



Action Plan 2025-26

KVK – PURI



NICRA
National Initiative on Climate Resilient Agriculture



1. Details about the existing NICRA villages

Sl No	Details	Village 1	Village 2
1	Name of the village	Jatipur	Pandasura
2	Involved in TDC since (year)	2022	2024
3	Cultivated area (ha)	58	68
4	Rainfed Area (ha)	Nil	Nil
5	Irrigated Area (ha)	58	68
6	No. of households in the village	72	60
7	Drought prone area	Nil	Nil
8	Flood prone area	45	41
9	Approximate households covered so far	64	28
10	Identified FSTs	Irrigated low land with animal Irrigated medium land with animal Irrigated medium land with pond and animal	Irrigated low land with/without animal, Irrigated medium land with animal, Irrigated medium land with pond

2. Predominant farming system typologies in NICRA villages							
Sl. No	Farming System Typologies	Jatipur			Pandasura		
		Area (ha)	No. of farmers	% coverage (area in the village)	Area (ha)	No. of farmers	% coverage (area in the village)
1	Irrigated Low Land With Animal	41	78	70.68	14	25	20.58
2	Irrigated Medium Land With Animal	13	36	22.43	21	42	30.89
3	Irrigated Medium Land With Pond and animal	4	06	6.89	2	13	2.94
4	Irrigated Low Land Without Animal				31	62	45.59

3. Predominant climatic and resource constraints of the major farming system typologies of NICRA villages

S. No.	Farming System Typologies	Village - Jatipur		
		Climate constraints	Resource /Crop/Animal constraints	Other constraints
1	Irrigated low land with animal	<ul style="list-style-type: none"> •Flood •Cyclone in the month of October and November 	<ul style="list-style-type: none"> • Unavailability of suitable flood/ submergence tolerant rice varieties • Scope of vegetable cultivation is limited • Scarcity of fodder for livestock • Low milk yield • Unavailability of bundle straw for mushroom cultivation • Infectious disease occur in cattles/poultry/goats during flood situation or prolonged heavy rainfall due to unscientific shelter management • Lodging in Rice • Majority of low lands remains fallow during kharif • Weed infestation of water hyacinth in community pond 	<ul style="list-style-type: none"> • Migration of labour • Low household income • High cost of cultivation of crop • Low income from live stock due to indigenous breed (Cow, Goat,Poultry)
2	Irrigated medium land with animal			
3	Irrigated medium land with pond & animal			

3. Predominant climatic and resource constraints of the major farming system typologies of NICRA villages

SI No	Farming System Typologies	Village - Pandasura		
		Climate constraints	Resource /Crop/Animal constraints	Other constraints
1	Irrigated medium land with animal	<ul style="list-style-type: none"> •Flood •Cyclone in the month of October and November 	<ul style="list-style-type: none"> • Unavailability of suitable flood/ submergence tolerant rice varieties • Scarcity of fodder for livestock • Low milk yield • Unavailability of bundle straw for mushroom cultivation • Lodging in Rice • High energy requirement in water conveyance • Lack of livestock management • Non adoption of improved technologies in vegetable cultivation • Infestation of large scale spiraling white fly in coconut 	<ul style="list-style-type: none"> • Migration of labour • Low household income • High cost of cultivation of crop • Low income from live stock due to indigenous breed (Cow, Goat,Poultry)
2	Irrigated low land with animal			
3	Irrigated medium land with pond & animal			
4	Irrigated low land without animal			

4. Identified promising resilient technologies for addressing the constraints

S No	Farming System Typologies	Village 1- Jatipur		
		Identified Technologies	Resource / Crop/ Animal constraints	Other constraints
1	Irrigated low land with animal	<ul style="list-style-type: none"> •Bund renovation to take up sequential fish cum rice farming •Demonstration of lodging resistant and short duration Rice variety Bina wave Dhan 11 •Wet DSR •Cultivation of Colocasia variety Sree Telia Demonstration •Management of Dairy Unit •Improved Goatery unit •Introduction of sirohi buck for breed up gradation •Mineral mixture • Community pond cleaning by VCRMC and release of Grass carps 	<ul style="list-style-type: none"> •Area remains fallow during kharif •Lodging of crop before harvesting in Rabi Paddy crop due to cyclonic wave • No scientific management of cow shelter •Low milk and meat yield from livestock •Heavy infestation of grass weeds in both individual and community pond •Infectious disease of goat leads to high mortality •Rearing of Local breed of goat 	<ul style="list-style-type: none"> •Migration of labour

4. Identified promising resilient technologies for addressing the constraints

S No	Farming System Typologies	Village - Jatipur		
		Identified Technologies	Resource / Crop/ Animal constraints	Other constraints
2	Irrigated Medium Land With Animal	<ul style="list-style-type: none"> •Green manuring “ Dhaincha” •Demonstration of flood tolerant rice variety Bina Dhan11 •Rearing of heat stress tolerant poultry bird in backyard for income generation • Demonstration of local feed preparation for poultry •Community Vermicompost unit with permanent structure •Mulching in Chili and Tomato •Demonstration on YMV tolerant okra variety Kashi Shristi 	<ul style="list-style-type: none"> • Unavailability of suitable flood/ submergence tolerant rice varieties • Lodging in Rice • Severe weed infestation in vegetable crops • Water scarcity for vegetable cultivation in backyard. • Infectious disease in cattle/poultry/goats during flood situation due to unscientific shelter management • Heavy infection of YVMV in okra 	Low income of house hold Labour mgration,

4. Identified promising resilient technologies for addressing the constraints

S No	Farming System Typologies	Village - Jatipur		
		Identified Technologies	Resource / Crop/ Animal constraints	Other constraints
3	Irrigated medium land with pond and animal	<p>Renovation of farm pond and manual removal of pond weeds</p> <p>Stocking of IMC and prawn</p> <p>Flood tolerant variety Bina Dhan -11</p> <p>Demonstration on triple disease resistant tomato hybrid Arka Rakshak</p> <p>Demonstration on disease resistant chili hybrid Arka Sannvi</p> <p>Azolla as an alternative feed for milch cows</p> <p>Demonstration on yam variety Sree Nidhi</p> <p>Hydroponic fodder cultivation</p>	<ul style="list-style-type: none"> • Improper pond management • Proliferation of “aquatic weeds” is found unhygienic & encourages siltation process, thus reduces space & volume for water retention • Unavailability of suitable flood/submergence tolerant rice varieties • Scarcity of fodder for livestock • Low milk yield • Infectious disease in cattles/poultry/goats during flood situation due to unscientific shelter management • Incidence of wilt and leaf curl virus in solanaceous crop 	<ul style="list-style-type: none"> • Migration of labour • Low household income • High cost of cultivation of crop • Low income from live stock due to indigenous breed (Cow, Goat, Poultry)

4. Identified promising resilient technologies for addressing the constraints

S No	Farming System Typologies	Village - Pandasura		
		Identified Technologies	Resource / Crop/ Animal constraints	Other constraints
1	Irrigated low land with animal	<ul style="list-style-type: none"> •Raising of peripheral embankment for rice fish farming •Demonstration of lodging resistant Rice variety Bina Dhan 11 •Wet DSR using Drum Seeder •Cultivation of Colocasia variety Sree Telia •Demonstration of sweet potato variety Kisan •Management of Dairy Unit • Cultivation of Fodder Hybrid Napier 	<ul style="list-style-type: none"> •Area remains fallow during kharif •Lodging of crop before harvesting in Rabi Paddy crop due to cyclonic wave • No scientific management of cow/small ruminants shelter •Low milk yield from livestock •Heavy incidence of grass weeds in both individual and community pond 	<ul style="list-style-type: none"> •Migration of labour

4. Identified promising resilient technologies for addressing the constraints

S No	Farming System Typologies	Village - Pandasura		
		Identified Technologies	Resource / Crop/ Animal constraints	Other constraints
2	Irrigated Medium Land With Animal	<ul style="list-style-type: none"> •Green manuring “ Dhanicha” •Demonstration of flood tolerant rice variety Bina Dhan11 •Community MAT nursery raising for using mechanized line transplanter •Mulching in Pointed gourd with trellis •Demonstration of Yam •Demonstration of marigold variety Seracole for round the year income generation •Scientific composite carp culture in small backyard tank •Rearing of heat stress tolerant poultry bird in backyard for income generation •Portable poultry house •Community mushroom unit under shade net 	<ul style="list-style-type: none"> • Unavailability of suitable flood/ submergence tolerant rice varieties • Lodging in Rice • Severe weed infestation in vegetable crops • High energy consumption in water conveyance • Infectious disease in cattle/poultry/goats during flood situation due to unscientific shelter management 	<ul style="list-style-type: none"> •Low income of house hold •Labour migration

4. Identified promising resilient technologies for addressing the constraints

S No	Farming System Typologies	Village - Pandasura		
		Identified Technologies	Resource / Crop/ Animal constraints	Other constraints
3	Irrigated medium land with pond and animal	<p>Stocking of IMC and prawn</p> <p>Flood tolerant variety Bina Dhan -11</p> <p>Gravity fed drip irrigation system with mulching in tomato</p> <p>Azolla as an alternative feed for milch cows</p> <p>Low Cost Goat House in Pond dyke</p>	<ul style="list-style-type: none"> • Low income from IFS pond • Proliferation of “aquatic weeds” is found unhygienic & encourages siltation process, thus reduces space & volume for water retention • Unavailability of suitable flood/submergence tolerant rice varieties • Scarcity of fodder for livestock • Low milk yield • Infectious disease in cattle/poultry/goats during flood situation due to unscientific shelter management 	<ul style="list-style-type: none"> • Migration of labour • Low household income • High cost of cultivation of crop • Low income from live stock due to indigenous breed (Cow, Goat, Poultry)

4. Identified promising resilient technologies for addressing the constraints

S No	Farming System Typologies	Village - Pandasura		
		Identified Technologies	Resource /Crop /Animal constraints	Other constraints
4	Irrigated low land without animal	<ul style="list-style-type: none"> •Construction of Pond in convergence with o/o Soil Conservation •Wet DSR •Demonstration of flood and lodging resistant rice variety Bina Dhan11 •Demonstration of deep water rice variety CR Dhan 506 •Paddy straw mushroom cultivation • Plantation of Banana variety Patkapura in pond dyke 	<ul style="list-style-type: none"> • Unavailability of suitable flood/ submergence tolerant rice varieties • Scarcity of bundle straw for mushroom cultivation • The Incidence of lodging in Rabi Rice affects yield significantly • Heavy incidence of sigatoka leaf spot in banana 	Low income of household

5. Categorization of the identified technologies in to NRM, Crops and Livestock in each village for taking up demonstrations during 2025-26									
S No	Farming System Typologies	Village 1- Jatipur			Village 2- Pandasura				
		NRM	Crop	Livestock	Total	NRM	Crop	Livestock	Total
1	Irrigated Low Land With Animal	4	6	5	15	4	5	1	10
2	Irrigated Medium Land With Animal	2	3	2	7	1	3		4
3	Irrigated Medium Land With Pond	2	2	0	4	1	2	0	3
4	Irrigated Low Land Without Animal	0	0	0	0	1	2	1	4

6. No. of farmers involved in each of the village for demonstrations during 2025-26									
S No	Farming System Typologies	Village 1- Jatipur			Village 2- Pandasura				
		NRM	Crop	Livestock	Total	NRM	Crop	Livestock	Total
1	Irrigated Low Land With Animal	22	15	4	41	15	25	10	50
2	Irrigated Medium Land With Animal	4	8	10	22	10	10	0	20
3	Irrigated Medium Land With Pond and animal	10	10	0	20	10	15	3	28
4	Irrigated Low Land Without Animal	0	0	0	0	10	10	0	20

7. Scaling out of Promising Climate Resilient Technologies and proposed number of farmers to be involved (in convergence with development departments)

SI No	Farming System Typologies	Village - Jatipur				Village - Pandasura			
		Climate Resilient Technology	Convergence with Scheme	No. of farming household to be covered	Area to be covered (ha)	Climate Resilient Technology	Convergence with Scheme	No. of farming household covered	Area to be covered (ha)
1	Irrigated Low Land With Animal	Animal health camp	Dept. of vet. and AH	72	200 nos	Animal health camp	Dept. of vet. and AH	60	120nos
2	Irrigated Medium Land With Animal	Mechanized Line Transplanting	MLT, EE. (Agril Deptt)	10	4.0	Mechanized Line Transplanting	Executive Engineer (Agril Deptt)	20	8.0

7. Scaling out of Promising Climate Resilient Technologies and proposed number of farmers to be involved (in convergence with development departments)

Sl No	Farming System Typologies	Village - Jatipur				Village - Pandasura			
		Climate Resilient Technology	Convergence with Scheme	No. of farming household covered	Area to be covered (ha)	Climate Resilient Technology	Convergence with Scheme	No. of farming household covered	Area to be covered (ha)
3	Irrigated Medium Land With Pond	Pond renovation with IMC support	DFO, Puri	2	2 nos pond	construction of new pond	Dept. of Soil Conservation	2	2 nos pond (24X24X2)m

Activities and Cost

8. NRM Interventions:

8.1. Name of Intervention:

Sl. No	Village	Intervention	Dimensions	No. of units	No. of farm households proposed to be involved	Convergence value, if any (Rs)	Value of farmers share (Rs)	Cost to project (Rs)	Remarks or add column, if needed
1.	Jatipur, Pandasura	Water chestnut – rice sequential farming	38mx28m x2.4m	1	12	-	40,000	70,000	-
		Bund renovation to promote Fish – cum-rice sequential farming	412 m length	1	27	-	80,000	2,40,000	-
	S. total			2	47	-	1,20,000	3,10,000	

8. NRM Interventions;

8.2. In situ conservation – Resource Conservation Technologies (RCTs), etc.

Sl. No.	Village	Intervention	Unit cost (Rs/unit) A*	Coverage Proposed		Total amount (Rs) A x B	Remarks
				Area (ha)/ unit B	No. of farm households proposed to be involved C		
1.	Jatipur, Pandasura	Lime application	1600/-	10nos.	10	16000	Maintain water quality for fish farming
2.		Gravity fed drip irrigation in Tomato	15000/-	0.1	2	30000	Optimum utilization of water, enhanced irrigation water use efficiency
3.		Mulching	75,000	0.4	10	30,000	In situ water cons.
4.		Community Vermi compost unit with GI pipe structure	20000/- per unit	5	25	1,00,000	Using mushroom substrate

Activities and Cost

9.Crop Interventions;

9.1. Stress tolerant / improved varieties / Short duration / Legume crops, etc..

Sl. No.	Village	Intervention	Description		Cost (Rs/ unit) A *	Coverage Proposed		Total amount (Rs) A x C	Remarks
			Crop	Variety (s)		Area (ha) B	No. of farm households to be involved C		
1	Jatipur Pandasura	Flood	Paddy	Bina Dhan11	2500	16	16	40000	
2.		Submergence tolerant	Colocasia	Sree Telia	750	0.03	2	1500	
3.		Triple disease resistant hybrid	Tomato	Arka Rakshak	5000	0.4	5	25000	

9.Crop Interventions;

9.1. Stress tolerant / improved varieties / Short duration / Legume crops, etc..

S. N o.	Village 1,2,3 etc.	Intervention	Description		Cost (Rs/ha) A*	Coverage Proposed		Total amount (Rs) A x C	Remarks
			Crop	Variety (s)		Area (ha) B	No. of households to be involved C		
	Jatipur, Pandasura	YVMV tolerant hybrid variety	Lady's finger	Kashi Shristi	1600	0.4	5	8000	
		TolCV resistant hy. Var.	Chilli	Arka Sannvi	4000	0.4	5	20000	
			Sweet potato	Kisan	3,000	0.4	5	15000	Cover crops to prevent soil erosion

9.Crop Interventions;

9.2. Improved agronomic practices and other crop interventions, etc..

S. No.	Village	Intervention	Description		Cost (Rs/ha) A*	Coverage Proposed		Total amount (Rs.) A x C	Remarks
			Crop	Var		Area (ha) B	No. of households to be involved C		
1.	Jatipur, Pandasura	Wet DSR by drum seeder	Paddy	-	1000	4	10	10,000	
2.		Critical inputs for Integrated pest management	-	-	5000	4	6	30,000	Pesticide application through Ag. Spray drone and use of diff traps
3.		Other inputs (green manuring Dhaincha)	-	-	5000	4	6	20,000	
4.		SIGA (Mushroom)	Mushroom	-	60/- per bed	300 beds	15	18,000 and 20,000 (straw soaking pit)	Community mushroom farming

Activities and Cost

10. Livestock and Fisheries

10.1. Name of Intervention: Feed demonstrations for crop residue management / stress management: silage / feed blocks/ mineral mixture (MM) blocks / feed enrichment, etc..

Name of fodder/feed demo/type of shelter created or renovated/enterprises/others, if any	Variety	Area (ha)	Unit cost of demo (Rs)*	No. of demos/ units	Amount (Rs)*	Remarks (purpose of intervention& farmers covered)
Improved Goatery unit			35,000	2	70,000	Infectious disease occur in goats during flood /prolonged heavy rainfall due to unscientific shelter management.
Introduction of sirohi buck for breed up gradation	-	-	40,000	2	80,000	Low body weight and vulnerable to diseases.
Stocking of IMC & Prawn		10	2500	20	50,000	Low income
Renovation of cowshed			20,000	2	40,000	To prevent disease in cattle
Preparation of Poultry local feed			1,500	10	15,000	Feed to be provided to poultry
Feed preparation for fish			2,000	20	40,000	

Activities and Cost

Community interventions

Establishment of Seed banks, fodder banks etc

Name of the SHG	Crop and variety	Quantity of storage (q.)/Area (ha)	Unit cost (Rs.)	No. of units	Amount (Rs.)	Remarks (No. of beneficiaries & Period of use)
1	Seed Bank (Paddy- Binadhan)	10.0	-	1	25,000	30 nos.
2	Fodder bank	0.2	25,000	1	25,000	40 nos.
Total					50,000	70 nos.

Activities and Cost

11. Non-recurring contingencies – Equipments

Proposal for Procurement of climate related farm machinery/ implements for Custom Hiring Centre

S.No.	Item	Unit cost (Rs)	No. of units	Amount (Rs)
1.	Repairing of Custom hiring Centre	1,00,000	1	1,00,000
2.	Cream Separator	20,000	2	40,000
3.	Solar Pump	75,000	1	75,000
4.	Rice cleaner cum grader	40,000	1	40,000
5.	Weighing Balance	10,000	1	10,000
6.	Tractor drawn Spader	1,35,000	1	1,35,000
7.	Tractor drawn Reversible MB plough	1,00,000	1	1,00,000
Total NRC				5,00,000

Activities and Cost

12. Capacity Building & Other extension activities

12.1. Training programmes proposed for the year

Theme	Title of training programme	Proposed month	No. of participants	Cost (Rs.)
ICM	Integrated crop management in rice under flood situation	August	30	2250
RCT	Mulching in vegetable crops	November	30	2250
SFM	Soil sampling and soil health management	September	30	2250
IPM	Use of traps and trap crop for Pest management	October	30	2250
IFS	Scientific pond management	September	30	2250
SIGA	Mushroom cultivation under shade net.	December	30	2250
Farm mechanization	MAT nursery raising using Self propelled Rice Transplanter	December	30	2250
Micro Irrigation	Installation and maintenance of drip irrigation system in vegetable crops	July	30	2250
Total				18,000

Activities and Cost

12. Capacity Building & Other extension activities

12.2. Field Days/Exposure visits/Awareness programmes/Kisan melas/Kisan gosthi/any other/ proposed for the year

Theme	Title of Programme	Proposed month	No. of participants	Cost (Rs.)
Crop production	Field day on cultivation of flood tolerant rice variety	February	50	3000
	Field day on mulching in vegetables cultivation and kitchen gardening	February	50	3000
Livestock & Fishery	Field day on Sequential Fish-Rice Farming	December	50	3000
Total				9000

Exposure visits

Place of visit	Purpose of visit	Proposed month	No. of participants	Cost (Rs.)
Krushi Odisha/ICAR institutes (BBSR)	Exposure visit	March	30	30,000

Activities and Cost

13. Publications and Media products proposed to be Developed

13.1 Publications

Publication	Nature of Publication (Book/Bulletin/ Brochure etc.)	Proposed during the month	No. of Copies	Cost (Rs.)
2nos.	Booklets	Dec	500	25,000
1 no.	Video Films	Round the year	5 minutes	60,000
Total				85,000

Activities and Cost

Contractual Manpower (SRFs)

Category	Rate/month (Rs.)	No. of positions	No. of months	Amount (Rs.)
SRF	44,100	1	12	5,29,200
Total				5,29,200

Any other contingencies	Amount (Rs.)
TA, repairing of weather station, data collection, administrative cost, Exhibition , training material etc.	1,80,000
Total	1,80,000

14. Summary of cost Estimates for 2025-26

Procurement of farm machinery/implements for CHC	500000
Repair/ Renovation of existing water harvesting structures & drainage channels etc.	310000
<i>In situ</i> conservation – Resource Conservation Technologies (RCTs)	176000
Stress tolerant/ Improved varieties	109500
Improved agronomic practices and other crop interventions	98000
Year round fodder production strategies (annual/perennial fodder) in the village	20000
Feed demonstrations for crop residue management / stress management: silage / feed blocks/ mineral mixture blocks / feed enrichment	55000
Improved housing /shelter for protection against extreme weather	110000
Livestock/fisheries units	130000
Establishment of fodder banks (hay)	25000
Establishment of seed banks	25000
Training courses	18000
Field days	9000
Exposure visits	30000
Up-scaling of successful interventions	40000
Contractual manpower (SRFs)	529200
Media products to be developed	85000
Any other contingencies (TA etc)	180000
Grand total (Rupees twenty four lakhs forty nine thousand seven hundred only)	24,49,700

Thank you