearling stocking in rainfed farm ponds	-		1	2	3	3

# 10. Popularization of Climate Resilient Varieties

Crop*	Climate Resilient Varieties incorporated in the Kharif 2017 plan of the State Department	Approx. area brought under the variety by the state department during the K <i>harif</i> 2017 (ha)
Crop1-Paddy	Variety 1- Sahabhagidhan	8400
	Variety 2-Swarnasub-1	6600
Crop2	Variety 1	
	Variety 2	
Crop3	Variety 1	
	Variety 2	
Crop4	Variety 1	
	Variety 2	
Crop*	Climate Resilient Varieties incorporated in the Rabi2017 plan of the State Department	Approx. area brought under the variety by the state department during the <i>Kharif</i> 2017 (ha)
Crop1 Greengram	Variety 1-IPM 02-14	3400
	Variety 2	
Crop2 Blackgram	Variety 1-PU-31	1800
	Variety 2	
Crop3	Variety 1	
	Variety 2	
Crop4	Variety 1	
	Variety 2	

# 11. Awards Received during the year for the work related to NICRA

Name of the award	Given by whom	When the award was given

#### 12. Distinguished visitors to the NICRA village during the year

Name of the person	When the visit occurred	Significant comments/ suggestions
D. Indra kumar, member of NITI Ayoga	21.12.2017	

#### 13. Amount (Rs.) mobilized through convergence from various departments

S.	Activity/ Intervention	Coverage	Convergence established	Approx. amount (Rs.)
No.		[No. of farmers/Area (ha)]	with	mobilized
			(Name of the programme	
			or department)	

- 14. Publications and other products developed during the year
- 15. Significant observations about the project/ the performance of interventions/ adoption of interventions/ livelihood improvement etc..