National Innovation on Climate Resilient Agriculture (NICRA) Action Plan (January to December, 2023)

भाकृअनुप – कृषि प्रौद्योगिकी अनुप्रयोग अनुसंधान संस्थान, कानपुर
ICAR-AGRICULTURAL TECHNOLOGY APPLICATION RESEARCH INSTITUTE
(ATARI), KANPUR – 208 002

National Innovation on Climate Resilient Agriculture (NICRA)
Action Plan
(January to December, 2023)

SK Dubey, Raghwendra Singh, SK Singh, Seema Yadav,

SN Yemul and Rajeev Singh

ICAR-Agricultural Technology Application Research Institute,

Kanpur 208002 (UP)

Citation: SK Dubey, Raghwendra Singh, SK Singh, Seema Yadav, SN Yemul and Rajeev Singh (2023). National Innovation on Climate Resilient Agriculture (NICRA) Action Plan (January to December, 2023) PP 1-151.

Published: 2023

Published by:
Director
ICAR-Agricultural Technology Application Research Institute (ATARI), Kanpur-208002
Email:zpdicarkanpur@gmail.com
Website: atarik.in

Content

INTRODUCTION

National Innovations on Climate Resilient Agriculture (NICRA) is a network project of the Indian Council of Agricultural Research (ICAR) launched in February, 2011. 3rd phase of the project started w.e.f., 2022-2025 and with the aims to enhance resilience of Indian agriculture to climate change and climate vulnerability through strategic research and technology demonstrations. The project consists of four components *viz.* strategic research, technology demonstrations, capacity building and sponsored/competitive grants. The project also aims to enhance the resilience of Indian agriculture covering crops, livestock and fisheries to climatic variability and climate change through development and application of improved production and risk management technologies; to demonstrate site specific technology packages on farmers' fields for adapting to current climate risks and to enhance the capacity building of scientists and other stakeholders in climate resilient agricultural research and its application. The project is comprised of four components. (1) strategic research on adaptation and mitigation, (2) technology demonstration on farmers' fields to cope with current climate variability, (3) sponsored and competitive research grants to fill critical research gaps and (4) capacity building of different stake holders. The major research themes are: (1) vulnerability assessment of major production zones, (2) linking weather based agro-advisories to contingency planning (3) assessing the impacts and evolving varieties tolerant to key climatic stresses (drought, heat, frost, flooding, etc.) in major food and horticulture crops, (4) continuous monitoring of greenhouse gases in open field conditions in major production systems, (5) evolving adaptation and mitigation strategies through enhancing water and nutrient use efficiency and conservation agriculture, (6) studying changes in pest dynamics, pest/pathogen-crop relationships and emergence of new pests and pathogens under changing climate, (7) adaptation strategies in livestock through nutritional and environmental manipulations and (8) harnessing the beneficial effects of temperature in inland and marine fisheries through better understanding of the spawning behaviour.

In each project village in Uttar Pradesh, the interventions are made in the following four modules (i) natural resources management (ii) crop production (iii) livestock & fisheries and (iv) institutional interventions

Approach of the Scheme: The unique features of the scheme implemented in XII Five Year Plan were:

1. Strengthening the existing network research on adaptation and mitigation (food crops, horticulture, livestock and fishery) with more infrastructure and capacity building
2. Setting up of high through put phenotyping platforms and temperature, CO2, ozone gradient facilities at identified locations/institutions including North East region.
3. Strengthening research on climate sensitive crops like cotton, maize, sugarcane, onion, etc. which are critical for India's farm GDP/exports but not covered in the XI Plan.

This Document comprises the Annual Action Plan of all the 17 KVKs representing different vulnerability group in Uttar Pradesh for the year 2023.

Krishi Vigyan Kendra, Khekra, Baghpat- 250101

Action Plan 2023

Name of KVK: Baghpat (U.P.)

Village: Shikhera/Patoli/Daulatpur

Module-1: Natural Resource Management

Intervention	Technology to be demonstrated	Critical input (Variety, Fertilizer / Chemicals doses)	Details of activity	No. of farmers	Area (ha)	Measurable indicators of output	Cost born by Project (Rupees)
In-situ moisture conservation RCT	Demonstration of line sowing of wheat using Multi-purpose seed drill	DBW-173 / DBW 71 @ 125 Kg / ha	i). Seed- 2500 Kg @ Rs. 50 /Kg ii) Multi-purpose seed drill hiring @ Rs. 200 /acre	50	20	Water saving, yield & productivity	1,25,000 10,000
	Promotion of low water requiring crop (Mustard)	R.H 725 @ 4 Kg/ha	i). Seed – 40 Kg @ Rs. 150/Kg	25	10	Water saving, yield & productivity	6,000
	Demonstration of soil moisture Indicator for irrigation management in Sugarcane	Soil moisture indicator	i). Soil moisture indicator – 12 (Qty) @ Rs. 1750 / unit	12	5	Water saving, yield & productivity	21,000
	Green manuring (for improving soil structure and fertility)	Dhaincha Seed @ 25 Kg/ha and Sun hemp @ 25 Kg/ha	i) Seed - 250 Kg @ Rs.80/Kg ii) Soil testing @ Rs. 200 /sampling (Before and after intervention)	25	5	Improve the soil fertility	20,000 10,000
	Soil moisture conservation using Hydro-gel in wheat	Hydro gel @ 2.5 kg/ha	Hydro gel - 25 kg @ Rs. 1500 / kg	25	10	Water saving, yield & productivity	37,500
	Crop residue management using waste decomposer	Waste decomposer @ 2 unit per farmer	Waste decomposer – 100 @ Rs. 20 / unit	50	20	Crop residue management	2000
						Total	**2,31,500**

Module-2: Crop Production

Intervention	Technology to be demonstrated	Critical input (Variety, Fertilizer / Chemicals doses,)	Details of activity	No. of farmers	Area (ha)	Measurable indicators of out put	Cost born by Project (Rupees)
Introduction to Latest High yield variety (Paddy)	Latest high yield and disease resistant variety (Paddy)	PB -1692, PB-1847, PB-1718 @ 20 Kg / ha	i). Seed- 200 Kg @ Rs. 120 / Kg	25	10	Yield & productivity	24,000
Kitchen gardening	High nutritive food availability	Vegetable kit	Vegetable seed kit @ Rs.100 / kit	25	-	Enhancement in Nutrition food	2,500
Introduction to less water requiring crop during Kharif (Green gram)	Improving soil fertility and low water required crop	K-667 @ 16 Kg / ha	Seed- 160 Kg @ Rs. 130 / Kg	50	10	Improve the soil fertility and improve yield & productivity	20,800
Integrated pest management (IPM) through bio-control agent	Bio-control agent based IPM through Tricho-card	Tricho cards in sugarcane crop @ 5 card / ha(4 cards/ farmers)	Tricho-cards-400 @ Rs. 50 /cards	100	20	Yield	20,000
						Total	**67,300**

Module-3: Livestock & Fisheries

Intervention	Technology to be demonstrated	Critical input (Breed / Variety / Medicine doses,)	Details of activity	No. of farmers	Unit / No. / Area (ha)	Measurable indicators of output	Cost born by Project (Rupees)
Promotion of high nutritive fodder variety (Jowar)	Varietal evaluation	U.P. Chari-1 & 2 @ 40 Kg / ha	Seed- 200 Kg @ Rs. 100 / Kg	25	05	Fodder yield and milk yield	20,000
Animal health camp	-	-	-	-	-	-	50,000
Seed bank/Fodder bank	-	-	-	-	-	-	5,000
						Total	**75,000**

Module-4: Institutional Interventions:

Interventions	Topic	No. of farmers
HRD training	In-situ moisture conservation (Green Manuring and Brown Mulching)	20
	Integrated pest management through Tricho-card in Sugarcane	20
	Seed production technology in Sugarcane crop	20
	Introduction to Alternate wetting drying techniques in Paddy for moisture conservation	20

Interventions	Topic	No. of farmers
	Soil health management through green manuring	20
	Use of Soil Moisture Indicator in irrigation management in sugarcane	20
	Introduction to techniques of Soil moisture conservation	20
	Crop residue management using waste decomposer	20
	Seed production technology in Wheat crop	20
	Introduction to benefits of rain water harvesting structures	20
	Seed production technology in mustard crop	20
	Nutrient management in Orchard	20
Total	**12**	**240**

Note: Lunch @ Rs. 80 / Farmer = **Rs. 19,200**

Training materials @ Rs. 50 / Farmer = **Rs. 12,000**

Total = **Rs. 31,200**

Any other (Pl. specify)	Exposure visit at IARI, New Delhi SVPUAT, Meerut	100
Climate literacy through a village level weather station	Exposure to weather station at KVK, Baghpat	20
Field Day	Field day on sugarcane and wheat demo. Field (03 Field visits)	75

Note: Exposure visit to IARI, New Delhi- Critical input (Lunch, Pen, Pad, Banner, traveling allowance etc.,) @ Rs. 60000 / exposure visit = **Rs. 60,000**

Note: Exposure visit to weather station at KVK, Baghpat - Critical input (Lunch, Pen, Pad, Banner, traveling allowance etc.,) @ **Rs. 7,000**

Note: Field day: Lunch @ Rs. 80 / Farmer = **Rs. 6,000**

Training materials @ Rs. 50 / Farmer = **Rs. 3,750**

Total = **Rs. 9,750**

Summary of budget (2022)

Heads Recurring		**Amount (Rs)**
I. Contingency		
1. Conducting Bench mark survey		-
2. Project Launching programme		-
3. Operational expenditure	Natural Resource Management	2,31,500
	Crop Production	67,300
	Livestock & Fisheries	70,000
	Institutional Interventions	1,07,950
1. SRF 1 No) Salary + HRA (@ Rs35000 + HRA 10 %)		4,62,000
2. POL/Vehicles		50,000
3. Office rent for 12 months @ Rs 1250.00 per month		15,000
4. Stationery, Report preparing, Office running expenditure etc.,		30,000
5. Miscellaneous Expenditure		25,000
II. T A		30,000
Total		**10,93,750**

Krishi Vigyan Kendra– Bahraich – I
Action Plan 2023

1. Details about the existing NICRA villages

S. No	Details	Village 1	Village 2	Village 3
1	Name of the village	Baundi	Rani Bagh	Jabdi
2	Involved in TDC since (year)	2011-12 (12)	2020 - 21 (3)	2021-22 (2)
3	Cultivated area (ha)	529.93	260.6	153.2
4	Rainfed Area (ha)	188.1	115.6	48.2
5	Irrigated Area (ha)	381.83	145.4	105
6	Flood affected area (ha)	434	188.4	123.5
7	Total Area of village (ha)	627.97	280.9	185.9
8	No. of households in the village	480	250	195
9	Approximate households covered so far	122	85	58

2. Divide the NICRA villages into predominant farming system typologies

S No.	Farming System Typologies	Vill. Baundi			Vill. Rani Bagh			Vill. Jabdi		
		Area (ha)	No. of farmers (approx.)	% coverage of the typology (area in the village)	Area (ha)	No. of farmers (approx.)	% coverage of the typology (area in the village)	Area (ha)	No. of farmers (approx.)	% coverage of the typology (area in the village)
1	Rainfed without animal	162.70	144	25.9	94.5	96	33.64	45.60	56	24.52
2	Rainfed with animal Crop-1/ Soil-1	22.40	15	3.56	21.1	21	7.51	2.6	5	1.39
3	Rainfed with animal Crop-2/ soil-2	-	-	-	-	-	-	-	-	-
4	Irrigated	292.5	229	46.59	105.2	108	37.45	79.4	112	42.71

	without animal	9			0					
5	Irrigated with animal	89.24	92	14.21	40.20	25	14.31	25.6	22	13.77

3. Predominant climatic, crop, animal and resource constraints of the major identified farming system typologies of NICRA villages

	Farming System Typologies	Vill. Baundi			Vill. Rani Bagh			Vill. Jabdi		
		Climate constraints	Resource /Crop/ Animal constraints	Other constraints	Climate constraints	Resource /Crop/ Animal constraints	Other constraints	Climate constraints	Resource /Crop/ Animal constraints	Other constraints
1	Rainfed without animal	Flood	1. Old and Longer Duration Varieties 2. Bad Resource Management	3. Lack of proper trainings 4. Lack of Agro advisory access	Flood	1. Old and Longer Duration Varieties 2. Bad Resource Management	3. Lack of proper trainings 4. Lack of Agro advisory access	Flood	1. Old and Longer Duration Varieties 2. Bad Resource Management	3. Lack of proper trainings 4. Lack of Agro advisory access
2	Rainfed with animal CROP-1/ Soil-1									
3	Rainfed with animal CROP-2/ Soil-2									
4	Irrigated without animal									
5	Irrigated with animal									
6	Other predominant system									

4. Identify Promising resilient technologies for addressing the constraints

S No	Farming System Typologies	Vill. Baundi			Vill. Rani Bagh			Vill. Jabdi		
		Climate constraints	Resource /Crop/ Animal constraints	Other constraints	Climate constraints	Resource /Crop/ Animal constraints	Other constraints	Climate constraints	Resource /Crop/ Animal constraints	Other constraints
1	Rainfed without animal	1. Early Sowing/Transplanting of Kharif Crops 2. Late Sowing of Rabi Crop 3. Summer sowing	1. Short to mid Duration Paddy : NDR 2065, PR-126 2. Late Sown Wheat : HD3271, HD3118 3. Crop Diversification : Toria, Mustard, Lentil 4. Summer Maize	1. Capacity Building 2. Seed Bank 3. Agro Advisory via IT Tools: WhatsApp	1. Early Sowing/Transplanting of Kharif Crops 2. Late Sowing of Rabi Crop 3. Summer sowing	1. Short to mid Duration Paddy : NDR 2065, PR-126 2. Late Sown Wheat : HD3271, HD3118 3. Crop Diversification : Toria, Mustard, Lentil 4. Summer Maize	1. Capacity Building 2. Seed Bank 3. Agro Advisory via IT Tools: WhatsApp	1. Early Sowing/Transplanting of Kharif Crops 2. Late Sowing of Rabi Crop 3. Summer sowing	1. Short to mid Duration Paddy : NDR 2065, PR-126 2. Late Sown Wheat : HD3271, HD3118 3. Crop Diversification : Toria, Mustard, Lentil 4. Summer Maize	1. Capacity Building 2. Seed Bank 3. Agro Advisory via IT Tools: WhatsApp
2	Rainfed with animal CROP-1/ Soil-									
3	Rainfed with animal CROP-2/ Soil-									
4	Irrigated without animal									
5	Irrigated with animal									
6	Other predominant system									

5. Categorization of the identified technologies in to NRM, Crops and Livestock in each of the village for taking up demonstrations during 2023-24

S No	Farming System Typologies	Vill Baundi				Vill Rani Bagh				Vill Jabdi			
		NRM	Crop	Livestock	Total	NRM	Crop	Livestock	Total	NRM	Crop	Livestock	Total
1	Rainfed without anima	1.Field Bunding 2. Crop Residue	1.Medium Duration paddy 2.Late	1.Green Fodder:	190	1.Field Bunding	1.Medium Duration	1.Green Fodder:	190	1.Field Bunding 2.Crop	1.Medium Duration	1.Green Fodder :	343
2	Rainfed with												

	anima CROP-1/ Soil-1	management 3. Fertilizer Saving	Wheat 3.Summer Maize 4.Mustard 5.Lentil 6.Horticultural Crops	Sudan Chari 2.Napier Grass 3.Barseem		2.Crop Residue management 3.Fertilizer Saving	paddy 2.Late Wheat 3.Summer Maize 4Mustard 5.Lentil 6.Horticultural Crops	Sudan Chari 2.Napier Grass 3.Barseem		Residue management 3.Fertilizer Saving	paddy 2.Late Wheat 3.Summer Maize 4.Mustard 5.Lentil 6.Horticultural Crops	Sudan Chari 2.Napier Grass 3.Barseem	
3	Rainfed with animal CROP-2/ Soil-2												
4	Irrigated without anima												
5	Irrigated with anima												
6	Other predominantsystem												

6. No. of farmers involved in each of the village for demonstrations during 2023-24 (technology wise)

S No	Farming System Typologies	Vill Baundi				Vill Rani Bagh				Vill Jabdi			
		NRM	Crop	Livestock	Total	NRM	Crop	Livestock	Total	NRM	Crop	Livestock	Total
1	Irrigated without animal	20	110	-	130	20	110	-	130	60	120	-	180
2	Irrigated with animal	-	-	60	60	-	-	60	60	-	-	60	60
3	Irrigated with Horticultural Crop	-	-	-	-	-	-	-	-	-	103	-	103

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

S No	Farming System Typologies	Vill Baundi				Vill Rani Bagh				Vill Jabdi			
		Climate Resilient Technology	Convergence with Scheme	No. of farmers proposed to be involv	Area to be covered (ha)	Climate Resilient Technology	Convergence with Scheme	No. of farmers proposed to be involv	Area to be covered (ha)	Climate Resilient Technology	Convergence with Scheme	No. of farmers proposed to be involv	Area to be covered (ha)

				ed				ed				ing	
1	Short/ Medium Duration Paddy			30	12			30	12			30	12
2	Late sown wheat			30	12			30	12			40	16
3	Summer Maize			10	2			10	2			10	2
4	Mustard			20	8			20	8			20	8
5	Lentil			20	8			20	8			20	8
6													

Activities and Cost

8. NRM Interventions.

8.1. Repair / Renovation of existing water harvesting structures, drainage channels etc.:

Sl No.	**Village 1, 2, 3, etc.**	**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)**
	Field Bunding*	-	-	100	60	-	-	-
		Sub-total 8.1						

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

Sl No.	**Village 1, 2, 3, etc.**	**Intervention**	**Unit cost Rs/ha A**	**Coverage Proposed**		**Total amount (Rs) A x C**
				Area (ha)B	No. of farm households proposed to be involved C	
1	**Vill Baundi Vill Rani Bagh Vill Jabdi**	Crop Residue Management using Machinery	6000	20	50	120000
		Fertilizer Management (LCC)	180	18.2	45	8100
		Crop Residue Management using Pusa Decomposer	6000	20	50	270000
		Sub-total 8.2.				

9.Crop Interventions.

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

Sl No.	Village 1,2,3 etc.	Intervention	Description		Cost (Rs/ha) A	Coverage Proposed		Total amount (Rs)AxC
			Crop	Variety (s)		Area (ha) B	No. of farm households to be involved C	
1	**Vill Baundi Vill Rani Bagh Vill Jabdi**	Short/Medium Duration Paddy	Paddy	NDR-2065	1500	36	90	54000
		Late Sown Wheat	Wheat	HD 3271/3118	4500	40	100	180000
		Summer Maize	Maize	Hy Ver	2200	15	30	33000
		Crop Diversification	Mustard	Pant Sweta/RH 725	1000	25	60	25000
			Lentil	PL-9	4500	25	60	112500
		Sub Total 9.1.						404500

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

Sl No.	village	Intervention	Description		Cost (Rs/ha)A	Coverage Proposed		Total amount (Rs) A x C
			Crop	Variety (s)		Area (ha) B	No. of farm households to be involved C	
1.	**Vill Baundi Vill Rani Bagh Vill Jabdi**	Crop Diversification	Garlic	G282	90000	0.4	15	36000
			Onion	NHRDF Red	25000	0.4	15	10000
			Okra	Hy ver	40000	2	20	80000
			Bottle Gourd	Hy ver	21000	2	20	42000
			Bitter Gourd	Hy Ver	12000	1	15	12000
			Fruit – Mango	Amrapali/ other newly release variety	12500	1.6	9	20000
			Fruit – Guava	CISH - Lalit/ other newly release variety	12500	1.6	9	20000
	Sub Total 9.2.							220000

10. Livestock and Fisheries

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

Sl No.	Details of feed intervention	Unit cost of intervention (Rs.)	No. of farm households to be involved	Total amount(Rs/ha)	Remarks
1	Health Camp – 3	50000	90	150000	with help of state Vet. Department
2	Sorghum	20000	90	20000	
3	Napier Grass	10000	90	10000	
4	Barseem	6500/ha	100 (15)	97500	
	Sub-total 10.1.			277500	

10.2. Establishment of Seed banks / Fodder banks, etc.

Sl No.	Seed bank/ Fodder Bank	Seed of crop and variety/ Fodder crop/ variety	Quantity of seed/ fodder produced/ storage (t)	Unit cost (Rs.)	No. of farmers involved	Amount (Rs.)
1	Seed bank	Paddy	1500	60000 x 3	-	180000
2		Wheat	3000			
3		Mustard	300			
4		Lentil	200			
	Sub-total 10.2.					180000

11. Non-recurring contingencies – Equipment

Proposal for Procurement of climate related farm machinery/ implements for Custom Hiring center at Vill. Jabdi/KVK Bahraich-I

S. No.	Item	Unit cost (Rs)	No. of units	Total amount (Rs)
1.	Cultivator	25000	2	50000
2.	Harrow	120000	2	240000
3.	Rotavator	180000	2	360000
4.	Super Seeder	350000	1	350000
5.	Multi-Crop Seed Drill cum Planter	120000	1	120000
6.	Ridge Bed Planter	100000	1	100000
7.	Multi Crop Power Thresher	150000	1	150000
8.	Power Tiller	250000	1	250000
9.	Brush Cutter	50000	2	100000
10	Winnowing cum Grading Machine	80000	1	80000
	Total NRC			1800000

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.)
Crop Production	Production Technology of crops (5 Trainings)	-	100	90000
Seed Storage	Seed Storage Technology for preservation of high value seeds	-	20	18000
Vegetable Production	Nursery Raising technology of vegetables	-	20	18000
Farm Mechanization	Efficient Machineries for Crop Production	-	20	18000
Green Fodder	Production Technology of green fodder (2 Trainings)	-	50	36000
Home Science	Value Addition opportunities in various crops	-	25	18000
Sub-total 12.1.				198000

12.2. Field Days/Exposure visits/Awareness programmes/Kisan melas/Kisan ghosti proposed for the year

Theme	Title of Programme	Proposed month	No. of participants	Cost (Rs.)
Paddy	3-Field Days for each crop (one in each adopted villages)	Sept-Oct	180	45000
Wheat		Feb-March	180	45000
Lentil		Feb-March	150	45000
Mustard		Jan-Feb	150	45000
Maize		Feb March	120	45000
Sub-total 12.2.			780	225000

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.)
Recommended Interventions in NICRA villages of Bahraich for fight against Climate Change	Book	Feb March	200	100000
Extension Literatures	Leaflets (10 Nos)	Feb – March	5000	25000
Research Article	In High NAAS Rated Journal	Feb – March	50000	50000
Sub-total 13.1.			55200	175000

13.2 Video Films

Video Film to be prepared	Duration (Minutes)	Proposed during the month	Cost (Rs.)
3 (Three)	10-15 minutes	Feb March	30000
Sub-total 13.2.			30000

14. Summary of cost Estimates for 2023-24

Item number	Title of the Item	Amount (Rs.)
8.1	Repair / Renovation of existing water harvesting structures, drainage channels etc	0.00
8.2	In situ conservation – Resource Conservation Technologies (RCTs), etc.	398100.00
9.1	Stress tolerant / improved varieties / Short duration / Legume crops, etc..	404500.00
9.2	Improved agronomic practices and other crop interventions, etc..	220000.00
10.1	Feed demonstrations for crop residue management / stress management: silage / feed blocks/ mineral mixture (MM) blocks / feed enrichment, etc..	277500.00
10.2	Establishment of Seed banks / Fodder banks, etc..	180000.00
11	Non-recurring contingencies – Equipment Proposal for Procurement of climate related farm machinery/ implements for Custom Hiring center at Vill. Jabdi/KVK Bahraich-I	1800000.00
12.1	Training programmes proposed for the year	198000.00
12.2	Field Days/Exposure visits/Awareness programmes/Kisan melas/Kisan ghosti proposed for the year	225000.00
13.1	Publications	175000.00
13.2	Video Films	30000.00
	Grand total (Rs.)	3908100.00

15. Plan for the spread of the proven practices (Convergence with departments, linkages with development organizations, etc.)

Sl. No	Proven technology/ Capacity building	Department involved	Strategy	Input arrangement / contribution from the department	Amount mobilised (Rs. In Lakhs)
1.	Field Leveling And Bunding	State Agriculture Department, Bahraich	Soil and Water Conservation strategy		25.00
2.	Cereal Paddy production		NRD 2065		10.00
3.	Cereal Wheat production		HD 3271		10.00
4.	Cereal Wheat production		DBW 187		15.00
5.	Oil seed Production-Mustard		PPS – 1/Pant Shweta		5.00
6.	Pulses production - Lentil		PL-9/PL-8		25.00
	Total				**90.00**

Krishi Vigyan Kendra-Banda

Action Plan 2023-24

1. Detailsabouttheexisting NICRA villages

S.N.	Nameofthevillage	Chaudhary Dera
2	Involvedin TDCsince(year)	2022-23
3	Cultivatedarea(ha)	313.04
4	RainfedArea(ha)	236.96 (68%)
5	IrrigatedArea(ha)	76.08 (24%)
6	Flood/Saltaffectedarea(ha)	00
7	TotalAreaofvillage(ha)	347.82
8	No.ofhouseholdsinthevillage	256
9	Approximatehouseholdscoveredsofar	100

2. DividetheNICRAvillagesintopredominantfarmingsystemtypologies

Sl No	FarmingSystem Typologies*	Village1		
		Area (ha)	No.offarmers (approx.)	% coverage of the typology (area in the village)
1	Rainfed Farming without Animal (FST-I)	18.55	26	5.92
2	RainfedFarming with Animal (FST-II)	218.41	168	69.78
3	Irrigated Farming withoutAnimal (FST-III)	25.38	22	8.10
4	Irrigated Farming withanimal (FST-IV)	50.70	40	16.20
5	Landless (FST- V)	-	13	-

3. Predominant climatic, crop, animal and resource constraints of the major identified farming system typologies of NICRA villages

S.N.	Farming System Typologies	Village1		
		Climate constraint	**Resource/Crop/Animal constraints**	**Other constraints**
1	Rainfed Farming without Animal (FST-I)	Drought, Heat wave,& uncertain rainfall	Poor Performance of crop varieties, Erosion prone and poor fertility of soil, Imbalance plant nutrition, Poor organic carbon content, Poor water Holding Capacity Infestation of diseases and insects, Malnutrition and unavailability of balance diet, Poor availability of seasonal fruit	Weather forecast and Scientific advisory
2	RainfedFaming with Animal(FST-II)	Drought & Heat wave, uncertain rainfall	Poor Performance of crop varieties, Erosion prone and poor fertility of soil, Imbalance plant nutrition, Poor organic carbon content, Poor water Holding Capacity Infestation of diseases and insects, Malnutrition and navailability of balance diet, Poor availability of seasonal fruit, Poor milk yield due to breed, Unavailability of green fodder Disease infestation, Poor yield due to poor management	Weather forecast and Scientific advisory
3	Irrigated Farming without Animal (FST-III)	Drought & Heat wave, uncertain rainfall	Poor Performance of crop varieties, Erosion prone and poor fertility of soil, Poor water use efficiency, Deep water table, Imbalance plant nutrition, Poor organic carbon content, Poor water Holding Capacity Infestation of diseases and insects, Malnutrition and unavailability of balance diet, Poor availability of seasonal fruit	Weather forecast and Scientific advisory

4	Irrigated Farming with animal (FST-IV)	Drought & Heat wave, uncertain rainfall	Poor Performance of crop varieties, Erosion prone and poor fertility of soil, Poor water use efficiency, Deep water table, Imbalance plant nutrition, Poor organic carbon content, Poor water Holding Capacity Infestation of diseases and insects, Malnutrition and unavailability of balance diet, Poor availability of seasonal fruit, Poor milk yield due to breed, Unavailability of green fodder Disease infestation, Poor yield due to poor management	Weather forecast and Scientific advisory
5	Landless (FST- V)	-	-	Unemployment,Livelihood security, Mall nutrition Migration

***Typologies mentioned here are indicative. Can vary for your situationIdentifypredominanttypologiesintheselectedvillagesforyoursituation.IdentifyconstrainsfortheselectedtypologiesintheNICRAvillages.**

4. Identify Promising resilient technologies for addressing the constraints

Sl. No	Farming System Typologies*	Village1shortlisted		
		Climate constraints	**Resource/Crop/Animal constraints**	**Other constraints**
1	Rainfed Farming without Animal (FST-I)	Drought, Heat wave, & uncertain rainfall	Improved high yielding varieties (Short duration and heat tolerant), Soil health Management (Soil Test based recommendation) Compost and Manure (Vermi Compost and NADEP), Improved crop management practices (IPM,IDM, INM, Seed Treatment),Seed bank (Participatory Seed Production), Nutrition and Health Management (Kitchen Garden, Vaccination, Food preservation, Meal Planning) Nursery horticultural crops & forestry (Locally available fruit crops orchard)	Weather forecast and Scientific advisory (Weather based advisories through whatsApp and different mobile app)
2	RainfedFarming with Animal (FST-II)	Drought & Heat wave, uncertain rainfall	Improved high yielding varieties (Short duration and heat tolerant), Soil health Management (Soil Test based recommendation) Compost and Manure (Vermi Compost and NADEP), Improved crop management practices (IPM,IDM, INM, Seed Treatment) , Seed bank (Participatory Seed Production), Nutrition and Health Management (Kitchen Garden, Vaccination, Food preservation, Meal Planning) Nursery horticultural crops &forestry (Locally available fruit crops orchard)Feeding management (Jaggery Block), Breeding Management (Sex Sorted Semen) Health Management (Animal health camp, and vaccination), Shelter Management (Hygiene maintenance, Body massage brush) Feed Management (Napier grass, Silage, Hay), Poultry (Kadaknath Incubator), Goatary(Bundelkhandi/ Sirohi)	Weather forecast and Scientific advisory (Weather based advisories through whatsApp and different mobile app)
3	Irrigated Farming withoutAnimal (FST-III)	Drought & Heat wave, uncertain rainfall	Modern irrigation facilities (Sprinkler System, HDP Pipe), Improved high yielding varieties (Short duration and heat tolerant), Soil health Management (Soil Test based recommendation) Compost and Manure (Vermi Compost and NADEP), Improved crop management practices (IPM,IDM, INM, Seed Treatment) , Seed bank (Participatory Seed Production), Nutrition and Health Management (Kitchen Garden, Vaccination, Food preservation, Meal Planning) Nursery horticultural crops & forestry (Locally available fruit crops orchard)	Weather forecast and Scientific advisory (Weather based advisories through whatsApp and different mobile app)

4	Irrigated Farming withanimal (FST-IV)	Drought & Heat wave, uncertain rainfall	Modern irrigation facilities (Sprinkler System, HDP Pipe),Improved high yielding varieties (Short duration and heat tolerant), Soil health Management (Soil Test based recommendation) Compost and Manure (Vermi Compost and NADEP), Improved crop management practices (IPM,IDM, INM, Seed Treatment) , Seed bank (Participatory Seed Production), Nutrition and Health Management (Kitchen Garden, Vaccination, Food preservation, Meal Planning) Nursery horticultural crops & forestry (Locally available fruit crops orchard)Feeding management (Jaggery Block), Breeding Management (Sex Sorted Semen) Health Management (Animal health camp, and vaccination), Shelter Management (Hygiene maintenance, Body massage brush) Feed Management (Napier grass, Silage, Hay), Poultry (Kadaknath Incubator), Goatary (Bundelkhandi/ Sirohi)	Weather forecast and Scientific advisory (Weather based advisories through whatsApp and different mobile app)
5	Landless Farmers (FST- V)	-	Post harvest management and value addition	Poultry & Goatary, Handicraft, Sewing and Stitching

5. Categorization of the identified technologies in to NRM,Crops and Livestock in each of the village for taking up demonstrations during 2023-24

S No	Farming System Typologies	Village1			
		NRM	Crop	Livestock	Total
1.	Rainfed Farming without Animal (FST-I)	1. Bunding& Leveling 2. Soil health management 3.Moisture conservation	1. Improved variety field crops 2.Stress tolerant varieties of crops 3.Integrated crop management module 4. Agro-forestry 5.Seed bank 6. Kitchen Garden, 7. Grain Storage 8. Post harvest management and value addition		11
2.	RainfedFarming with Animal (FST-II)	1. Bunding& Leveling 2. Soil health management 3. Moisture conservation	1. Improved variety field crops 2. Stress tolerant varieties of crops 3. Integrated crop management module 4. Agro- forestry 5. Seed bank 6. Kitchen Garden, 7. Grain Storage	1. Feeding management 2. Health management 3. Shelter Management 4. Fodder bank	16

			8. Post harvest management and value addition	5. Breed Improvement	
3.	Irrigated Farming withoutAnimal (FST-III)	1. Bunding& Leveling 2. Modern irrigation facilities 3. Soil health management	1.Improved variety field crops 2. Integrated crop management module 3. Agro-forestry 4. Seed bank 5. Kitchen Garden, 6. Grain Storage 7. Post harvest management and value addition 8. Orchard management		11
4.	Irrigated Farming withanimal (FST-IV)	1. Bunding& Leveling 2. Modern irrigation facilities 3. Soil health management	1.Improved variety field crops 2. Integrated crop management module 3. Agro-forestry 4. Seed bank 5. Kitchen Garden, 6. Grain Storage 7. Post harvest management and value addition 8. Orchard management	1. Feeding management, 2. Health Management, 3. Shelter Management, 4. Fodder bank 5. Breed improvement	16
5.	Landless Farmers (FST- V)	-	1. Post harvest management and value addition	1.Poultry 4. Goatary 3. Handicraft 4. Sewing and Stitching	5

- Integratemultipletechnologiesatthehouseholdsothatwecanassesstheimpactofmultipletechnologiesatthehouseholdlevel

6. No. of farmers involved in each of the village for demonstrations during 2023-24(technology wise)

SNo	Farming System Typologies	Village1						
		NRM	No. of farmer	Crop	No.of farmer	Livestock	No. of farmer	Total
1	Rainfed Farming without Animal (FST-I)	1. Bunding& Leveling 2.. Soil health management 3. Moisture conservation	1 6 1	1.Improved variety field crops 2. Stress tolerant varieties of crops 3. Integrated crop management module 4. Agro-forestry 5. Seed bank 6. Kitchen Garden, 7. Grain Storage 8. Post harvest management and value addition	5 2 5 1 5 10 1 2			39
2	RainfedFarming with Animal(FST-II)	1. Bunding& Leveling 2. Soil health management 3. Moisture conservation	1 72 4	1. Improved variety field crops 2. Stress tolerant varieties of crops 3. Integrated crop management module 4. Agro- forestry 5. Seed bank 6. Kitchen Garden, 7. Grain Storage 8. Post harvest management and value addition	35 8 20 1 15 60 1 4	1. Feeding management, 2. Health Management, 3. Shelter Management, 4. Fodder bank 5. Breed improvement	4 - 1 1 15	242
3	Irrigated Farming withoutAnimal (FST-III)	1. Bunding& Leveling 2. Modern irrigation facilities 3. Soil health management	1 - 6	1.Improved variety field crops 2. Integrated crop management module 3. Agro-forestry 4. Seed bank 5. Kitchen Garden, 6. Grain Storage	5 5 1 5 10 1			37

				7. Post harvest management and value addition 8. Orchard management	2 1			
4	Irrigated Farming withanimal (FST-IV)	1. Bunding& Leveling 2. Modern irrigation facilities 3. Soil health management	1 - 22	1.Improved variety field crops 2. Integrated crop management module 3. Agro-forestry 4. Seed bank 5. Kitchen Garden, 6. Grain Storage 7. Post harvest management and value addition 8. Orchard management	19 10 1 5 20 1 2 1	1. Feeding management, 2. Health Management, 3. Shelter Management, 4. Fodder bank 5. Breed improvement	2 - 1 1 5	91
5.	Landless (FST-V)			1. Post harvest management and value addition	-	5. Poultry 6. Goatary 3. Handicraft 4. Sewing and Stitching	5 2 3 3	13

7. ScalingoutofPromisingClimateResilientTechnologiesandproposednumberoffarmerstobe involved (in convergence with development departments)

Sl. No	FarmingSystem Typologies	Village1			
		Climate Resilient Technology	Convergence with Scheme	No. of farmers proposed to be involved	Area to be covered (ha)
1	Rainfed Farming without Animal (FST-I)	-	-	-	-
2	Rainfed Farming with Animal(FST-II)	-	-	-	-
3	Irrigated Farming without Animal (FST-III)	-	-	-	-
4	Irrigated Farming with animal (FST-IV)	-	-	-	-
5	Landless (FST-V)	-	-	-	-

8. NRM Interventions: **Activities and Cost**

Repair/Renovationofexistingwaterharvestingstructures,drainagechannelsetc.:

Sl No.	Intervention	Dimensions	No.of units	No.offarm households proposedtobeinvolved	Convergence value,if any (Rs)	Valueof farmers share(Rs)	Costto project (Rs)
1.	Bunding& Leveling		2 ha	4	00	00	20000
	Sub-total8.1						**20000**

Insitu conservation–Resource Conservation Technologies (RCTs),etc.

Sl No.	Intervention	Unitcost Rs/ha A	CoverageProposed		Total amount(Rs) AxC
			Area(ha) B	No. of farm households proposed to be involved **C**	
1.	Manual Weeding	10000/ unit	1 Unit	2	10000
2.	Mulching	10000	2.0 ha	5	20000
3.	Soil testing and soil health card issued	100	-	100	25000
4.	Green manuaring through Dhaincha	5000	2.0 ha	4	10000
5.	Vermi compos**t**	40000	-	1	40000
6.	NADEP compos**t**	20000	-	1	20000
	Sub-total8.2.				**125000**

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

Sl No.	Intervention	Description		Cost (Rs/ha) A	Coverage Proposed		Total amount(Rs AxC
		Crop	Variety(s)		Area (ha) B	No. of farm households to be involved C	
1.	Improved variety	Green gram	Shikha, PDM-11, 54, Pant moong-1, 3	2500	4.00	10	10000
3.	Stress tolerant variety/ Short duration	Sesame	Pragati,GJT-05,Shekhar	1000	4.00	10	4000
4	Improved variety	Sorghum	CSH-16,CSH-9,Bundela	1500	4.00	10	6000
5.	Improved variety	Pearl millet	ICMB-155,PUSA-322,ICMH-451	500	4.00	10	2000
6.	Improved variety	Chickpea	RVG-202,RVG-203,JG-12, JG-36	8000	4.00	10	32000
7.	Improved variety	Fieldpea	IPFD11-2,IPFD6-3, IPFD12-2	8000	4.00	10	32000
9.	Improved variety	Linseed	BUAT Alsi1, 2,3,4, Padmini, Parvati	4000	4.00	10	16000
12.	Improved variety	Tomato	KashiAman,Kashivikash,Pusa	20000	1.00	2	20000

			Ruby				
13.	Improved variety	Brinjal	KashiUttam,KashiTaru	20000	1.00	2	20000
15.	Orchard/Nursery	Lamon, Bael,Ber./ Brinjal, Tomato etc.	Dasheri,Amrapali,Narendra Bael-07,Gola,Apple/ KashiUttam,KashiTaru, KashiAman,Kashivikash,Pusa Ruby etc.	20000	0.80	4	80000
16.	Kitchen Garden	Kitchen Garden Kit	Seasonal Vegetables	125/unit	-	100	12500
	SubTotal9.1.						**234500**

9. Crop Interventions:

Improved agronomic practices and other crop interventions, etc.

Sl. No.	**Intervention**	**Description**		**Cost (Rs/ha) A**	**Coverage Proposed**		**Totalamount (Rs) AxC**
		Crop	Variety(s)		Area (ha) **B**	No. of farm households to be involved C	
1.	Use of *Rhizobium culture*	Chickpea/ Fieldpea	RVG-202,RVG-203,JG-12,JG-36, IPFD11-2,IPFD6-3,IPFD12-2	500	4.00	10	2000
2.	Azotobacter	Wheat	K1317,DBW187	1000	4.00	10	4000
3.	Intercropping	Wheat+ Mustard	K1317/DBW187+ RH-749/Giriraj	4000	4.00	10	16000
4.	Thinning and de-topping	Mustard	RH-749,Giriraj	600	4.00	10	2400
	SubTotal9.2.						**24400**

10. Livestock and Fisheries

Feeddemonstrationsforcropresiduemanagement/stressmanagement:silage/feedblocks/mineralmixture(MM) blocks/feed enrichment, etc..

Sl No.	Details of feed intervention	Unit cost of intervention(Rs.)	o. of farm households to be involved	Total amount (Rs/ha)
1.	Napier Grass	10000	2	20000
2.	Mineral Mixture	5000	6	30000
3.	Silage Making	10000	2Unit	20000
4.	Goatry (Shirohi,Jamunapari)	30000	2 Unit	60000
5.	Animal Health Camp vaccination	20000	All Village	20000
6.	AI(Sex Sorted Semen)	500	20	10000
7.	Kadaknath Breed	2000	5	10000
	Sub-total10.1.			**170000**

Establishment to Seed banks/Fodder banks,etc.

Sl No.	Seed bank/Fodder Bank	Seed of crop and variety/Fodder crop/variety	Quantity of seed/ fodd produced/ storage(t)	Unit cost (Rs.)	No. of farmers involved	Amount (Rs.)	Remarks
1.	Establishment of seed bank	pulses, oil seed and millets	25 Qt.	5000	5	25000	Grain Bin
2.	Fodder Bank	Napier/ Pearl millet	10 ton	-	2	-	Silage
	Sub-total10.2					**25000**	

10. Non-recurring contingencies–Equipment

ProposalforProcurementofclimaterelatedfarmmachinery/implementsforCustom Hiringcentre

Sl. No.	Item	Unit cost(Rs)	No. of units	Total amount(Rs)
1	Foot sprayer	6000	2	12000
2	Incubator	70000	1	70000
3	HDPE pipe (1000 fit)	50/fit	1000 fit	50000
4	Pipe lapeta	10/fit	1000fit	10000
5	Khurere	20000	1	20000
	TotalNRC			**162000**

11. Capacity Building& Other extension activities

Training programmes proposed for the year

Theme	Title of training programme	Proposed month	No. of participants	Cost(Rs.)
Kishan Mela	Exposure visit	November 2023	300	50000
ICM	Integrated crop management in Rabi cereals crop	January	30	3000
ICT	Awareness among farmers for daily updates	July	30	3000
ED	Business Planning for agri. enterprise among rural youth	Oct	30	3000
LPM	Summer Management of Livestock	April	30	3000
CP	Method and Role of *Rhizobium* seed treatment in pulse crop production	June	30	3000
LPM	Importance of vaccination and de-worming in farm animals	June	30	3000
LPM	Importance and preparation of balanced ration from locally available resources for dairy animal	July	30	3000
CP	Production technology of Sorghum	July	30	3000
LPM	Management of Farm Animals during Rainy Season	July	30	3000
ICM	Integrated crop management in Sesamum	August	30	3000
CP	Production technology of Napier Grass.	September	30	3000
LPM	Management of Livestock during Winters	October	30	3000
CP	Durum wheat cultivation techniques	November	30	3000
IPM	Integrated Pest & Disease in Field-pea	December	30	3000
IPM	Application of systemic insecticides for control of Mustard aphid	December	30	3000
Kitchen Garden	Role of kitchen garden in combating malnutrition in different seasons	June	30	3000

Nutrition Management	Prevention of infectious disease among children in summer season.	July	30	3000
Nutrition Management	Food processing /value addition	August	30	3000
Kitchen Garden	Care and management of kitchen garden in different seasons	September	30	3000
Nutrition Management	Role of vaccination to prevent seasonal health issues.	October	30	3000
Sub-total 12.1.				**110000**

FieldDays/Exposurevisits/Awarenessprogrammes/Kisanmelas/Kisanghostiproposedforthe year

Theme	**Title of Programme**	**Proposed month**	**No. of participants**	**Cost(Rs.)**
CP	Mustard Production Technology	January	40	4000
CP	Field pea production technology	February	40	4000
CP	High-techVegetable Day (Seasonal)	February	40	4000
CP	Chickpea Production Technology	February	40	4000
CP	Til Production Technology	September	40	4000
CP	Sorghum Production Technology	September	40	4000
Sub-total12.2.				**24000**

12. Publications and Media products proposed to be Developed Publications

Publication	**Nature of Publication (Book/Bulletin/Brochure etc.)**	**Proposed during the month**	**No. of Copies**	**Cost(Rs.)**
Importance of Varmi Compost	Folder	November,2023	500	5000
Importance of NadepCompost	Folder	December,2023	500	5000
Napier Production Technique	Folder	February, 2024	500	5000
Sub-total13.1.				**15000**

Video Films

Video Film to be prepared	**Duration(Minutes)**	**Proposed during the month**	**Cost(Rs.)**
Farmer Success Story	5	March,2023	5000
Sub-total13.2.			**5000**

13. Summary of cost Estimates for 2023-24

Item number	**Title of the Item**	**Amount(Rs.)**
8.1	NRM-Repair/Renovationofexistingwaterharvestingstructures,drainagechannels	20000
8.2	NRM-Insituconservation–ResourceConservationTechnologies(RCTs),etc	125000
9.1	CropInterventions-Stresstolerant/improvedvarieties/Shortduration/Legumecrops,etc	234500

9.2	CropInterventions-Improvedagronomicpracticesandothercropinterventions,etc	24400
10.1	Livestock and Fisheries- Feed demonstrations for crop residue management/ stress management: silage/feed blocks/mineral mixture(MM)blocks/feedenrichment, etc.	170000
10.2	Establishment of Seed banks/Fodder banks, etc.	25000
11	Non-recurring contingencies–Equipment Proposal for Procurement of climate related farmmachinery/implements for Custom Hiring centre	162000
12.1	Capacity Building & Other extension activities	110000
12.2	FieldDays/Exposurevisits/Awarenessprogrammes/Kisanmelas/Kisanghostiproposedforthe year	24000
13.1	Publications	15000
13.2	Video Film	5000
14	Salary (Senior Research Fellow)	401760
15	TA	100000
16	POL	20000
17	Misc.	20000
	Grand total (Rs.)	**1456660**

14. Plan for the spread of the proven practices(Convergence with Departments, linkages with development organizations, etc.)

Sl. No	Proven technology/Capacity building	Department involved	Strategy	Input arrangement /contribution from the department	Amount mobilized (Rs. In Lakhs)
1	Soil testing and soil health card issued	IFFCO	Farmer will be awered and contact will with the department.	100/ Sample	20000
2	Bunding & Leveling	MNREGA /BSA	Farmer will be awered and contact will with the department.	10 ha / 100000 per ha.	100000
3	Animal Health Camp vaccination	CPO	Farmer will be awered and contact will with the department.	500 Animal /20 per Animal	10000

Krishi Vigyan Kendra Bhadohi
Action Plan 2023

1. Details about the existing NICRA villages

S No	Details	Village 1
1	Name of the village	Uchetha
2	Involved in TDC since (year)	2022
3	Cultivated area (ha)	93.68
4	Rainfed Area (ha)	96
5	Irrigated Area (ha)	20
6	Flood/ Salt affected area (ha)	8
7	Total Area of village (ha)	120.205
8	No. of households in the village	225
9	Approximate households covered so far	2500

2. Divide the NICRA villages into predominant farming system typologies

S No	Farming System Typologies*	Village 1		
		Area (ha)	No. of farmers (approx.)	% coverage of the typology (area in the village)
1	Rainfed without animal	32.3	65	26.61
2	Rainfed with animal Crop-1/ Soil-1	26.5	50	22
3	Rainfed with animal Crop-2/ soil-2	61.2	110	50.16

3. Predominant climatic, crop, animal and resource constraints of the major identified farming system typologies of NICRA villages

S No	Farming System Typologies*	Village 1		
		Climate constraints	Resource /Crop/Animal constraints	Other constraints
1	Rainfed without animal	Heat wave & Drought	➢ Less crop growth	
2	Rainfed with animal CROP-1/ Soil-1	Heat wave & Drought	➢ Infertility & Low milk production in Animal ➢ Less crop growth ➢ Low green fodder production	In Animal, Less feeding of fodder
3	Rainfed with animal CROP-2/ Soil-2	Heat wave & Drought	➢ Infertility & Low milk production in Animal ➢ Less crop growth ➢ Low green fodder production	In Animal, Less feeding of fodder

4. Identify Promising resilient technologies for addressing the constraints

S No	Farming System Typologies*	Village 1- Technologies identified to minimize the impact of constraints shortlisted		
		Climate constraints	Resource /Crop/Animal constraints	Other constraints
1	**Rainfed without animal**	Heat wave & Drought	➢ Use of resistant variety Co-51 Rice ➢ Bajra-NSC-1071P	
2	**Rainfed with animal CROP-1/ Soil-1**	Heat wave & Drought	➢ Use of resistant variety Co-51 Rice & ➢ Bajra-NSC-1071P ➢ Use of mineral mixture and drought resistant green fodder for sustained milk production	Use of nutrient supplements for improving digestions
3	**Rainfed with**	Heat wave	➢ Use of resistant variety Co-51 Rice &	Use of nutrient

	animal CROP-2/ Soil-2	& Drought	➢ Bajra-NSC-1071P ➢ Use of mineral mixture and drought resistant green fodder for sustained milk production	supplements for improving digestions

5. Categorization of the identified technologies in to NRM, Crops and Livestock in each of the village for taking up demonstrations during 2023-24

S No	Farming System Typologies	Village 1			
		NRM	**Crop (FLD)**	**Livestock**	**Total**
1	**Rainfed without animal**	1) Water harvesting techniques 2) Bund formation for runoff water 3) Irrigation through Sprinkler	1) Co-51 through DSR 2) Bajra Hybrid 3) RagiVl Mandua-204 4) Papaya Red lady 5) Aonla NA-7 6) Kharif Onion AFDR 7) Okra KashiKranti 8) WheatHD-2967 9) MustardRH-749 10) Linseed (Alsi) Parvati 11) Vegetable Pea KashiMukti 12) Onion AFLR 13) Microbial Consodial 14) Leaf colour chart	-	17
2	**Rainfed with animal CROP-1/ Soil-1**	1) Water harvesting techniques 2) Bound formation for runoff water 3) Irrigation through Sprinkler	1) 1) Co-51 through DSR 2) Bajra Hybrid 3) RagiVl Mandua-204 4) Papaya Red lady 5) Aonla NA-7 6) Kharif Onion AFDR 7) Okra KashiKranti 8) WheatHD-2967 9) MustardRH-749 10) Linseed (Alsi) Parvati 11) Vegetable Pea KashiMukti 12) Onion AFLR 13) Microbial Consortia 14) Leaf colour chart	1) Vaccination camp for cow &Buffalo Hemorrhagic Septicemia Disease. 2) Animal health and Infertility management camp 3) Distribution of Green fodder cutting	20
3	**Rainfed with animal CROP-2/ Soil-2**	1) Water harvesting techniques 2) Bound formation for runoff water 3) Irrigation through Sprinkler	-	1) Vaccination camp for cow &Buffalo Hemorrhagic Septicemia Disease. 2) Animal health and Infertility management camp 3) Distribution of Green fodder cutting	6

6. No. of farmers involved in each of the village for demonstrations during 2023-24 (technology wise)

S No	Farming System Typologies	Village 1			
		NRM	**Crop**	**Livestock**	**Total**
1	Rainfed without animal	75	350	-	425
2	Rainfed with animal CROP-1/ Soil-1	75	350	75	500
3	Rainfed with animal CROP-2/ Soil-2	75	-	75	150

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

S No	FST	Village 1		
		Climate Resilient Technology	**No. of farmers proposed to be involved**	**Area to be covered (ha)**
1	Rainfed without animal	1) 1) Co-51 through DSR 2) Bajra Hybrid 3) RagiVl Mandua-204 4) Papaya Red lady 5) Aonla NA-7 6) Kharif Onion AFDR 7) Okra KashiKranti 8) WheatHD-2967 9) MustardRH-749 10) Linseed (Alsi) Parvati 11) Vegetable Pea KashiMukti 12) Onion AFLR 13) Microbial Consortia 14) Leaf colour chart	350	146
2	Rainfed with animal CROP-1/ Soil-1	1) 1) Co-51 through DSR 2) Bajra Hybrid 3) RagiVl Mandua-204 4) Papaya Red lady 5) Aonla NA-7 6) Kharif Onion AFDR 7) Okra KashiKranti 8) WheatHD-2967 9) MustardRH-749 10) Linseed (Alsi) Parvati 11) Vegetable Pea KashiMukti 12) Onion AFLR 13) Microbial Consortia 14) Leaf colour chart 15) Vaccination camp for cow & Buffalo Hemorrhagic Septicemia Disease. 16) Animal health and Infertility management camp 17) Distribution of Green fodder cutting	350/250 animal	146

3	Rainfed with animal CROP-2/ Soil-2	1) 1) Co-51 through DSR 2) Bajra Hybrid 3) RagiVl Mandua-204 4) Papaya Red lady 5) Aonla NA-7 6) Kharif Onion AFDR 7) Okra KashiKranti 8) WheatHD-2967 9) MustardRH-749 10) Linseed (Alsi) Parvati 11) Vegetable Pea KashiMukti 12) Onion AFLR 13) Microbial Consortia 14) Leaf colour chart 15) Vaccination camp for cow & Buffalo Hemorrhagic Septicemia Disease. 16) Animal health and Infertility management camp 17) Distribution of Green fodder cutting	350/250 animal	146

Activities and Cost

8. NRM Interventions;

8.1. Repair / Renovation of existing water harvesting structures, drainage channels etc.:

Sl No.	Village 1, 2, 3, etc.	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)
1	Uchetha	Pond Renovation	90.52 x88.39x45.7 x86.86 m Tota Area=15859.04 m2	1	30	200000	-	200000
	Sub-total 8.1							**200000**

9.Crop Interventions;

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

Sl No.	Village 1,2,3 etc.	Intervention	Description		Cost (Rs/ha) A	Coverage Proposed		Total amount (Rs) A x C
			Crop	Variety (s)		Area (ha) B	No. of farm households to be involved	
1.	Uchetha	Introduction of short duration paddy variety	Paddy Wheat Mustard Veg. Pea	Co-51 HD-2967 RH-749 KashiMukti		26.5	137	68120
2		Introduction of High yielding variety	Moong Linseed Onion	Virat Parvati AFLR		6.125	67	30900
3		Introduction of High yielding variety	Bajra	MPMH-17		8	36	9500
	Sub Total 9.1.							**108520**

9.Crop Interventions;

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

Sl No.	village	Intervention	Description		Cost (Rs/ha) A	Coverage Proposed		Total amount (Rs) A x C
			Crop	Variety (s)		Area (ha)B	No. of farm households to be involved	
1	Uchetha	Introduction of Improved millets and Finger millets variety	Finger millet	VL Mandua 204		0.5	25	1200
		Improved papaya Variety	Papaya	Red Lady		.25 ha	700	21000
		Aonla	Aonla	NA-7		0.125	25	10000

		Okra	Okra	KashiKranti				6400
		Microbial Consortium	-	-	-	-	100	24000
		Leaf colour chart	-	-	-	-	100	18000
		Oyster Mushroom cultivation	Oyster Mushroom	Oyster Mushroom	-	-	15	15000
		Sub Total 9.2.						**95600**

10. Livestock and Fisheries

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

Sl No.	Details of feed intervention	Unit cost of intervention (Rs.)	No. of farm households to be involved	Total amount (Rs/ha)
1	Dewrming + Mineral Mixture	300	100	30000
	Sub-total 10.1.			**30000**

11. Non-recurring contingencies – Equipment

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

S. No.	Item	Unit cost (Rs)	No. of units	Total amount (Rs)
1.	Solar Pumping Set 5hp	150000	1	150000
	Total NRC			**150000**

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.)
Village Risk Management committee Formation	Gosthi on Formation of village risk Management committee	05January 2023	20	800
Natural farming	Low cost technology of natural farming	02 Feb, 2023	34	1360
Scientific Cultivation	Production technology of Okra, Bitter Gourd, Pumpkin,Sponge Gourd and Bottle gourd	20 Feb, 2023	11	440
Scientific Cultivation	Production technology of Moong	10 March, 2023	16	640
Seed Storage	Pro Harvest Bag Uses training and Distribution	25 March, 2023	100	4000
Sustainable soil health Management	Use of Green manure for sustainable soil health	05 April 2023	25	1000
Sustainable soil health Management	Soil health management through INM	24 April 2023	25	1000
Conservation of Agriculture	Rice cultivation through DSR techniques	27 June 2023	30	1200
Scientific Cultivation	Production technology of Ragi	11 July 2023	09	180
Scientific Cultivation	Production technology of Kharif Onion	11 July 2023	22	880
Scientific Cultivation	Production technology of Bajra	21 July 2023	19	760
Sustainable soil health Management	Production technology of Vermicompost	August 2023	25	1000
Nutrient management of Rice crops	Use of LCC for rice & its benefits	August 2023	25	1000
Scientific Cultivation	Plantation of fruit crops	Sept 2023	25	1000
Specialized farming	Oyster Mushroom cultivation	Sept 2023	15	600
Climate resilient Agriculture	Adverse weather make a opportunity for growing vegetables through the advance weather information	Sept,2023	20	800
Scientific Cultivation	Cultivation of Onion	Oct.2023	30	1200
Scientific Cultivation	Production technology of vegetable pea	Oct.2023	25	1000

Climate resilient Agriculture	Pre advance plant protection through the assimilation of Agromet Bulletin Advisory	Nov,2023	25	1000
Disease management	Use of consortia for bettercrop health	Nov 2023	25	1000
Climate resilient Agriculture	Adverse weather make a opportunity for growing vegetables through the advance weather information	Dec, 2023	25	1000
Sub-total 12.1				**21860**

12.2. Field Days/Exposure visits/Awareness programmes/Kisanmelas/Kisanghosti proposed for the year

Theme	Title of Programme	Proposed month	No. of participants	Cost (Rs.)
Field day and Gosthi	20	April to July	1300	52000
Exposure visit		April to July	125	5000
Scientist visit		April to July	150	6000
Sub-total 12.2.				**63000**

13. Publications and Media products proposed to be Developed

Publication	Nature of Publication (Book/Bulletin/ Brochure etc.)	Proposed during the month	No. of Copies	Cost (Rs.)
Drought prone area keliye resistant variety	Pamphlet	August	1000	4000
NICRA Role its Village development	Pamphlet	September	1000	4000
Weather based forecasting	Pamphlet	October	1000	4000
SichanyihetuTapakSichayivaFavra	Pamphlet	November	1000	4000
Sub-total 13.1.				16000

14. Summary of cost Estimates for 2023-24

Item number	Title of the Item	Amount (Rs.)
8.1	Repair / Renovation of existing water harvesting	2,00000
9.1	Stress tolerant / improved varieties / Short duration / Legume crops,	108520
9.2	Improved agronomic practices and other crop interventions	95600
10.1	Feed demonstrations for crop residue management	30,000
11	Proposal for Procurement of climate related farm machinery/ implements for Custom Hiring centre	1,50000
12.1	Training programmes	21860
12.2	Field Days/Exposure visits/Awareness programmes/Kisanmelas/Kisanghosti proposed for the year	63000
13	Publications	16,000
	Grand total (Rs.)	**6,84,980**

Krishi Vigyan Kendra-Chitrakoot

1. Details about the existing NICRA villages

S.No	Details	Village 1	Village 2	Village 3	Village 4
1	Name of the village	Titihara	Rampurwa	Baihar	Hariharpur
2	Involved in TDC since (year)	2011	2016	2020	2022
3	Cultivated area (ha)	532.42	232.42	188	40.8
4	Rainfed Area (ha)	460	170	64.5	30.8
5	Irrigated Area (ha)	72	62	123.5	15
6	Flood/ Salt affected area (ha)	-	-	-	-
7	Total Area of village (ha)	898.92		383.11	302.43
8	No. of households in the village	503	120	200	46
9	Approximate households covered so far	425	95	145	25

2. Divide the NICRA villages into predominant farming system typologies

S No	Farming System Typologies*	Village 1			Village 2€		
		Area (ha)	No. of farmers (approx.)	% coverage of the typology (area in the village)	Area (ha)	No. of farmers (approx.)	% coverage of the typology (area in the village)
1	Rainfed without animal	10.5	27	8.1	5.0	22	3.52
2	Rainfed with animal Crop-1/ Soil-1	4.5	65	19.5	3.0	55	8.8
3	Rainfed with animal Crop-2/ soil-2	3.0	45	13.5	2.0	42	6.72
4	Irrigated without animal	5.0	55	16.5	2.5	35	5.6
5	Irrigated with animal	6.0	35	10.5	3.5	56	8.96
6	Other predominant system	1.0	12	3.6	0	0	0

3. Divide the NICRA villages into predominant farming system typologies

S No	Farming System Typologies*	Village 3			Village 4€		
		Area (ha)	No. of farmers (approx.)	% coverage of the typology (area in the village)	Area (ha)	No. of farmers (approx.)	% coverage of the typology (area in the village)
1	Rainfed without animal	3.5	18	23.33	2.0	15	20.0
2	Rainfed with animal Crop-1/ Soil-1	2.5	65	16.66	2.5	35	25.0
3	Rainfed with animal Crop-2/ soil-2	2.0	45	13.33	1.5	15	15.0
4	Irrigated without animal	3.0	25	20.0	2.0	35	20.0
5	Irrigated with animal	4.0	35	26.66	1.0	21	10.0
6	Other predominant system	0	0	0	1.0	15	10.0

Predominant Climatic and Resource Constraints of the major farming system typologies of NICRA villages

S No	FST	NICRA Villages	
		Climate constraints	**Resource /Crop/Animal constraints**
1	Rainfed without animal	Erratic rainfall, Risk of dry spells/heavy rains, High runoff	Poor soil organic matter, Low productivity , Lack of availability of short duration drought tolerant varieties, Less penetration of rain water due to hard pen
2	Rainfed with animal	Extreme weather, Poor quality of drinking water	Lack of assured fodder supply, little green fodder
			Scarcity of good quality drinking water for animals
			Low productivity of indigenous animals Anestrous in buffaloes Use of cow dung as fuel

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

S. No	Farming System Typologies	NICRA Villages	
		Climate constraints	**Resource /Crop/Animal constraints**
3	Irrigated without animal	Sometimes un-timely rains & hailstorm damages rabi crops,	Limited water availability, limited area under assured irrigation, Most of the open wells dried or less water, Poor quality of ground water.
4	Irrigated with animal	Extreme weather, poor quality of drinking water	Dependence on crop residues Little green fodder during the lean period Quantity and quality of feeds Health-Ecto-endo parasites Anestrous in buffaloes Use of cow dung as fuel

Identified promising resilient technologies for addressing the constraints

S No	Farming System Typologies	Villages	
		Climate constraints	**Resource /Crop/Animal constraints**
1	Rainfed without animal	Construction of rain water harvesting structures, Levelling, Bunding, Deep ploughing	Short duration drought tolerant varieties of Bajra (Dhan shakti), Sesame (pragati) Mustard (M-30), Application of gypsum, Green manuring
2	Rainfed with animal	Roof water harvesting tank for safe & clean water drinking, Improved housing	Improved fodder varieties of sorghum, Napier grass, green fodder cultivation with limited/ harvested water, Use of area specific MM, Vermi composting, Azolla cultivation

Identified promising resilient technologies for addressing the constraints

S No	Farming System Typologies	Village		
		Climate constraints	**Resource /Crop/Animal constraints**	**Other constraints**
3	Irrigated without animal	Recharge of tube wells, Efficient irrigation methods, Reclamation of low fertile/saline soils by green manuring	Short duration heat tolerant varieties of Mustard (M-30), Wheat (HI-1605,) & Crop Diversification Vegetable Production, Soil test based nutrient application	Sowing on Seeddril Mulching in vegetables
4	Irrigated with animal	Roof water harvesting tank for safe & clean water drinking Improved housing	Improved fodder crops & varieties, Improved breeds, balanced feeding, Vermi composting, Azolla cultivation, MM, UMMB	

5. Categorization of the identified technologies in to NRM, Crops and Livestock in each of the village for taking up demonstrations during 2023-24

S No	Farming System Typologies	Village 1				Village 2			
		NRM	Crop	Livestock	Total	NRM	Crop	Livestock	Total
1	Rainfed without animal	1	1	0	2	0	1	0	1
2	Rainfed with animal CROP-1/ Soil-1	1	2	1	4	1	2	1	4
3	Rainfed with animal CROP-2/ Soil-2	0	1	1	2	0	1	1	2
4	Irrigated without animal	0	2	0	2	0	1	0	1
5	Irrigated with animal	0	2	2	4	0	2	2	4
6	Other predominant system	1	0	0	1	0	1	0	1

5. Categorization of the identified technologies in to NRM, Crops and Livestock in each of the village for taking up demonstrations during 2023-24

S No	Farming System Typologies	Village 3				Village 4			
		NRM	Crop	Livestock	Total	NRM	Crop	Livestock	Total
1	Rainfed without animal	1	1	1	3	1	1	0	2
2	Rainfed with animal CROP-1/ Soil-1	1	1	1	3	0	1	1	2
3	Rainfed with animal CROP-2/ Soil-2	0	1	1	2	1	1	1	3
4	Irrigated without animal	0	2	0	2	0	2	0	2
5	Irrigated with animal	1	2	1	4	1	2	1	4
6	Other predominant system	0	0	0	0	1	0	0	1

6. No. of farmers involved in each of the village for demonstrations during 2023-24 (technology wise)

S No	Farming System Typologies	Village 1				Village 2			
		NRM	Crop	Livestock	Total	NRM	Crop	Livestock	Total
1	Rainfed without animal	0	0	0	0	0	0	0	0
2	Rainfed with animal CROP-1/ Soil-1	0	0	0	0	0	14	0	14
3	Rainfed with animal CROP-2/ Soil-2	0	0	0	0	0	5	0	5
4	Irrigated without animal	0	0	0	0	0	0	0	0
5	Irrigated with animal	0	0	0	0	0	9	0	9
6	Other predominant system	0	0	0	0	0	0	0	0

6. No. of farmers involved in each of the village for demonstrations during 2023-24 (technology wise)

S No	Farming System Typologies	Village 3				Village 4			
		NRM	Crop	Livestock	Total	NRM	Crop	Livestock	Total
1	Rainfed without animal	0	3	0	3	0	0	0	0
2	Rainfed with animal CROP-1/ Soil-1	0	34	0	34	0	2	0	2
3	Rainfed with animal CROP-2/ Soil-2	0	21	0	21	0	2	0	2
4	Irrigated without animal	0	10	0	10	0	0	0	0

5	Irrigated with animal	0	7	0	7	0	2	0	2
6	Other predominant system	0	0	0	0	0	0	0	0

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

S No	FST	Village 1				Village 2				Village 3			
		Climate Resilient Technology	Convergence with Scheme	No. of farmers proposed to be involved	Area to be covered (ha)	Climate Resilient Technology	Convergence with Scheme	No. of farmers proposed to be involved	Area to be covered (ha)	Climate Resilient Technology	Convergence with Scheme	No. of farmers proposed to be involved	Area to be covered (ha)
1	Rainfed without animal	-	-	-	-	-	-	-	-	-	-	-	-
2	Rainfed with animal Crop-1	-	-	-	-	-	-	-	-	-	-	-	-
3	Rainfed with animal CROP-2/ Soil-2	-	-	-	-	Ragee (seed)	Ag (S.G.)	22	3.52	Ragee (seed)	Ag (S.G.)	28	4.48
4	Irrigated without animal	-	-	-	-	-	-	-	-	-	-	-	-
5	Irrigated with animal	-	-	-	-	-	-	-	-	-	-	-	-

Activities and Cost

8. NRM Interventions;

8.1. Repair / Renovation of existing water harvesting structures, drainage channels etc.:

Sl No.	Village 1, 2, 3, etc.	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)
1	Titihara, Rampurwa,Baihar & Hariharpur	Repair of open well	-	5	45	125000/-	10000/-	115000/-

2	Hariharpur & Baihar	Repair Hand pump	-	2	59	20000/-	2000/-	18000/-
	Sub-total 8.1			**7**	**104**	**145000/-**	**12000/-**	**133000/-**

Activities and Cost

8. NRM Interventions;

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

Sl No.	Village 1, 2, 3, etc.	Intervention	Unit cost Rs/ha A	Coverage Proposed		Total amount (Rs) A x C
				Area (ha) B	No. of farm households proposed to be involved C	
1.	Titihara , Rampurwa , Baihar & Hariharpur	Banding	10000/-	5.0	15	150000/-
		Leveling	10000/-	2.0	5	50000/-
		Farm pond	50000/-	0.32	3	150000/-
		Sub-total 8.2.	**70000/-**	**7.32**	**42**	**350000/-**

Activities and Cost

9.Crop Interventions;

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

Sl No.	Village 1,2,3 etc.	Intervention	Description		Cost (Rs/ha) A	Coverage Proposed		Total amount (Rs) A x B
			Crop	Variety (s)		Area (ha)B	No. of farm households to be involved C	
1.	Titihara , Rampurwa , Baihar & Hariharpur	Drought	Chickpea, Lentil	All varieties Will be used which released within 5 year	47350/-	10	60	473500/-
2.		High temperature	Wheat		34690/-	15	50	520350/-
3.		Oil seed crop	Mustard , Sesame		43276/-	10	50	432760/-
4.		Seed for legume catch crops	Green gram		19700/-	10	30	197000/-
		Sub Total 9.1.			**145016/-**	**45**	**190**	**1623610/-**

Activities and Cost

9.Crop Interventions;

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

Sl No.	village	Intervention	Description		Cost (Rs/ha) A	Coverage Proposed		Total amount (Rs)A x B
			Crop	Variety (s)		Area (ha)B	No. of farm households to be involved C	
1.	Baihar	Mushroom cultivation	Mushroom	Oyster	10000/-	2 unit	15	20000/-
2.	Titihara , Rampurwa , Baihar & Hariharpur	Income generation	Vegetables	HYV	45000/-	4	15	180000/-
3.	Baihar , Rampurwa , Hariharpur	Transplanting	Paddy	Bona dubraj	32596/-	2.4	13	78230/-
4.	Rampurwa , Baihar	L.D. Pigeon pea	Pigeon pea	Rajendr -1	15825/-	4.8	26	75960/-
5.	Rampurwa ,Baihar & Hariharpur	Millets crop	Bajra	Dhan shakti	22616/-	8.0	50	180928/-
6.			Ramdana		54000/-	1.5	40	81000/-
7.			Kodo	CG-03	46000/-	1.0	18	46000/-
		Sub Total 9.2.			226037/-		177	662118/-

Activities and Cost

10. Livestock and Fisheries

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

Sl No.	Details of feed intervention	Unit cost of intervention (Rs.)	No. of farm households to be involved	Total amount (Rs/ha)
1.	Perennial grass	3000/-	50	150000/-
2.	Goat farming	8000/-	10	80000/-
3.	Fish farming	10000/-	5	50000/-
4.	Mineral mixture	250/-	100	25000/-
5.	Vermi compost bag	2000/-	10	20000/-
6.	Low cost poultry house	15000/-	3	45000/-
7.	Back yard poultry farming	5000/-	3	15000/-
	Sub-total 10.1.	47250/-	178	385000/-

Activities and Cost

10.2. Establishment of Seed banks / Fodder banks, etc..

Sl No.	Seed bank/Fodder Bank	Seed of crop and variety/ Fodder crop/ variety	Quantity of seed/ fodder produced/ storage (t)	Unit cost (Rs.)	No.of farmers involved	Amount (Rs.)
1.	Seed bank	Wheat (K-1006)	0.5	2000/-	5	10000/-
2.		Chick pea	0.5	2000/-	5	10000/-
	Sub-total 10.2.				10	20000/-

Activities and Cost

11. Non-recurring contingencies – Equipment

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

S. No.	Item	Unit cost (Rs)	No. of units	Total amount (Rs)
1.	BBF Planter	95000/-	1	95000/-
	Total NRC	95000/-		95000/-

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.)
	Deep ploughing in summer	May	26	2600/-
	Soil testing for nutrient management	May	24	2400/-
	Resource conservation technologies	June	20	2000/-
	Green manuring	July	26	2600/-
	Improve nutritional status through kitchen Gardening	July/Oct	50	5000/-
	Rain water harvesting	August	24	2400/-
	Goat Keeping	September	23	2300/-
	Poultry farming	September	25	2500/-
	SHG, Seed club formation	October	23	2300/-
	Weed management in Rabi crops	November	20	2000/-
	Fertilizer management in crops	December	25	2500/-
	Disease management in Rabi crops	January	22	2200/-
	Insect control in pulse crops	February	24	2400/-
Sub-total 12.1.			**332**	**33200/-**

12. Capacity Building & Other extension activities

12.2. Field Days/Exposure visits/Awareness programmes/Kisan melas/Kisan ghosti proposed for the year

Theme	Title of Programme	Proposed month	No. of participants	Cost (Rs.)
Field Days	Paddy	August	20	2000/-
	Pigeon pea	November	15	1500/-
	Wheat	January	25	2500/-
	Sprinkler irrigation in chick pea	February	40	4000/-
Exposure visits	Knowledge upgrade	October	25	50000/-

Kishan gosthi	NRM , Crop , Livestock , Fish farming & CHC	May to March	265	13250/-
Awareness programmers	Climate change to Safe drinking water	October	50	5000/-
Sub-total 12.2.			**440**	**78250/-**

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.)
	Bulletin	march	50	10000/-
Sub-total 13.1.			50	10000/-

13.2 Video Films

Video Film to be prepared	Duration (Minutes)	Proposed during the month	Cost (Rs.)
-	-	-	-
Sub-total 13.2.			

14. Summary of cost Estimates for 2023-24

Item number	Title of the Item	Amount (Rs.)
8.1	Repair / Renovation of existing water harvesting structures, drainage channels	133000/-
8.2	In situ conservation – Resource Conservation Technologies (RCTs),	350000/-
9.1	Stress tolerant / improved varieties / Short duration / Legume crops, etc..	1623610/-
9.2	Improved agronomic practices and other crop interventions, etc..	662118/-
10.1	Feed demonstrations for crop residue management / stress management: silage / feed blocks/ mineral mixture (MM) blocks / feed enrichment, etc..	385000/-
10.2	Establishment of Seed banks / Fodder banks, etc..	20000/-
11	Proposal for Procurement of climate related farm machinery/ implements for Custom Hiring centre	95000/-
12.1	Training programmes proposed for the year	33200/-
12.2	Field Days/Exposure visits/Awareness programmes/Kisan melas/Kisan ghosti proposed for the year	78250/-
13.1	Publications	10000/-
	Grand total (Rs.)	**3390178**

15. Plan for the spread of the proven practices (Convergence with departments, linkages with development organisations, etc.,)

Sl. No	Proven technology/ Capacity building	Department involved	Strategy	Input arrangement / contribution from the department	Amount mobilised (Rs. In Lakhs)

Krishi Vigyan Kendra–Gonda-I (Uttar Pradesh)
Action Plan 2023-24

Details about the villages involved in the programme

S No	Details	Village 1	Village 2	Village 3	Village 4
1	Name of the village	**BAMBAMPURWA**	**RAMBALIPURWA**	**SUKAINAYAK**	**BABAMAJHA**
2	Involved in TDC since (year)	2015-2016	2020-2021	2020-2021	2020-2021
3	Cultivated area (ha)	310.0	295.0	326.0	275.0
4	Rainfed Area (ha)	0	0	0	0
5	Flood prone Area (ha)	205.0	198.0	219.0	181.0
6	Irrigated Area (ha)	105.0	97.0	107.0	96.0
7	No. of households in the village	70	45	42	55

2. Divide the NICRA villages into predominant farming system typologies

S No	Farming System Typologies*	Village 1 (**BAMBAMPURWA)**			Village 2 (**RAMBALIPURWA)**		
		Area (ha)	No. of farmers (approx.)	% coverage of the typology (area in the village)	Area (ha)	No. of farmers (approx.)	% coverage of the typology (area in the village)
1	1-Field crops+Live Stock	120.0	270	39	94.0	145	32
2	2-Field crop+ vegetables	77.5	121	25	62.0	119	22
3	3-Live Stock+Vegetables	46.5	96	15	55.0	72	19
4	4-Field crop + Live Stock+ Vegetables	66.0	163	21	80.0	94	27

S No	Farming System Typologies*	Village 3 (**SUKAINAYAK)**			Village 4 (**BABAMAJHA)**		
		Area (ha)	No. of farmers (approx.)	% coverage of the typology (area in the village)	Area (ha)	No. of farmers (approx.)	% coverage of the typology (area in the village)
1	1-Field crops + Live Stock	86	245	31.97	104.0	155	32
2	2-Field crop +vegetables	70	112	23.3	65.0	110	21
3	3-Live Stock+Vegetables	53	85	19.70	60.0	52	18
4	4-Field crop + Live Stock+ Vegetables	60	90	22.30	93	98	29

3. Predominant climatic, crop, animal and resource constraints of the major identified farming system typologies of NICRA villages

S No	FST	Village 1 (**BAMBAMPURWA)**		Village 2 (**RAMBALIPURWA)**	
		Climate constraints	**Resource /Crop/Animal constraints**	**Climate constraints**	**Resource /Crop/Animal constraints**
1	**1-Field crops + Live Stock**	Flood	1. Unavailability of flood tolerant variety of crop. 2. Crop damage about 40-60% every year due to flood. 3. No proper management of fodder during the flood period. 4- No proper vaccination of animals.	Flood	1. Unavailability of flood tolerant variety of crop. 2. Crop damage about 40-60% every year due to flood. 3. No proper management of fodder during the flood period. 4- No proper vaccination of animals.
2	**2-Field crop + vegetables**	Flood	1-Vegetable crop fully damaged during flood. 2-Lack of knowledge about vegetable cultivation. 3-No proper management of insect –pest and disease in vegetable production. 4-Unavailability of flood tolerant variety of crop. 5- Crop damage about 40-60% every year due to flood.	Flood	1-Vegetable crop fully damaged during flood. 2-Lack of knowledge about vegetable cultivation. 3-No proper management of insect –pest and disease in vegetable production. 4-Unavailability of flood tolerant variety of crop. 5- Crop damage about 40-60% every year due to flood.
3	**3-Live Stock + Vegetables**	Flood	1-No proper management of fodder during the flood period. 2- No proper vaccination of animals. 3-Vegetable crop fully damaged during flood. 4-Lack of knowledge about vegetable cultivation. 5-No proper management of insect –pest and disease in vegetable production.	Flood	1-No proper management of fodder during the flood period. 2- No proper vaccination of animals. 3-Vegetable crop fully damaged during flood. 4-Lack of knowledge about vegetable cultivation. 5-No proper management of insect –pest and disease in vegetable production.
4	**4-Field crop + Live Stock+ Vegetables**	Flood	1. Unavailability of flood tolerant variety of crop. 2. Crop damage about 40-60% every year due to flood. 3-No proper management of fodder during the flood period. 4- No proper vaccination of animals. 5-Vegetable crop fully damaged during flood. 6-Lack of knowledge about vegetable cultivation. 7-No proper management of insect –pest and disease in vegetable production.	Flood	1. Unavailability of flood tolerant variety of crop. 2. Crop damage about 40-60% every year due to flood. 3-No proper management of fodder during the flood period. 4- No proper vaccination of animals. 5-Vegetable crop fully damaged during flood. 6-Lack of knowledge about vegetable cultivation. 7-No proper management of insect –pest and disease in vegetable production.

S No	Farming System Typologies*	Village 3 (**SUKAINAYAK)**		Village 4 (**BABAMAJHA)**	
		Climate constraints	**Resource /Crop/Animal constraints**	**Climate constraint**	**Resource /Crop/Animal constraints**
1	**1-Field crops + Live Stock**	Flood	1. Unavailability of flood tolerant variety of crop. 2. Crop damage about 40-60% every year due to flood. 3. No proper management of fodder during the flood period. 4- No proper vaccination of animals.	Flood	1. Unavailability of flood tolerant variety of crop. 2. Crop damage about 40-60% every year due to flood. 3. No proper management of fodder during the flood period. 4- No proper vaccination of animals.
2	**2-Field crop + vegetables**	Flood	1-Vegetable crop fully damaged during flood. 2-Lack of knowledge about vegetable cultivation. 3-No proper management of insect –pest and disease in vegetable production. 4-Unavailability of flood tolerant variety of crop. 5- Crop damage about 40-60% every year due to flood.	Flood	1-Vegetable crop fully damaged during flood. 2-Lack of knowledge about vegetable cultivation. 3-No proper management of insect –pest and disease in vegetable production. 4-Unavailability of flood tolerant variety of crop. 5- Crop damage about 40-60% every year due to flood.
3	**3-Live Stock + Vegetables**	Flood	1-No proper management of fodder during the flood period. 2- No proper vaccination of animals. 3-Vegetable crop fully damaged during flood. 4-Lack of knowledge about vegetable cultivation. 5-No proper management of insect –pest and disease in vegetable production.	Flood	1-No proper management of fodder during the flood period. 2- No proper vaccination of animals. 3-Vegetable crop fully damaged during flood. 4-Lack of knowledge about vegetable cultivation. 5-No proper management of insect –pest and disease in vegetable production.
4	**4-Field crop + Live Stock+ Vegetables**	Flood	1. Unavailabilityof flood tolerant variety of crop. 2. Crop damage about 40-60% every year due to flood. 3-No proper management of fodder during the flood period. 4- No proper vaccination of animals. 5-Vegetable crop fully damaged during flood. 6-Lack of knowledge about vegetable cultivation. 7-No proper management of insect –pest and disease in vegetable production.	Flood	1. Unavailabilityof flood tolerant variety of crop. 2. Crop damage about 40-60% every year due to flood. 3-No proper management of fodder during the flood period. 4- No proper vaccination of animals. 5-Vegetable crop fully damaged during flood. 6-Lack of knowledge about vegetable cultivation. 7-No proper management of insect –pest and disease in vegetable production.

4. Identify Promising resilient technologies for addressing the constraints

S No	Farming System Typologies*	limate onstrain	Village 1- Technologies identified to minimise the impact of constraints shortlisted	Climate onstraint	Village-2 Technologies identified to minimise the impact of constraints shortlisted
1	Field crops + Live Stock	Flood	1. Flood tolerant variety of rice 2. Raised bed sowing of crop 3.Introduce short duration variety of wheat 4. Introduce toriya crop as a compensative crop. 5. Vaccination of animals before flood occurs 6. Proper feed and fodder management 7. Proper management of milk and milk production.	Flood	1. Flood tolerant variety of rice 2. Raised bed sowing of crop 3.Introduce short duration variety of wheat 4. Introduce toriya crop as a compensative crop. 5. Vaccination of animals before flood occurs 6. Proper feed and fodder management 7. Proper management of milk and milk production.
2	Field crop + vegetables	Flood	1. Flood tolerant variety of rice 2. Raised bed sowing of crop 3.Introduce short duration variety of wheat 4. Introduce toriya crop as a compensative crop. 5. Availability of quality seed and seedling of vegetables. 6. Promotion of rabi and summer tomato cultivation. 7. Proper use of net and staking of vegetable crops to save crop from adverse conditions. 8. Use of micro and macro nutrients 9. Applied plant protection measure to save the crop from disease and insect pest.	Flood	1. Flood tolerant variety of rice 2. Raised bed sowing of crop 3.Introduce short duration variety of wheat 4. Introduce toriya crop as a compensative crop. 5. Availability of quality seed and seedling of vegetables. 6. Promotion of rabi and summer tomato cultivation. 7. Proper use of net and staking of vegetable crops to save crop from adverse conditions. 8. Use of micro and macro nutrients 9. Applied plant protection measure to save the crop from disease and insect pest.
3	Live Stock + Vegetables	Flood	1. Vaccination of animals before flood occurs 2. Proper feed and fodder management 3. Proper management of milk and milk production. 4. Availability of quality seed and seedling of vegetables. 5. Promotion of rabi and summer tomato cultivation. 6. Proper use of net and staking of vegetable crops to save crop from adverse conditions. 7. Use of micro and macro nutrients 8. Applied plant protection measure to save the crop from disease and insect pest.	Flood	1. Vaccination of animals before flood occurs 2. Proper feed and fodder management 3. Proper management of milk and milk production. 4. Availability of quality seed and seedling of vegetables. 5. Promotion of rabi and summer tomato cultivation. 6. Proper use of net and staking of vegetable crops to save crop from adverse conditions. 7. Use of micro and macro nutrients 8. Applied plant protection measure to save the crop from disease and insect pest.

4	Field crop + Live Stock+Vegetables	Flood	1-Availability of quality seed and seedling of vegetable 2-Pramotin of Rabi and summer tomato cultivation 3-Proper use of net and stalking of vegetable crop to save crop from adverse 4-use of micro and macro nutrients 5-applied plant protection measure to save the crop from disease and insect pest. 6-Vaccination of animals before flood occurs 7-Proper feed and fodder management 8- Proper management of milk and milk production 9-Availability of quality seed and seedling of vegetable 10-Pramotin of Rabi and summer tomato cultivation 11-Proper use of net and stalking of vegetable crop to save crop from adverse 12-use of micro and macro nutrients 13-applied plant protection.	Flood	1-Availability of quality seed and seedling of vegetable 2-Pramotin of Rabi and summer tomato cultivation 3-Proper use of net and stalking of vegetable crop to save crop from adverse 4-use of micro and macro nutrients 5-applied plant protection measure to save the crop from disease and insect pest. 6-Vaccination of animals before flood occurs 7-Proper feed and fodder management 8- Proper management of milk and milk production 9-Availability of quality seed and seedling of vegetable 10-Pramotin of Rabi and summer tomato cultivation 11-Proper use of net and stalking of vegetable crop to save crop from adverse 12-use of micro and macro nutrients 13-applied plant protection.

S No	Farming System Typologies*				
		Climate constraints	Village 3- Technologies identified to minimise the impact of constraints shortlisted	Climate constraints	Village-4 Technologies identified to minimise the impact of constraints shortlisted
1	Field crops + Live Stock	Flood	1. Flood tolerant variety of rice 2. Raised bed sowing of crop 3.Introduce short duration variety of wheat 4. Introduce toriya crop as a compensative crop. 5. Vaccination of animals before flood occurs 6. Proper feed and fodder management 7. Proper management of milk and milk production.	Flood	1. Flood tolerant variety of rice 2. Raised bed sowing of crop 3.Introduce short duration variety of wheat 4. Introduce toriya crop as a compensative crop. 5. Vaccination of animals before flood occurs 6. Proper feed and fodder management 7. Proper management of milk and milk production.
2	Field crop + vegetables	Flood	1. Flood tolerant variety of rice 2. Raised bed sowing of crop 3.Introduce short duration variety of wheat 4. Introduce toriya crop as a compensative crop. 5. Availability of quality seed and seedling of vegetables. 6. Promotion of rabi and summer tomato cultivation. 7. Proper use of net and staking of vegetable crops to save crop from adverse conditions. 8. Use of micro and macro	Flood	1. Flood tolerant variety of rice 2. Raised bed sowing of crop 3.Introduce short duration variety of wheat 4. Introduce toriya crop as a compensative crop. 5. Availability of quality seed and seedling of vegetables. 6. Promotion of rabi and summer tomato cultivation. 7. Proper use of net and staking of vegetable crops to save crop from adverse conditions. 8. Use of micro and macro

			nutrients 9. Applied plant protection measure to save the crop from disease and insect pest.		nutrients 9. Applied plant protection measure to save the crop from disease and insect pest.
3	Live Stock + Vegetables	Flood	1. Vaccination of animals before flood occurs 2. Proper feed and fodder management 3. Proper management of milk and milk production. 4. Availability of quality seed and seedling of vegetables. 5. Promotion of rabi and summer tomato cultivation. 6. Proper use of net and staking of vegetable crops to save crop from adverse conditions. 7. Use of micro and macro nutrients 8. Applied plant protection measure to save the crop from disease and insect pest.	Flood	1. Vaccination of animals before flood occurs 2. Proper feed and fodder management 3. Proper management of milk and milk production. 4. Availability of quality seed and seedling of vegetables. 5. Promotion of rabi and summer tomato cultivation. 6. Proper use of net and staking of vegetable crops to save crop from adverse conditions. 7. Use of micro and macro nutrients 8. Applied plant protection measure to save the crop from disease and insect pest.
4	Field crop + Live Stock+Vegetables	Flood	1-Availability of quality seed and seedling of vegetable 2-Pramotin of Rabi and summer tomato cultivation 3-Proper use of net and stalking of vegetable crop to save crop from adverse 4-use of micro and macro nutrients 5-applied plant protection measure to save the crop from disease and insect pest. 6-Vaccination of animals before flood occurs 7-Proper feed and fodder management 8- Proper management of milk and milk production 9-Availability of quality seed and seedling of vegetable 10-Pramotin of Rabi and summer tomato cultivation 11-Proper use of net and stalking of vegetable crop to save crop from adverse 12-use of micro and macro nutrients 13-applied plant protection.	Flood	1-Availability of quality seed and seedling of vegetable 2-Pramotin of Rabi and summer tomato cultivation 3-Proper use of net and stalking of vegetable crop to save crop from adverse 4-use of micro and macro nutrients 5-applied plant protection measure to save the crop from disease and insect pest. 6-Vaccination of animals before flood occurs 7-Proper feed and fodder management 8- Proper management of milk and milk production 9-Availability of quality seed and seedling of vegetable 10-Pramotin of Rabi and summer tomato cultivation 11-Proper use of net and stalking of vegetable crop to save crop from adverse 12-use of micro and macro nutrients 13-applied plant protection.

5. Categorization of the identified technologies in to NRM, Crops and Livestock in each of the village for taking up demonstrations during 2023-24

S No	Farming System Typologies	Village 1(Bambampurwa)		
		NRM	Crop	Livestock
1	**Field crops + Live Stock**	1.Mulching in sugarcane 2. Use of seed cum ferti-seed drill (RCT) 3.Incorporation of biomass and crop residues management 4. Vermi compost 5-green manuring	Introduction of rice variety for up land, medium land and low land 2. Introduction of toriya as a compensatory crop 3. Introduction of HYV of mustard 4. Introduction of late sown and heat tolerant variety wheat 5. Kitchen Gardening	1.Fodder production 2. Animal nutrition management (mineral mixture) 3. Animal health camp 4. Control of ecto- end parasites 5- vaccination of animals
Field crop + vegetables	1.Mulching in sugarcane 2. Use of seed cum ferti seed drill (RCT) 3. Incorporation of biomass and crop residues management 4-raised bed sowing of crop	1.Introduction of paddy variety for up land, medium land and low land 2. Introduction of toriya as a compensatory crop 3. Introduction of HYV of mustard 4. Introduction of late sown variety of wheat 5. Kitchen Gardening 6. Vegetables production 7. Plantation of fruit plants	-	
3	**Live Stock + Vegetables**	1.Vermi compost 2. Composting (FYM)	1. Vegetables production 2. Plantation of fruit plants	1. Fodder production 2. Animal nutritio management (miner mixture) 3. Animal health camp 4. Control of ecto- enc parasites
4	**Field crop + Live Stock+Vegetables**	1.Mulching in sugarcane 2. Use of seed cum ferti seed drill (RCT) 3. Incorporation of biomass and crop residues management 4. Vermi compost 5. Composting (FYM)	1.Mulching in sugarcane 2. Use of seed cum ferti seed drill (RCT) 3.Incorporation of biomass 4. Introduction of late sown variety of wheat 5. Kitchen Gardening 6. Vegetables production 7. Plantation of fruit plants 8. Nursery raising	1.Fodder production 2. Animal nutrition management (mineral mixture) 3. Animal health camp 4. Control of ecto-endo parasites

No	Farming System Typologies	Village 2 (RAMBALIPURWA)		
		NRM	Crop	Livestock
1	**Field crops + Live Stock**	1.Mulching in sugarcane 2. Use of seed cum ferti seed drill (RCT) 3.Incorporation of biomass	Introduction of rice variety for up land, medium land and low land 2. Introduction of toriya as a compensatory crop	1.Fodder production 2. Animal nutrition management (mineral mixture) 3. Animal health camp

		and crop residues management 4. Vermi compost 5-green manuring	3. Introduction of HYV of mustard 4. Introduction of late sown and heat tolerant variety wheat 5. Kitchen Gardening	4. Control of ecto- endo parasites 5- vaccination of animals
2	**Field crop + vegetables**	1.Mulching in sugarcane 2. Use of seed cum ferti seed drill (RCT) 3. Incorporation of biomass and crop residues management 4-raised bed sowing of crop	1.Introduction of paddy variety for up land, medium land and low land 2. Introduction of toriya as a compensatory crop 3. Introduction of HYV of mustard 4. Introduction of late sown variety of wheat 5. Kitchen Gardening 6. Vegetables production 7. Plantation of fruit plants	
3	**Live Stock + Vegetables**	1.Vermi compost 2. Composting (FYM)	1. Vegetables production 2. Plantation of fruit plants	1. Fodder production 2. Animal nutrition management (mineral mixture) 3. Animal health camp 4. Control of ecto- endo parasites
4	**Field crop + Live Stock+Vegetables**	1.Mulching in sugarcane 2. Use of seed cum ferti seed drill (RCT) 3. Incorporation of biomass and crop residues management 4. Vermi compost 5. Composting (FYM)	1.Mulching in sugarcane 2. Use of seed cum ferti seed drill (RCT) 3.Incorporation of biomass 4. Introduction of late sown variety of wheat 5. Kitchen Gardening 6. Vegetables production 7. Plantation of fruit plants 8. Nursery raising	1.Fodder production 2. Animal nutrition management (mineral mixture) 3. Animal health camp 4. Control of ecto- endo parasites

No	Farming System Typologies	Village 3 (SUKAINAYAK)		
		NRM	Crop	Livestock
1	**Field crops + Live Stock**	1.Mulching in sugarcane 2. Use of seed cum ferti seed drill (RCT) 3.Incorporation of biomass and crop residues management 4. Vermi compost 5-green manuring	Introduction of rice variety for up land, medium land and low land 2. Introduction of toriya as a compensatory crop 3. Introduction of HYV of mustard 4. Introduction of late sown and heat tolerant variety wheat 5. Kitchen Gardening	1.Fodder production 2. Animal nutrition management (mineral mixture) 3. Animal health camp 4. Control of ecto- endo parasites 5- vaccination of animals
2	**Field crop + vegetables**	1.Mulching in sugarcane 2. Use of seed cum ferti seed drill (RCT) 3. Incorporation of biomass and crop residues management 4-raised bed sowing of crop	1.Introduction of paddy variety for up land, medium land and low land 2. Introduction of toriya as a compensatory crop 3. Introduction of HYV of mustard 4. Introduction of late sown variety of wheat 5. Kitchen Gardening 6. Vegetables production 7. Plantation of fruit plants	

3	**Live Stock + Vegetables**	1.Vermi compost 2. Composting (FYM)	1. Vegetables production 2. Plantation of fruit plants	1. Fodder production 2. Animal nutritio management (mineral mixture 3. Animal health camp 4. Control of ecto- end parasites
4	**Field crop + Live Stock+Vegetables**	1.Mulching in sugarcane 2. Use of seed cum ferti seed drill (RCT) 3. Incorporation of biomass and crop residues management 4. Vermi compost 5. Composting (FYM)	1.Mulching in sugarcane 2. Use of seed cum ferti seed drill (RCT) 3.Incorporation of biomass 4. Introduction of late sown variety of wheat 5. Kitchen Gardening 6. Vegetables production 7. Plantation of fruit plants 8. Nursery raising	1.Fodder production 2. Animal nutrition management (mineral mixture) 3. Animal health camp 4. Control of ecto- endo parasites

S.No	FST	Village 4 (babamajha)		
		NRM	Crop	Livestock
1	**Field crops + Live Stock**	1.Mulching in sugarcane 2. Use of seed cum ferti seed drill (RCT) 3.Incorporation of biomass and crop residues management 4. Vermi compost 5-green manuring	Introduction of rice variety for up land, medium land and low land 2. Introduction of toriya as a compensatory crop 3. Introduction of HYV of mustard 4. Introduction of late sown and heat tolerant variety wheat 5. Kitchen Gardening	1.Fodder production 2. Animal nutrition management (mineral mixture) 3. Animal health camp 4. Control of ecto- endo parasites 5- vaccination of animals
2	**Field crop + vegetables**	1.Mulching in sugarcane 2. Use of seed cum ferti seed drill (RCT) 3. Incorporation of biomass and crop residues management 4-raised bed sowing of crop	1.Introduction of paddy variety for up land, medium land and low land 2. Introduction of toriya as a compensatory crop 3. Introduction of HYV of mustard 4. Introduction of late sown variety of wheat 5. Kitchen Gardening 6. Vegetables production 7. Plantation of fruit plants	--
3	**Live Stock + Vegetables**	1.Vermi compost 2. Composting (FYM)	1. Vegetables production 2. Plantation of fruit plants	1. Fodder production 2. Animal nutrition manageme (mineral mixture) 3. Animal health camp 4. Control of ecto- endo parasite
4	**Field crop + Live Stock+Vegetables**	1.Mulching in sugarcane 2. Use of seed cum ferti seed drill (RCT) 3. Incorporation of biomass and crop residues management 4. Vermi compost 5. Composting (FYM)	1.Mulching in sugarcane 2. Use of seed cum ferti seed drill (RCT) 3.Incorporation of biomass 4. Introduction of late sown variety of wheat 5. Kitchen Gardening 6. Vegetables production 7. Plantation of fruit plants 8. Nursery raising	1.Fodder production 2. Animal nutrition management (mineral mixture) 3. Animal health camp 4. Control of ecto- endo parasites

6. No. of farmers involved in each of the village for demonstrations during 2023-24 (technology wise)

S No.	Farming System Typologies	Village 1						Total
		NRM		Crop		Livestock		
		Technology	No. of farmer	Technology	No. of farmer	Technology	No. of farmer	
1	Field crops + Live Stock	1.Mulching in sugarcane 2. Use of seed cum ferti seed drill 3. Incorporation of biomass and crop residues management. 4. Vermicompost	34	1. Introduction of paddy variety for up land, medium land and low land 2. Introduction of toriya as a compensatory crop 3. Introduction of HYV of mustard 4. Introduction of late sown variety of wheat. 5. Kitchen Gardening.	90	1.Fodder production 2. Animal nutrition management (mineral mixture) 3. Animal health camp 4. Control of ecto- endo parasites	36	160
2	Field crop + vegetables	1.Mulching in sugarcane 2. Use of seed cum ferti seed drill (RCT) 3. Incorporation of biomass and crop residues management	19	1.Introduction of paddy variety for up land, medium land and low land 2. Introduction of toriya as a compensatory crop 3. Introduction of HYV of mustard 4. Introduction of late sown variety of wheat. 5. Kitchen Gardening. 6. Vegetables production.	46	--		65
3	Live Stock + Vegetables	1.Vermi compost 2. Composting (FYM)	5	1. Vegetables production 2. Plantation of fruit plants	9	1. Fodder production 2. Animal nutrition management (mineral mixture) 3. Animal health camp 4. Control of ecto- endo parasites	31	45
4	Field crop + Live Stock+Vegetables	1.Mulching in sugarcane 2. Use of seed cum ferti seed drill (RCT) 3. Incorporation of biomass and crop residues management 4. Vermi compost 5. Composting (FYM)	12	1.Mulching in sugarcane 2. Use of seed cum ferti seed drill (RCT) 3.Incorporation of biomass 4. Introduction of late sown variety of wheat 5. Kitchen Gardening 6. Vegetables production 7. Plantation of fruit plants 8. Nursery raising	23	1.Fodder production 2. Animal nutrition management (mineral mixture) 3. Animal health camp 4. Control of ecto- endo parasites	8	43

No	Farming System Typologies	Village 2						
		NRM	No. of farmer	Crop	No. of farmer	Livestock	No. of farmer	Total
1	Field crops + Live Stock	1.Mulching in sugarcane 2. Use of seed cum ferti seed drill (RCT) 3.Incorporation of biomass and crop residues management 4. Vermi compost	28	Introduction of paddy variety for up land, medium land and low land 2. Introduction of toriya as a compensatory crop 3. Introduction of HYV of mustard 4. variety of wheat Introduction of late sown 5. Kitchen Gardening	47	1.Fodder production 2. Animal nutrition management (mineral mixture) 3. Animal health camp 4. Control of ecto-endo parasites	35	110
2	**Field crop + vegetables**	1.Mulching in sugarcane 2. Use of seed cum ferti seed drill (RCT) 3. Incorporation of biomass and crop residues management	8	1.Introduction of paddy variety for up land, medium land and low land 2. Introduction of toriya as a compensatory crop 3. Introduction of HYV of mustard 4. Introduction of late sown variety of wheat 5. Kitchen Gardening 6. Vegetables production 7. Plantation of fruit plants	22	-		30
3	**Live Stock + Vegetables**	1.Vermi compost 2. Composting (FYM)	4	Vegetables production Plantation of fruit plants	5	1. Fodder production 2. Animal nutrition management (mineral mixture) 3. Animal health camp 4. Control of ecto-endo parasites	29	38
4	**Field crop + Live Stock+Vegetables**	1.Mulching in sugarcane 2. Use of seed cum ferti seed drill (RCT) 3. Incorporation of biomass and crop residues management 4. Vermi compost 5. Composting (FYM)	11	1.Mulching in sugarcane 2. Use of seed cum ferti seed drill (RCT) 3.Incorporation of biomass 4. Introduction of late sown variety of wheat 5. Kitchen Gardening 6. Vegetables production 7. Plantation of fruit plants 8. Nursery raising	18	1.Fodder production 2. Animal nutrition management (mineral mixture) 3. Animal health camp 4. Control of ecto-endo parasites	7	36

No	Farming System Typologies	Village 3 (Rambalipurwa)						
		NRM	No. of farmer	Crop	No. of farmer	Livestock	No. of farmer	Total
1	**Field crops + Live Stock**	1.Mulching in sugarcane 2. Use of seed cum ferti seed drill (RCT) 3.Incorporation of biomass and crop residues management 4. Vermi compost	48	Introduction of paddy variety for up land, medium land and low land 2. Introduction of toriya as a compensatory crop 3. Introduction of HYV of mustard 4. variety of wheat Introduction of late sown 5. Kitchen Gardening	71	1.Fodder production 2. Animal nutrition management (mineral mixture) 3. Animal health camp 4. Control of ecto- endo parasites	16	135
2	**Field crop + vegetables**	1.Mulching in sugarcane 2. Use of seed cum ferti seed drill (RCT) 3. Incorporation of biomass and crop residues management	5	1.Introduction of paddy variety for up land, medium land and low land 2. Introduction of toriya as a compensatory crop 3. Introduction of HYV of mustard 4. Introduction of late sown variety of wheat 5. Kitchen Gardening 6. Vegetables production 7. Plantation of fruit plants	19			24
3	**Live Stock + Vegetables**	1.Vermi compost 2. Composting (FYM)	4	1. Vegetables production 2. Plantation of fruit plants	5	1. Fodder production 2. Animal nutrition management (mineral mixture) 3. Animal health camp 4. Control of ecto-endo parasites	46	55
4	**Field crop + Live Stock+Vegetables**	1.Mulching in sugarcane 2. Use of seed cum ferti seed drill (RCT) 3. Incorporation of biomass and crop residues management 4. Vermi compost 5. Composting (FYM)	18	1.Mulching in sugarcane 2. Use of seed cum ferti seed drill (RCT) 3.Incorporation of biomass 4. Introduction of late sown variety of wheat 5. Kitchen Gardening 6. Vegetables production 7. Plantation of fruit plants 8. Nursery raising	30	1.Fodder production 2. Animal nutrition management (mineral mixture) 3. Animal health camp 4. Control of ecto- endo parasites	15	63

No	Farming System Typologies	Village 4 (rambalipurwa)						
		NRM	No. of farmer	Crop	No. of farmer	Livestock	No.of farmer	Total
1	**Field crops + Live Stock**	1.Mulching in sugarcane 2. Use of seed cum ferti seed drill (RCT) 3.Incorporation of biomass and crop residues management 4. Vermi compost	43	Introduction of paddy variety for up land, medium land and low land 2. Introduction of toriya as a compensatory crop 3. Introduction of HYV of mustard 4. variety of wheat Introduction of late sown 5. Kitchen Gardening	61	1.Fodder production 2. Animal nutrition management (mineral mixture) 3. Animal health camp 4. Control of ecto- endo parasites	37	141
2	**Field crop + vegetables**	1.Mulching in sugarcane 2. Use of seed cum ferti seed drill (RCT) 3. Incorporation of biomass and crop residues management	8	1.Introduction of paddy variety for up land, medium land and low land 2. Introduction of toriya as a compensatory crop 3. Introduction of HYV of mustard 4. Introduction of late sown variety of wheat 5. Kitchen Gardening 6. Vegetables production 7. Plantation of fruit plants	23	--	--	31
3	**Live Stock + Vegetables**	1.Vermi compost 2. Composting (FYM)	12	1. Vegetables production 2. Plantation of fruit plants	16	1. Fodder production 2. Animal nutrition management (mineral mixture) 3. Animal health camp 4. Control of ecto-endo parasites	42	70
4	**Field crop + Live Stock+Vegetables**	1.Mulching in sugarcane 2. Use of seed cum ferti seed drill (RCT) 3. Incorporation of biomass and crop residues management 4. Vermi compost 5. Composting (FYM)	14	1.Mulching in sugarcane 2. Use of seed cum ferti seed drill (RCT) 3.Incorporation of biomass 4. Introduction of late sown variety of wheat 5. Kitchen Gardening 6. Vegetables production 7. Plantation of fruit plants 8. Nursery raising	29	1.Fodder production 2. Animal nutrition management (mineral mixture) 3. Animal health camp 4. Control of ecto- endo parasites	8	51

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

S.No.	Farming System Typologies	Village 1				Village 2			
		Climate Resilient Technology	Convergence with Scheme	No. of farmers proposed to be involved	Area to be covered (ha)	Climate Resilient Technology	Convergence with Scheme	No. of farmers proposed to be involved	Area to be covered (ha)
1	Field crops + Live Stock	1.Mulching in sugarcane	Dept. sugarcane	27	11.0	Mulching in sugarcane	Dept. sugarcane	10	2.5
2	Field crop + vegetables	Seed cum fertilizer drill	ATMA	35	12.0	Use of ZT Machine	ATMA	12	3.0
3	Live Stock + Vegetables	Vermi compost	Dept. Animal husbandry	7	7	Vermi compost	Dept. Animal husbandry	4	4
		Composting (FYM)	Dept. Animal husbandry	140	310	Composting (FYM)	Dept. Animal husbandry	75	145
4	Field crop + Live Stock+Vegetables	Animal health camp	Dept. Animal husbandry	141	380	Animal health camp	Dept. Animal husbandry	130	250
		Animal nutrition management (mineral mixture)	Dept. Animal husbandry	40	60 packet	Animal nutrition management (mineral mixture)	Dept. Animal husbandry	30	40 packet

S .No	**Farming System Typologies**	**Village 3**				**Village 4**			
		Climate Resilient Technology	Convergence with Scheme	No. of farmers proposed to be involved	Area to be covered (ha)	Climate Resilient Technology	Convergence with Scheme	No. of farmers proposed to be involved	Area to becovered (ha)
1	Field crops + LiveStock	1.Mulching in sugarcane	Dept. sugarcane	20	4.0	Mulching in sugarcane	Dept. sugarcane	6	1.5
2	Field crop+ vegetables	Use of ZT Machine	ATMA	20	3.0	Use of ZT Machine	ATMA	4	1.0
3	Live Stock+ Vegetables	Vermi compost	Dept. Animal husbandry	3	3	Vermi compost	Dept. Animal husbandry	2	2
		Composting (FYM)	Dept. Animal husbandry	120	195	Composting (FYM)	Dept. Animal husbandry	70	120

4	Field crop + LiveStock+ Vegetables	Animal health camp	Dept. Animal husbandry	95	130	Animal health camp	Dept. Animal husbandry	80	150
		Animal nutrition management (mineral mixture)	Dept. Animal husbandry	20	25 packet	Animal nutrition management (mineral mixture)	Dept. Animal husbandry	20	15 packet

Activities and Cost

8. NRM Interventions;

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

Sl No.	Village 1, 2, 3,4	Intervention	Unit cost Rs/ha A	Coverage Proposed		Total amount (Rs) A x C
				Area (ha) B	No. of farm households proposed to be involved C	
1		Mulching in sugarcane	1600.0	14.5	46	73600.00
2		Use of ZT Machine	3125.00	23.5	45	140625
3		Incorporation of biomass and crop residues management	2900.00	18.0	31	89900.00
		Sub Total 8.2				**304125**

Activities and Cost

9. Crop Interventions;

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

Sl No.	Village 1,2,3,4	Intervention	Description		Cost (Rs/ha) A	Coverage Proposed		Total amount (Rs) A x C
			Crop	Variety (s)		Area (ha) B	No. of farm households to be involved C	
1		Suitable Upland Varity	Rice	NDR-2064	40500.00	5.0	18	729000.00
2		Suitable Lowland Varity	Rice	Sabha sub-1	40800.00	1.6	6	244800.00
3		Early sown variety of oil seed	Toria	Tapesori	16690.00	10.0	45	751050.00
4		Delay of planting dates of rabi crops in areas with terminal heat stress	Wheat	K-9533 (Nanina)	30650.00	7.0	35	1072750.00
5		Latest variety of fodder crops	Oat	JHO-2000-4	16520.00	1.0	22	363440.00
		Sub Total 9.1.						**3161040.00**

Activities and Cost

9. Crop Interventions;

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

Sl No.	village 1,2,3,4	Intervention	Description		Cost (Rs/ha) A	Coverage Proposed		Total amount (Rs)A x C
			Crop	Variety(s)		Area (ha) B	No. of farm households to be involved C	
1		Delay of planting dates o rabi crops in areas wit terminal heat stress	Wheat	K-9533	3750.00	7.0	40	150000.00
2		Timely Sown	Wheat	DBW-187	3000.00	4.0	27	81000.00
3		Early sown variety of oil seed	Toriya	tapeswari	400.00	10.0	66	26400.00
4		Timely sown variety of oi seed	Mustard	Giriraj	400.00	20.0	83	33200.00

5		Latest variety of fodde crops	Oat	JHO 2000-4	4000.00	2.0	46	18400.00
6		Improved variety	Barseem	Maskavi	9600.00	3.0	76	729600.00
	Sub Total 9.2							**1038600.00**

Activities and Cost

10. Livestock and Fisheries

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

Sl No.	Details of feed intervention	Unit cost of intervention (Rs.)	No. of farm households to be involved	Total amount (Rs/ha)
1	Seed of barseam variety Maskavi	400	60	24000.00
2	Oat variety JHO 2000-4	380	30	11400.00
3	Jwar	450	40	18000.00
4	Mineral Mixture	180	150	27000.00
	Sub Total- 10.1.			**80400.00**

10.2. Establishment of Seed banks / Fodder banks, etc..

Sl No.	Seed bank/Fodder Bank	Seed of crop and variety/ Fodder crop/ variety	Quantity of seed/ fodder produced/ storage (t)	Unit cost (Rs.)	No.of farmers involved	Amount (Rs.)
1	Seed bank	Wheat/ K-9533	35.0	3000.00	45	10500.00
2	Seed bank	Toria/Tapesori	4.0	4000.00	14	16000.00
3	Seed bank	Mustard/ Giriraj	12.5	4000.00	20	50000.00
4	Fodder Bank	Barseem/Maskavi	1374.0	125.00	54	171750.00
5	Fodder Bank	Oat/JHO2000-4	476.0	125.0	22	59562.00
	Sub Total 10.2.					307812.00

Activities and Cost

11. Non-recurring contingencies – Equipment

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

S. No.	Item	Unit cost (Rs)	No. of units	Total amount (Rs)
1.	Super seeder machine	65000.00	1	275000.00
2	Battery power sprayer machine	3500.00	10	35000.00
3	Sugarcane planter	110000.00	1	110000.00
4	Power sprayer machine	60000.00	1	60000.00
	Total NRC -4			**565000.00**

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.)
Soil Health	Techniques of soil sample collection for testing of soil	April	20	3000.00
Soil Health	Use of Rotary mulcher in CRM	May	25	3750.00
Soil Health	Techniques of brown manuring in Rice	June	25	3750.00
Soil Health	Techniques of preparing vermi compost	July	20	3000.00
Soil Health	Preparation of waste decomposer and its use	August	20	3000.00
Animal care	Fodder production round the year	September	25	3750.00
RCT	Calibration of zero tillage machine for sowing of wheat	October	20	3000.00
RCT	Calibration of Super seeder for sowing of wheat	October	22	3300.00
Value addition Techniques	Preparation of mixed vegetable pickles	October	26	3900.00
Nursery raising	Techniques of nursery raising of vegetables, fruits plant and forest plants	November	25	3750.00
Clean milk production	Proper method of clean milk production and precautions.	November	20	3000.00
Animal care	care and management of live stock during flood situation.	December	20	3000.00
Value addition	Preparation of milk products	March	25	3750.00
FW	Safe Storage of grain	March	25	3700.00
	Sub Total - 12.1.			**47650.00**

12.2. Field Days/Exposure visits/Awareness programmes/Kisanmelas/Kisanghosti proposed for the year

Theme	Title of Programme	Proposed month	No. of participants	Cost (Rs.)
Exposure visit of farmers	Farmers Visit	February-2024	25	62500.00
Field days	Rice, Sugarcane, Toria, Mustard,	October-2023, November-2023, December-2023 March-2024	140	21000.00
Method demonstrations	Use of rotary mulcher Use of super seeder	November-2023 November-2023	25 20	6750.00
Awareness	Swacchtaprogrrane PF fasalbimayojana	December-2023 February 2024	40 50	6000.00 7500.00
KisanGosthi	Up scale the knowledge about new climate resilient technologies and variety of different crops	October- 2023 November-2023 December-2023 January-2024	30 25 35 30	20000.00
Sub-total 12.2.				123750.00

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.)
	Bulletin	Feb-March -2024	300	5000.00
	Brochure	Nov-Dec -2024	500	7000.00
Sub-total 13.1.				12000.00

13.2 Video Films

Video Film to be prepared	Duration (Minutes)	Proposed during the month	Cost (Rs.)
Drone camera & DSLR camera	10-12 Minutes	January to Mach 2024	45000.00
Sub-total 13.2.			45000.00

14. Summary of cost Estimates for 2023-24

Item number	Title of the Item	Amount (Rs.)
8.2	In situ conservation – Resource Conservation Technologies (RCTs)	304125.00
9.1	Stress tolerant / improved varieties / Short duration / Legume crops	3161040.00
9.2	Improved agronomic practices and other crop interventions	1038600.00
10.1	Feed demonstrations for crop residue management / stress management: silage / feed blocks/ mineral mixture (MM) blocks / feed enrichment	80400.00
10.2	Establishment of Seed banks / Fodder banks	307812.00
11	Non-recurring contingencies – Equipment	565000.00
12.1	Training programmes proposed for the year	47650.00
12.2	Field Days/Exposure visits/Awareness programmes/Kisanmelas/Kisanghosti proposed for the year	123750.00
13.1	Publications	12000.00
13.2	Video Films	45000.00
	Grand total (Rs.)	**5685377.00**

15. Plan for the spread of the proven practices (Convergence with departments, linkages with development organizations, etc,)

Sl. No	Proven technology/ Capacity building	Department involved	Strategy	Input arrangement / contribution from the department	Amount mobilised (Rs. In Lakhs)
1	Mulching in sugarcane	-	Farmer from the crop residue sugarcane after the harvesting sugarcane in this technology use the sugarcane leaf for the mulching sugarcane plant crop .	Use the sugarcane leaf as the input of this technology	Amount is not required

Krishi Vigyan Kendra–Gorakhpur–I
Action Plan 2023

1. Details about the existing NICRA villages

S No	Details	Village 1	Village 2	Village 3
1	Name of the village	Mahopar	Tighra	Malhipur (Barigaon)
2	Involved in TDC since (year)	2017	2020	2022
3	Cultivated area (ha)	87.50	240	204
4	Rainfed Area (ha)	0.00	0.00	0.00
5	Irrigated Area (ha)	87.5	240	204
6	Flood/ Salt affected area (ha)	48.00	122	140
7	Total Area of village (ha)	87.50	240	204
8	No. of households in the village	360.00	405	106

2. Divide the NICRA villages into predominant farming system typologies

S. No.	Farming System Typologies	Mahopar			Tighara		
		Area (ha)	No. of farmers (approx.)	% coverage of the typology (area in the village)	Area (ha)	No. of farmers (approx.)	% coverage of the typology (area in the village)
1	Flood Irrigated without Animal- (Ag.+Hort**)**	35	147	40.23	92	163	38.34
2	Flood Irrigated with Animal (Ag.+Live Stock)	32	124	36.78	36	51	15.0
3	Flood Irrigated with Animal- (Ag.+Hort.+Live Stock)	20	71	22.99	112	191	46.66

Divide the NICRA villages into predominant farming system typologies

S.No.	**Farming System Typologies**	**Mallhipur**		
		Area (ha)	No. of farmers (approx.)	% coverage of the typology (area in the village)
1	Flood Irrigated without Animal- (Ag.+Hort**)**	65	28	31.86
2	Flood Irrigated with Animal (Ag.+Live Stock)	61	21	29.90
3	Flood Irrigated with Animal- (Ag.+Hort.+Live Stock)	78	47	38.24

3. Predominant climatic, crop, animal and resource constraints of the major identified farming system typologies of NICRA villages

S.No.	Farming System Typologies	Mahopar			Tighara		
		Climate constraints	Resource /Crop/Animal constraints	Other constraints	Climate constraints	Resource /Crop/Animal constraints	Other constraints
	Flood Irrigated without Animal- (Ag.+Hort)	Flood, water logging, water stagnation, Heat **stress**	No use of Submergence and flood tolerant varieties, No use of RCT, late sowing of wheat, Poor SRR	Poor soil fertility, Lack of diversification , poor resource of house hold	Flood, water logging, water stagnation, Heat stress	No use of Submergence and flood tolerant varieties, No use of RCT, Not sown early/late varieties	Poor soil fertility, Lack of diversification
	Flood Irrigated with Animal (Ag.+Live Stock)	Flood, water logging, water stagnation, Heat stress,	FST-1+Lack of balance feeding and green fodder, disease and parasitic infestation , poor management of live stock	Poor soil fertility, Lack of diversification , poor resource of house hold	Flood, water logging, water stagnation, Heat stress	FST-1+Lack of balance feeding and green fodder, disease and parasitic infestation	Poor soil fertility, Lack of diversification
	Flood Irrigated with Animal- (Ag.+Hort.+Live Stock)	Flood, water logging, water stagnation, Heat stress	FST-1+FST-2 + No use of improved varieties ,IPM and INM	Poor soil fertility, Lack of diversification , poor resource of house hold	Flood, water logging, water stagnation, Heat stress	FST-1+FST-2 + No use of improved varieties ,IPM and INM	Poor soil fertility, Lack of diversification

Predominant climatic, crop, animal and resource constraints of the major identified farming system typologies of NICRA villages

S. N	Farming System Typologies	Mallhipur		
		Climate constraints	Resource /Crop/Animal constraints	Other constraints
1	Flood Irrigated without Animal- (Ag.+Hort)	Flood, water logging, water stagnation, Heat stress	No use of Submergence and flood tolerant varieties, No use of RCT, Not sown early/late varieties	Poor soil fertility, Lack of diversification , poor resource of house hold
2	Flood Irrigated with Animal (Ag.+Live Stock)	Flood, water logging, water stagnation, Heat stress	FST-1+Lack of balance feeding and green fodder, disease and parasitic infestation , poor management of live stock	Poor soil fertility, Lack of diversification , poor resource of house hold
3	Flood Irrigated with Animal(Ag.+Hort.+Live Stock)	Flood, water logging, water stagnation, Heat stress	FST-1+FST-2 + No use of improved varieties ,IPM and INM	Poor soil fertility, Lack of diversification , poor resource of house hold

4. Identify Promising resilient technologies for addressing the constraints

S. No.	**FST**	**Mahopar**			**Tighara**		
		Climate constraints	**Resource /Crop/Animal constraints**	**Other constraints**	**Climate constraints**	**Resource /Crop/Animal constraints**	**Other constraints**
1	Flood Irrigated without Animal- (Ag.+Hort)	use of Submergence and flood tolerant varieties	use of improved, Submergence and flood tolerant varieties, use of RCT, sowing early/late varieties, short duration & off season vegetables	Green manuring, composting, crops and veg. based diversification, support of Govt. schemes with line departments	use of Submergence and flood tolerant varieties	use of improved, Submergence and flood tolerant varieties, use of RCT, sowing early/late varieties, short duration & off season vegetables	Green manuring, composting, crops and veg. based diversification, support of Govt. schemes with line departments
2	Flood Irrigated with Animal (Ag.+Live Stock)	use of Submergence and flood tolerant varieties	FST-1+supplementation of mineral mixture after deworming, vaccination, green fodder production, improved breeds of live stock	Green manuring, composting, crops and veg. based diversification, support of Govt. schemes with line departments	use of Submergence and flood tolerant varieties	FST-1+supplementation of mineral mixture after deworming, vaccination, green fodder production, improved breeds of live stock	Green manuring, composting, crops and veg. based diversification, support of Govt. schemes with line departments
3	Flood Irrigated with Animal- (Ag.+Hort.+Live Stock)	use of Submergence and flood tolerant varieties	FST-1+FST-2 + use of improved varieties ,IPM and INM	Green manuring, composting, crops and veg. based diversification, support of Govt. schemes with line departments	use of Submergence and flood tolerant varieties	FST-1+FST-2 + use of improved varieties ,IPM and INM	Green manuring, composting, crops and veg. based diversification, support of Govt. schemes with line departments

Identify Promising resilient technologies for addressing the constraints

S. N	FST	Mallhipur		
		Climate constraints	Resource /Crop/Animal constraints	Other constraints
1	Flood Irrigated without Animal- (Ag.+Hort)	use of Submergence and flood tolerant varieties, Heat tolerant wheat varieties	use of improved, Submergence and flood tolerant varieties, use of RCT, Early sowing/late varieties, short duration & off season vegetables	Green manuring, composting, crops and veg. based diversification, support of Govt. schemes with line departments
2	Flood Irrigated with Animal (Ag.+Live	use of Submergence and flood tolerant	FST-1+supplementation of mineral mixture after deworming, vaccination,	Green manuring, composting, crops and veg. based

	Stock)	varietiesHeat tolerant wheat varieties	green fodder production, improved breeds of live stock	diversification, support of Govt. schemes with line departments
3	Flood Irrigated with Animal(Ag.+Hort.+ Live Stock)	use of Submergence and flood tolerant varietiesHeat tolerant wheat varieties	FST-1+FST-2 + use of improved varieties ,IPM and INM	Green manuring, composting, crops and veg. based diversification, support of Govt. schemes with line departments

5. Categorization of the identified technologies in to NRM, Crops and Livestock in each of the village for taking up demonstrations during 2023-24

S.N.	FST	Mahopar			
		NRM	Crop	Livestock	Total
1	Flood Irrigated without Animal-(Ag.+Hort)	1.In situ Residue management 2.RCT 3.Green manuring	1.Submergence tolerant rice variety 2.Heat tolerant wheat variety 3.Early sowing of wheat. 4.Increases in no of irrigation 5.Use of LCC & nano fertilizer with soluble NPK 6.Crop diversification 7.Short duration crops 8/.Off season vegetables		8
2	Flood Irrigated with Animal (Ag.+Live Stock)	1.In situ Residue management 2.RCT 3.Green manuring	1.Submergence tolerant rice variety 2.Heat tolerant wheat variety 3.Early sowing of wheat. 4.Increases in no of irrigation 5.Use of LCC & nano fertilizer with soluble NPK 6.Crop diversification 7.Short duration crops 8/.Off season vegetables	1Supplementation of mineral mixture after deworming 2.Green fodder production 3.Breed improvement 4/.Vaccination	11
3	Flood Irrigated with Animal-(Ag.+Hort.+Live Stock)	1.In situ Residue management 2.RCT 3.Green manuring	1.Submergence tolerant rice variety 2.Heat tolerant wheat variety 3.Early sowing of wheat. 4.Increases in no of irrigation 5.Use of LCC & nano fertilizer with soluble NPK 6.Crop diversification 7.Short duration crops 8/.Off season vegetables	1Supplementation of mineral mixture after deworming 2.Green fodder production 3.Breed improvement 4/.Vaccination	12

Categorization of the identified technologies in to NRM, Crops and Livestock in each of the village for taking up demonstrations during 2023-24

S.N.	FST	Tighara			
		NRM	Crop	Livestock	Total
1	Flood Irrigated without Animal-(Ag.+Hort)	1.In situ Residue management 2.RCT 3.Green manuring	1.Submergence tolerant rice variety 2.Heat tolerant wheat variety 3.Early sowing of wheat. 4.Increases in no of irrigation 5.Use of LCC & nano fertilizer with soluble NPK 6.Crop diversification 7.Short duration crops 8/.Off season vegetables		8
2	Flood Irrigated with Animal (Ag.+Live Stock)	1.In situ Residue management 2.RCT 3.Green manuring	1.Submergence tolerant rice variety 2.Heat tolerant wheat variety 3.Early sowing of wheat. 4.Increases in no of irrigation 5.Use of LCC & nano fertilizer with soluble NPK 6.Crop diversification 7.Short duration crops 8/.Off season vegetables	1Supplementation of mineral mixture after deworming 2.Green fodder production 3.Breed improvement 4/.Vaccination	11
3	Flood Irrigated	1.In situ Residue management	1.Submergence tolerant rice variety 2.Heat tolerant wheat variety	1Supplementation of mineral mixture after	12

	with Animal-(Ag.+Hort. +Live Stock)	2.RCT 3.Green manuring	3.Early sowing of wheat. 4.Increases in no of irrigation 5.Use of LCC & nano fertilizer with soluble NPK 6.Crop diversification 7.Short duration crops 8/.Off season vegetables	deworming 2.Green fodder production 3.Breed improvement 4/.Vaccination	

Categorization of the identified technologies in to NRM, Crops and Livestock in each of the village for taking up demonstrations during 2023-24

S.N.	FST	Mallhipur			
		NRM	Crop	Livestock	Total
1	Flood Irrigated without Animal-(Ag.+Hort)	1.In situ Residue management 2.RCT 3.Green manuring	1.Submergence tolerant rice variety 2.Heat tolerant wheat variety 3.Early sowing of wheat. 4.Increases in no of irrigation 5.Use of LCC & nano fertilizer with soluble NPK 6.Crop diversification 7.Short duration crops 8/.Off season vegetables		8
2	Flood Irrigated with Animal (Ag.+Live Stock)	1.In situ Residue management 2.RCT 3.Green manuring	1.Submergence tolerant rice variety 2.Heat tolerant wheat variety 3.Early sowing of wheat. 4.Increases in no of irrigation 5.Use of LCC & nano fertilizer with soluble NPK 6.Crop diversification 7.Short duration crops 8/.Off season vegetables	1Supplementation of mineral mixture after deworming 2.Green fodder production 3.Breed improvement 4/.Vaccination	11
3	Flood Irrigated with Animal-(Ag.+Hort.+Live Stock)	1.In situ Residue management 2.RCT 3.Green manuring	1.Submergence tolerant rice variety 2.Heat tolerant wheat variety 3.Early sowing of wheat. 4.Increases in no of irrigation 5.Use of LCC & nano fertilizer with soluble NPK 6.Crop diversification 7.Short duration crops 8/.Off season vegetables	1Supplementation of mineral mixture after deworming 2.Green fodder production 3.Breed improvement 4/.Vaccination	12

6. No. of farmers involved in each of the village for demonstrations during 2023-24 (technology wise)

S.N.	FST	Mahopar				Tighara			
		NRM	Crop	Livestock	Total	NRM	Crop	Livestock	Total
	Flood Irrigated without Animal-(Ag.+Hort)	1. 40 2. 30 3. 80	1. 30 2. 30 3. 20 4. 20 5. 20 6. 20 7. 20 8. 20		330	1. 20 2. 20 3. 50	1. 20 2. 209 3. 20 4. 20 5. 20 6. 20 7. 20 8. 20		250
	Flood Irrigated with Animal (Ag.+Live Stock)	1. 30 2. 25 3. 60	1. 20 2. 20 3. 30 4. 30 5. 30 6. 30 7. 30 8. 30	1. 10 2. 10 3. 10 4. 10	305	1. 20 2. 20 3. 50	1. 20 2. 20 3. 20 4. 20 5. 20 6. 20 7. 2-0 8. 20	1. 5 2. 5 3. 5 4. 5	230
	Flood Irrigated	1. 30	1. 20	1. 1	335	1. 20	1. 20	1. 5	250

	with Animal- (Ag.+Hort.+Liv e Stock)	2. 25 3. 60	2. 20 3. 30 4. 30 5. 30 6. 30 7. 30 8. 30	0 2. 1 0 3. 1 0 4. 1 0		2. 20 3. 50	2. 20 3. 20 4. 20 5. 20 6. 20 7. 20 8. 20	2. 5 3. 5 4. 5	

. No. of farmers involved in each of the village for demonstrations during 2023-24 (technology wise)

S.N.	Farming System Typologies	Mallipur			
		NRM	Crop	Livestock	Total
1	Flood Irrigated without Animal- (Ag.+Hort)	1. 20 2. 20 3. 40	1. 20 2. 20 3. 20 4. 20 5. 20 6. 20 7. 20 8. 20		240
2	Flood Irrigated with Animal (Ag.+Live Stock)	1. 30 2. 20 3. 20	1. 20 2. 20 3. 20 4. 20 5. 20 6. 20 7. 20 8. 20	1. 5 2. 5 3. 5 4. 5	230
3	Flood Irrigated with Animal- (Ag.+Hort.+Live Stock)	1. 20 2. 20 3. 30	1. 20 2. 20 3. 20 4. 20 5. 20 6. 20 7. 20 8. 20	1. 5 2. 5 3. 5 4. 5	250

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

S.N.	FST	Mahopar			
		Climate Resilient Technology	Convergence with Scheme	No. of farmers proposed	Area to be covered
1	Flood Irrigated without Animal- (Ag.+Hort)	1.Green manuring 2.Flood tolerant varieties 3.RCT	RKVY (Ag. Deptt.)IRRI- ISAR Varanasi **CSISA**	1. 50 2. 4 3. 20	1. 20 2. 2 3. 10
2	Flood Irrigated with Animal (Ag.+Live Stock)	1. Green manuring 2. Vaccination 3. Breed improvement	RKVY (Ag. Deptt.) ASCAD & FMDEP (AH & Dairy Deptt.) RGM (AH & Dairy Deptt.)	1. 50 2. 25 3. 25	1. 20 2. 25 3. 25
3	Flood Irrigated with Animal- (Ag.+Hort.+Live Stock)	4. Green manuring 5. Vaccination 6. Breed improvement	RKVY (Ag. Deptt.) ASCAD & FMDEP (AH & Dairy Deptt.) RGM (AH & Dairy Deptt.)	1. 50 2. 25 3. 25	1. 20 2. 25 3. 25

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

S.N.	FST	Tighara			
		Climate Resilient Technology	**Convergence with Scheme**	**No. of farmers proposed**	**Area to be covered**
1	Flood Irrigated without Animal- (Ag.+Hort)	1.Green manuring 2.Flood tolerant varieties 3.RCT	RKVY (Ag. Deptt.) IRRI- ISARC Varanasi **CSISA**	1. 50 2. 4 3. 20	1. 20 2. 2 3. 10
2	Flood Irrigated with Animal (Ag.+Live Stock)	Green manuring Vaccination Breed improvement	RKVY (Ag. Deptt.) ASCAD & FMDEP (AH & Dairy Deptt.) RGM (AH & Dairy Deptt.)	1. 40 2. 25 3. 25	1. 18 2. 25 3. 25
3	Flood Irrigated with Animal- (Ag.+Hort.+Live Stock)	Green manuring Vaccination Breed improvement	RKVY (Ag. Deptt.) ASCAD & FMDEP (AH & Dairy Deptt.) RGM (AH & Dairy Deptt.)	1. 40 2. 25 3. 25	1. 16 2. 25 3. 25

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

S.N.	Farming System Typologies	Mallipur			
		Climate Resilient Technology	Convergence with Scheme	No. of farmer proposed	Area to be covered
1	Flood Irrigated without Animal- (Ag.+Hort)	1.Green manuring 2.Flood tolerant varieties 3.RCT	RKVY (Ag. Deptt.) IRRI- ISARC Varanasi **CSISA**	1. 50 2. 4 3. 20	1. 20 2. 2 3. 10
2	Flood Irrigated with Animal (Ag.+Live Stock)	Green manuring Vaccination Breed improvement	RKVY (Ag. Deptt.) ASCAD & FMDEP (AH & Dairy Deptt.) RGM (AH & Dairy Deptt.)	1. 50 2. 25 3. 25	1. 20 2. 25 3. 25
3	Flood Irrigated with Animal(Ag.+Hort.+Live Stock)	Green manuring Vaccination Breed improvement	RKVY (Ag. Deptt.) ASCAD & FMDEP (AH & Dairy Deptt.) RGM (AH & Dairy Deptt.)	1. 50 2. 25 3. 25	1. 20 2. 25 3. 25

Activities and Cost

8. NRM Interventions;

8.1. Repair / Renovation of existing water harvesting structures, drainage channels etc.:

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)
1.	Mahopar	-	-	-	-	-	-	-
2.	Tighra	-	-	-	-	-	-	-
3	Mallhipur	-	-	-	-	-	-	-
	Sub Total 8.1							

Activities and Cost

8. NRM Interventions;

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

S.N.	Village	Intervention	Unit Cost (Rs/ha)	Coverage proposed		Total Amount (Rs.)AXB
				Area (ha)	No. of farm households proposed to be involved	
			A	B	C	
1	Mahopar	Sowing with supper seeder	7500	10	40	75000
		Ridge bed sowing	8000	5	30	40000
		DSR	7500	10	40	75000
		Green Manuring	4000	20	50	80000
2	Tighara	Sowing with supper seeder	7500	10	40	75000
		Ridge bed sowing	8000	5	30	40000

		DSR Green Manuring	7500 4000	10 20	40 50	75000 80000
3	Mallipur	Sowing with supper seeder Ridge bed sowing DSR Green Manuring	7500 8000 7500 4000	10 5 10 20	40 30 40 50	75000 40000 75000 80000
		Sub Total 8.2	810000			810000

Activities and Cost

9.Crop Interventions;

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

S.N.	Village	Intervention	Description		Cost(Rs/ha)	Coverage Proposed		Total Amount (Rs.)AXB
			Crop	Variety	A	B	C	
1	Mahopar	Submergence tolerant varieties Heat stress tolerant varieties Short duration crops Legume crops Green fodder	Rice Wheat Cowpea/Redish Lentil/P.pea. Barseem/napier	Sambha sub-1/Swarna S-1 DBW 187/ DBW 327 Kashi kanchan IPL315 VL-10	1600 4000 4000 5000 4000	20 30 2 6 2	50 50 20 25 20	32000 120000 8000 30000 8000
2	Tighara	Submergence tolerant varieties Heat stress tolerant varieties Short duration crops Legume crops Green fodder	Rice Wheat Cowpea/Redish Lentil/P.pea. Barseem/napier	Sambha sub-1/Swarna S-1 DBW 187/ DBW 327 Kashi kanchan IPL315 VL-10	1600 4000 4000 5000 4000	20 30 2 6 2	50 50 20 25 20	32000 120000 8000 30000 8000
3	Mallipur	Submergence tolerant varieties Heat stress tolerant varieties Short duration crops Legume crops Green fodder	Rice Wheat Cowpea/Redish Lentil/P.pea. Barseem/napier	Sambha sub-1/Swarna S-1 DBW 187/ DBW 327 Kashi kanchan IPL315 VL-10	1600 4000 4000 5000 4000	20 30 2 6 2	50 50 20 25 20	32000 120000 8000 30000 8000
		Sub Total 9.1						**594000**

Activities and Cost

9.Crop Interventions;

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

S. N.	Village	Intervention	Description		Cost (Rs/ha)	Coverage Proposed		Total Amount (Rs.)AXB
			Crop	Variety	A	B	C	
1	Mahopar	Sub mergence tolerant rice variety DSR LCC Early sowig wheat Line sowing + Thinning Line sowing + Seed treatment Sowing on bunds Line sowing + PSB Raised bed sowing	Rice Wheat Mustard Lentil Kharif onion Cow pea Pigeon pea	Shambha sub-1 DBW-187 RH725 IPL315 ADR Kashi kanchan NA-2	1600 4000 2000 5000 120000 12000	10 10 5 3 0.4 2	25 25 13 10 15 10	16000 160000 10000 15000 48000 24000

2	Tighara	Sub mergence tolerant rice variety DSR LCC	Rice	Shambha sub-1	1600	10	25	16000
		Early sowig wheat	Wheat	DBW-187	4000	10	25	160000
		Line sowing + Thinning	Mustard	RH725	2000	5	13	10000
			Lentil	IPL315	5000	3	10	15000
		Line sowing + Seed treatment	Kharif onion	ADR	120000	0.4	15	48000
		Sowing on bunds	Cow pea	Kashi kanchan	12000	2	10	24000
		Line sowing + PSB	Pigeon pea	NA-2				
		Raised bed sowing						
3	Mallipur	Sub mergence tolerant rice variety DSR LCC	Rice	Shambha sub-1	1600	10	25	16000
		Early sowig wheat	Wheat	DBW-187	4000	10	25	160000
		Line sowing + Thinning	Mustard	RH725	2000	5	13	10000
			Lentil	IPL315	5000	3	10	15000
		Line sowing + Seed treatment	Kharif onion	ADR	120000	0.4	15	48000
		Sowing on bunds	Cow pea	Kashi kanchan	12000	2	10	24000
		Line sowing + PSB	Pigeon pea	NA-2				
		Raised bed sowing						
		Sub Total 9.2						**879000**

Activities and Cost

10. Livestock and Fisheries

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

S.N.	Details of feed intervention	Unit cost of intervention (Rs.)	No. of farm households to be involved	Total amount (Rs/ha)
1	1. Supplementation of mineral mixture after deworming	1250	30	37500
2	2. Green fodder Napier		30	
3	3. Green fodder Barseem			

10.2. Establishment of Seed banks / Fodder banks, etc..

	Seed bank/Fodder Bank	Seed of crop and variety/ Fodder crop/ variety	Quantity of seed/ fodder produced/ storage (t)	Unit cost (Rs.)	No.of farmers involved	Amount (Rs.
	-	-	-	-	-	-
	Sub Total 10.2	-	-	-	-	-

Activities and Cost

11. Non-recurring contingencies – Equipment

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

S.N	Item	Unit cost (Rs in lakh)	No. of units	Total amount (Rs)
1	Multi crop planter super seeder	2.90	3	8.70
2	tractor mounted power sprayer	0.9	4	3.60
3	Tractor 60 HP	10.0	1	10.0
4	Power weeder	2.50	1	2.50
	Total NRC			**24.8**

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.)**
NRM	Green manuring	May	30	5000
NRM	Improved technique for Direct seeded rice	June	30	5000
Crop management	Recent advances in rice production technique under flood affected area	June	30	5000
Nutrient management	Nutrient management in wet land situation	July	30	5000
Weed management	Weed management in rice	July	30	5000
Crop production	Residue incorporation and production technique of wheat	October	30	5000

Weed control	Weed control in cereals and pulses of rabi season.	December	30	5000
Crop mananagement	Production technique of late sown rabi crops	November	30	5000
Live stock management	Live stock management for milk production	June	30	5000
Fodder and feed management	Fodder and feed management for milch animals in flood prone village	July	30	5000
Disease Management in Livestock	Vaccination in Livestock after rainy season	August	30	5000
Employment generation	Employment sources for villagers	January	30	5000
Vermi-compost	Goat farming	November	30	5000
Home Science	Income generation through value addition	February	30	5000
Protected Cultivation	Protected cultivation of Veg. Crops	September	30	5000
Integrated Farming	Commercial cultivation of marigold and Gladiolus	October	30	5000
Seed Production	Seed production Tech. of Cow pea, & green gram	January	30	5000
Sub-total 12.1.			510	85000

12. Capacity Building & Other extension activities

12.2. Field Days/Exposure visits/Awareness programmes/Kisan melas/Kisan ghosti proposed for the year

Theme	Title of Programme	Proposed month	No. of participants	Cost (Rs.)
DSR	Cultivation of Paddy through DSR	September	50	10000
RCT	Cultivation of wheat through Super seeder/ Zero Till Technique	March	50	10000
Varietal	Use of Shambha sub-1 in flood affected areas	November	50	10000
Short duration	Onion leaf production	August	50	10000
Crop Diversification	Production techniques of mustard, lentil and C.pea	October	50	10000
	Production of Improved variety (Kashi Kanchan) of Cowpea	March	50	10000
Nutrition Management	Use and importance area specific mineral mixture after deworming in live stock	October	50	10000
Feed and Fodder management	Green fodder production around the year	December	50	10000
Exp visit	Exposure visit of farmers		50	10000
Meeting	Strengthening SHGs		50	10000
Awareness	Training		50	10000
Sub-total 12.2.			**550**	**110000**

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.)
Natural farming	Bulletin	October	1000	25000
Off season cultivation of vegetables	Folder	November	1000	25000
Sustainable technology for flood prone area	Bulletin	Janauary	1000	25000
Success story	Bulletin	January	1000	25000
Sub-total 13.1.				**1,00,000**

13.2 Video Films

Video Film to be prepared	Duration (Minutes)	Proposed during the month	Cost (Rs.)
Sub-total 13.2.			

14. Summary of cost Estimates for 2023-24

Item No.	Title of the Item	Amount (Rs.)
8.1		0.0
8.2	NRM Interventions;	810000
9.1	Crop Interventions;	594000
9.2	Crop Interventions;	819000
10.1	Livestock and Fisheries	37500
10.2	Non-recurring contingencies – Equipment	2480000
11	Seed bank	0.0
12.1	Capacity Building & Other extension activities	85000
12.2	Capacity Building & Other extension activities	110000
13.1	Publications and Media products	1,00,000
13.2	Video	0.0
	Grand total (Rs.)	5854500

15. Plan for the spread of the proven practices (Convergence with departments, linkages with development organisations, etc.,)

Sl. No	Proven technology/ Capacity building	Department involved	Strategy	Input arrangement / contribution from the department	Amount mobilised (Rs. In Lakhs)
1	Green manuring	Deptt of Ag.	Demo, training & print media	Seed	250000
2	DSR	CSISA & Deptt. Of Ag. Private company	Demo, training & print media, Field day, Field visit	Seed, Herbicide & machine	100000
3	Residue incorporation	CSISA & Deptt. Of Ag.	Demo, training & print media	Seed, Herbicide & machine	487000
4	Submergence tolerant Varieties	IRRI-ISARC Varanasi, CSISA & Deptt. Of Ag.	Demo, training & print media, Field day &FV	Seed,	50000
5	Early sowing of wheat with heat stress tolerant varieties	CSISA & Deptt. Of Ag.	Demo, training & print media	Seed, Herbicide & machine	50000
6	Irrigation management in wheat	CSISA & Deptt. Of Ag.	Demo, training & print media	Seed, Herbicide & machine	
7	Crop diversification Kharif onion for veg. Radish, Cowpea, Okra	Deptt. Of Ag. & Deptt. Of Hort.	Demo, training & print media	Seed	300000
8	Mineral mixture for milch animal Vaccination	Deptt of animal Husbandry & SHG	Demo, training & print media	Vaccination	30000
9	Nutritional garden		Demo, training & print media		

Krishi Vigyan Kendra, Hamirpur (U.P.)

Action Plan 2023-24

(Yearly plan prepared prior to start of *Kharif* season in April/May)

1.0 A. Basic information about NICRA clusters DISTRICT:--Hamirpur

S.No.	*Item*	*Additional villages selected in the programme**	
		Village 1	*Village 2*
1.1	Village name	Pachkurakhurd	-
1.2	Name of mandal/Block	Sumerpur	-
1.3	Total area (ha)	752.0	-
1.4	No. of house holds	258	-
1.5	Extent of rainfed area (ha)	567.2	-

1.0 Contractual Manpower (SRFs/YPs)

Category	**Rate/month (Rs.)**	**No. of months**	**Amount (Rs.)**
SRF	31,000 (2480+HRA)	8 Month, 22 days	291600
Sub-total 8.0			**291600**

2.0 Implement & equipment

Item description	**Implement**	**Amount (Rs.)**
	Tractor mounted Power Sprayer	**79000**

3.0 Any other contingencies (TA etc)

Item description		**Amount (Rs.)**
		60000

4.0 NRM + Crop Production + Livestock + Institutional/ Others

Module	**Farming System Typology**								
	FST-1 Irrigated (Agriculture+Horticulture)		**FST-2 Irrigated (Agriculture+Horticulture+ Livestock)**		**FST-3Rainfed (Agriculture+Livestock)**		**FST-4 Landless+livestock**		
4.1 NRM	**Activity**	**Area (hac/unit)**	**Activity**	**Area(hac/unit)**	**Activity**	**Area(hac/unit)**	**Activity**	**Area(hac/unit)**	**Amount (RS)**
			Summer deep ploughing	0.5 hac	Deep ploughing	0.5 hac			4000
	Sprinkler and Raingun	0.2hac			Sprinkler and Raingun	0.2hac			8000
	mulching (organic/plastic)	0.5 hac	mulching (organic/plastic)	0.5 hac	-	-			8000
	Sub-Total								**20000**
4.2 Crop Production	**Demonstration in kharif season stress tolerant and short duration variety.**		**Demonstration in kharif season stress tolerant and short duration variety.**		**Demonstration in kharif season stress tolerant and short duration variety.**				
	Sesame(GT-06)	10 hac	Sesame (GT-06)	10 hac	Sesame (GT-06)	6 hac			16500
	Green gram(Shikha)	6 hac	Green gram (Shikha)	5 hac	Green gram (Shikha)	5 hac			30000
	Orchard establishment (Citrus)	0.4hac							10000
	Bottle gourd(Kashi ganga)	0.2 hac	Bottle gourd (Kashi ganga)	0.2 hac					1250
	Sponge Gourd(Kashishreya&KashiDivya)	0.2 hac	Sponge Gourd	0.2 hac					1250
	Okra(Kashilalima&KashiChaman	0.5 hac	Okra(Kashilalima& KashiChaman)	0.5 hac					3000

	)								
	Tomato(Kashichayan&kashiAman)	0.4 hac	Tomato(Kashichayan&kashiAman)	0.4 hac					5000
	Dolycaus bean (Sem-3, Sem-18)	0.4 hac	Dolycaus bean (Sem-3, Sem-18)	0.4 hac					5000
	Kitchen garden	10 unit	Kitchen garden	10 unit	Kitchen garden	5 unit			2500
	Demonstration in rabi season stress tolerant and short duration variety	**Demonstration in rabi season stress tolerant and short duration variety**		**Demonstration in rabi season stress tolerant and short duration variety**					
	Field pea (IPFD12-2)	3hac	Field pea (IPFD12-2)	4hac					51420
	Chickpea(JG-36)	1.5 hac	Chickpea (JG-36)	1.5 hac	Chickpea (JG-36)	1hac			35120
	Wheat(DBW-187)	4 hac	Wheat	4 hac					31400
					Lentil (IPL-316)	1.6 hac			9500
	Mustard(RH-0725)	10hac	Mustard (RH-0725)	10 hac	Mustard (RH-0725)	20 hac			21900
	Kitchen garden	10 unit	Kitchen Garden	10 unit	Kitchen Garden	5 unit			2500
	IPM Module	3 unit	IPM Module	4 unit	IPM Module	3 unit			10000
	Sub-Total								**236340**
4.3 Livestock			Animal health camp	1 no.	Animal health camp	1 no.	Animal health camp	1 no.	10000
			Stress tolerant fodder variety		Stress tolerant fodder variety				
			Napier	0.25hac	Napier	0.25 hac			5000
			Chari	0.2 hac	Chari	0.2 hac			4000
			Therapeutic drugs for various aliments	10 unit	Therapeutic drugs for various aliments	10 unit	Therapeutic drugs for various aliments	10 unit	10000
			Berseem	0.5	Berseem	0.5			5000
			feed storage bag (silage)	03	feed storage bag (silage)	02			5000
							Improved shelters for reducing heat stress/cold stress	1	12000
			Feeding management (TMR, Mineral Block, Medicines & disinfectant)	3	Feeding management (TMR, Mineral Block, Medicines & disinfectant)	4	Feeding management (TMR, Mineral Block, Medicines & disinfectant)	3	10000
			Cattle Breed Improvement : Assorted Sexed Semen A.I.	5	Cattle Breed Improvement : Assorted Sexed Semen A.I.	5	Cattle Breed Improvement : Assorted Sexed	5	10000

							Semen A.I.		
					Goatery unit	1 unit	Goatery unit	1unit	35000
					Poultry unit	5 unit	Poultry unit	5 unit	15000
	Sub-Total								**121000**
4.4 Institutional/ Others	Establishment of seed bank of pulses and oil seed crop	1 unit	Establishment of seed bank of pulses, oil seed and and fodder	1 unit	Establishment of seed bank of pulses, oil seed and millets and fodder	1 unit			-
	Sub-Total								-
	Total								**377340**

ACTIVITIES AND COSTS

2.0 Non-recurring contingencies – Equipment

Proposal for Procurement of farm machinery/ implements for Custom HiringCentre

S.No.	Item	Unit cost*(Rs)	No. of units	Total amount (Rs)
1.	Tractor mounted Power Sprayer	79000	1	79000
	Total NRC 2.0			**79000**

4.0 Module 1 – NRM interventions

***A)* Repair / Renovation of existing water harvesting structures, drainage channels etc.**

S. No.	Intervention* and village	Dimensions	No. of units	No. of beneficiaries	Convergence value, if any (Rs)	Value of farmers share(Rs)	Cost to project(Rs)
	-	-	-	-	-	-	-
	Sub-total 4.1 A						

B) In situ conservation – Resource Conservation Technologies (RCTs)

Item (specify the interventions) and village	Unit cost Rs/acre	No. of demos	Coverage		Total amount (Rs)
			Area (acres)	No. of farmers	
	A	**B**	**C**	**D**	**A x C**
Water Saving Technologies	5000.0	2	2	2	10000.0
Moisture Conservation through plastic Mulch Sheet	5000.0	5	2	5	10000.0
Sub-total 4.1 B					**20000.0**

4.2 Module II – Crop production interventions

Stress tolerant / improved varieties / Short duration / Legume crops

Intervention and village	Description		Cost (Rs/acre)	No. of demos	Coverage		Total amount (Rs)
	Crop	Variety (s)			Area (ac)	No. of farmers	
			A	***B***	***C***	***D***	***A x C***
Irrigated / Drought	Chickpea	JG-36	3512	10	10	10	35120
	Field pea	IPFD 12-2	3428	15	15	15	51420
	Mustard	RH-0725	219	100	100	100	21900
	Wheat	DBW-187	1570	20	20	20	31400
	Tomato	(Kashichayan& kashiAman)		5	2	5	5000
	Cucurbits	Bottle gourd (Kashi ganga)Sponge Gourd (Kashishreya & KashiDivya)		10	10	10	2500
	Okra	Kashilalima& KashiChaman)		10	10	10	3000
Stress	Lentil	IPL-316	2375	4	4	4	9500
	Dolycaus Bean			5	2	5	5000
Short duration varieties (specify)	Sesame	GT-06	235	65	65	65	16500
	Green gram	Shikha	750	40	40	40	30000
Diversification	Orchard	Citrus		1	3		10000
Nutri-kitchen							5000
Total							**226340**

(B) Improved agronomic practices and other crop interventions

Intervention	Cost (Rs/ acre)	No. of demos	Coverage		Amount (Rs)	Remarks (Purpose of intervention)
			Area (ac)	No. of farmers		
	A	B	C	D	A x C	
Critical inputs for Integrated crop management (specify crop)	2000	10	10	10	10000	Monitoring tools (Pheromone trap, Light trap & Sticky trap)
					10000	

Intervention	Cost (Rs/ acre)	No. of demos	Coverage		Amount (Rs)
			Area (ac)	No. of farmers	
	A	B	C	D	A x C
Other inputs (soil amendments, soil test based nutrient management, bio-fertilizers, other soil and plant health related inputs etc)					
Sub-total 4.2 B					

4.3 Module 3 – Livestock & Fisheries interventions

4.3 a fodder production during drought strategies (annual/perennial fodder) in the village

Season	Name of fodder	Variety	Area (ha)	Unit cost of demo (Rs/ha)*	No. of demos	Total amount (Rs/ha)*
Kharif	Sorghum	MP Chari	1	4000	10	4000
Rabi	Berseem	Bundel Berseem 2	1	5000	25	5000
	Hybrid Napier	IGFRI-3	1	5000 slips	50	5000
	Sub-total 4.1		**3**		**85**	**14000**

4.3 b Feed demonstrations for crop residue management / stress management: silage / feed blocks/ mineral mixture (MM) blocks / feed enrichment

Details of feed demo*	Unit cost of demo (Rs)	No. of demos	Total amount (Rs/ha)
a) Silage demos	1000	5	5000
b) Mineral mixture demos	1000	10	10000
c) Feeding management & disease control programme in livestock (Total Mixed Ration, Mineral block, medicines & disinfectant solution)	1000	20	20000
d) Any Breed Improvement	1000	10	10000
Sub-total of 4.2		**45**	**45000**

4.3 c Improved housing /shelter for protection of livestock against extreme weather

Type of shelter improvement*	Unit cost of demo (Rs)	Cost to project (Rs)	Farmer's share (Rs)	No. of demos	Total amount (Rs)	No. of farmers covered	Remarks (purpose of intervention)
Setting Mattress	2000	12000	0	02	12000	02	Protect the animals from stress due to
Improved shelter- Fogger for Dairy animal shed							Protect the animals from heat stress
Sub-total of 4.3					**12000**	**02**	

4.3 d Livestock / Fisheries units

A	B	C	D	E	F
Enterprise/unit*	Unit cost (Rs)	Convergence share in unit cost, if any** (Rs)	Project share in unit cost (Rs)	No. of units/ farmers	Cost to Project (DxE) (Rs)
Goatry	17500		17500	2	35000
Backyard poultry	1500		1500	10	15000
Sub-total of 4.4					**50000**

4.4 Module 4 – Institutional / Community interventions

4.4 a Establishment of fodder banks Silage

Name of the SHG	Fodder type	Quantity of storage (t)	Unit cost (Rs.)	No. of units	Amount (Rs.)
	Sorghum	**1**	**-**	**-**	**-**

4.4 b Establishment of Seed banks

Name of the SHG	Crop and variety	Quantity of storage (t)	Unit cost (Rs.)	No. of units	Amount (Rs.)
	Chickpea JG-36	0.2			
	Field pea IPFD 12-2	0.5			
	Mustard RH-0725	0.5			
	Wheat DBW-187	1.0			
	Sesame GT-06	0.5			
	Green gram Shikha	0.5			
Sub-total		**3.2**			

5.0 Capacity Building & Training Programmes

5.1 Trainings

Theme	Title of training course	Proposed month	No. of participants	Cost to project (Rs.)
NRM	Importance and method of rain water harvesting technique	April	22	1000
NRM	In-situ moisture conservation method through B.B.F. Ridge and Furrow, Raise bed techniques in crop production.	May	24	1000
Nutritional Security	Nutritional Garden – its importance under climate resilient condition	June	25	1000
Horti	Climate resilient interventions for enhancing horticultural crop production.	June	22	1000
INM	Importance of macro and micro nutrient & its application of major crops	June	24	1000
LPM	Climate resilient interventions in animal husbandry to reduce the adverse effect on animal production.	July	24	1000
LPM	All the year round green fodder production its conservation	July	24	1000
IPM	Plant Protection measures in kharif crops	July	22	1000
Theme	**Title of training course**	**Proposed month**	**No. of participants**	**Cost to project (Rs.)**
ICM	Importance of inter cropping for minimize risk in production	July	25	1000
NRM	Importance and role of micro irrigation system in climate resilience.	Aug.	22	1000
IDM	Integrated disease management in pulses	Sept.	22	1000
Feeding Management	Formulation of dairy ration	Sept.	24	1000
Sub-total 5.1				**12000**

5.2 Field Days proposed

Theme	Title of training course	Proposed month	No. of participants	Cost to project (Rs.)
NRM	Water saving irrigation system	September/January	25	2500
Crop Production	Production Technology of crops	September/March	25	2500
LPM	Impact of balance feeding on animal production	October/November	25	2500
LPM	Fodder Crops	November/December	25	2500
			100	**10000**

6.0Media Products developed/ Publication (Video films/brochures/bulletins proposed)

Item description	No	No. of copies	Amount (Rs.)
Technical bulletins/ Manual	1	100	10000
Video films/ Documentary	1	1	15000
Sub-total 6.0	**2**		**25000**

7.0 Exposure Visits proposed

Place of visit	Purpose of visit	Proposed month	No. of participants	Cost to project (Rs.)
BUAT Banda	Exposure of Crop Production & Hi-Tech-Horticulture	October, 2023	50	**30000**

8.0 POL

Place of visit	Purpose of visit	Cost (Rs.)
Adopted Village & other work places	Demonstration &Training	21000

9.0 Misc. & expenses

Items	Purpose	Cost (Rs.)
Stationary, Cartridge, Banner, Flex, Iron frame Board etc	Project work	21910

Summary of budget Estimates for 2023-24 (Tentative)

Sl.No.	Particulars	Total Amount
1	Salary (Senior Research Fellow)	291600
2	NON RECURRING CONTINGENCY EQUPMENTS Proposal for procurement of farm machinery/implements for Custom Hiring Centre	79000
3	Travel Allowances	60000
4	NRM+Crop Production + Livestock+Institutional/ Others	377340
5	Capacity Building and Training Programme Training courses proposed from April 2023- March 2024	22000
6	Publication &Media products to be developed	25000
7	Exposure visits (KisanMela, BUAT, Banda)	30000
8	POL	21000
9	Misc.& expenses (Stationary, Cartridge, Banner, Flex, Iron frame Board etc.)	21910
	Grand Total	**927850**

Date:19.08.2023Signature of PC, KVK/ in-charge NICRA

Date: Signature of Nodal Officer, NICRA-ZPD Zone

Krishi Vigyan Kendra, Jalaun
ACTION PLAN (Year 2023)

Name of village – Piyaniranjanpur, Block – Dakore

A- Farming System Typology

Module	Farming System Typology								
	Irrigated (Agriculture+Horticultur e)		**Irrigated griculture+Horticulture+l vestock)**		**Unirrigated (Agriculture + Livestock)**		**Landless+ livestock**		
	Activity	**Area (hac/unit)**	**Activ ity**	**Area (ha/unit)**	**Activity**	**Area (hac/unit)**	**Activity**	**Area (hac/unit)**	**Amount (RS)**
NRM	Sprinkler and micro sprinkler, drip irrigation	0.5hac	Sprinkler and micro sprinkler, drip irrigation	0.5hac	Sprinkler and micro sprinkler, drip irrigation	1.0hac			300000
	Soil testing and soil health card issued	50 unit	Soil testing and soil health card issued	50unit	Soil testing and soil health card issued	50unit			22500
	mulching in vegetable crops (organic/pla stic)	0.2hac	mulching in vegetables cops (organic/pl astic)	0.2hac	-	-			25000
	Crop residue incorporati on instead of burning in vegetables pea	1hac	Crop residue incorporati on instead of burning in vegetables pea	1hac	Crop residue incorporati on instead of burning vegetables pea	1hac			15000
			Vermicom pos**t**	2unit	Vermicom pos**t**	2unit	Vermico mpos**t**	5 unit	50000
	Sub-Total								**412500**
Crop Production	Demonstra tion in kharif season stress tolerant and short duration variety.		Demonstrat ion in kharif season stress tolerant and short duration variety.		Demonstrati on in kharif season stress tolerant and short duration variety.				
	Sesame	4hac	Sesame	3hac	Sesame	3hac			12500
	Moong	10hac	Moong	5hac	Moong	5hac			39000
	Summer moong	5 hac	Summer moong	5 hac					26000
	Orchard establishmen	0.4hac							14400
	Sapling for farmers	25 unit	Sampling fo farmers	25unit	Sampling f farmers	50 unit			20000
	Seedling for farmers	25unit	Sampling f farmers	50 unit	Sampling farmers	25 unit			10000
	Sponge	1hac	Sponge	1hac					10000

	Gourd		Gourd						
	Okra	1hac	Okra	1hac					30000
	Tomato	1hac	Tomato	1hac					10000
	Bottle gourd	1hac	Bottle Gourd.	1hac					5000
	Kitchen garden	10 unit	Kitchen garden	10 unit	Kitchen garden	5 unit			3750
	Field pea	10hac	Field pea	10hac	Field pea	10hac			270000
	Vegetable pea	2hac	Vegetable pea	2hac					56000
	Chickpea	10hac	Chickpea	5hac	Chickpea	10hac			180000
	Wheat	5 hac	Wheat	5 hac					42000
	Lentil	5hac	Lentil	5hac	Lentil	10hac			120000
	Mustard	10hac	Mustard	10hac	Mustard	10hac			20000
	Cauliflower	1 hac	Cauliflower	1 hac					3000
	Cabbage red	1 hac	Cabbage	1 hac					3000
	Knolkhol	0.25	Knolkhol	0.25					15000
	Brocoli	0.25	Brocoli	0.25					5000
	Kitchen garden	25 unit	Kitchen Garden	25unit	Kitchen Garden	25 unit			11250
	Weed control	5hac	Weed control	3 hac	Weed control	2 hac			12500
	IPM module in vegetables crops	2 unit	IPM module in vegetables crops	2 unit	IPM module in chickpea	1unit			25000
	Sub-Total								**943400**
Livestock			Animal heal camp	1 unit	Animal health camp	1 unit	Animal health camp	1 unit	15000
			Napier grass	0.25hac	Napier grass	0.25hac			24000
			Chari	2.5hac	Chari	2.5hac			27000
					Strip cup	5unit	Strip cup	5 unit	5000
			Therapeutic drugs for various aliments	10 unit	Therapeutic drugs for various aliments	10 unit	Therapeutic drugs for various aliments	10 unit	15000
			Barseem	1hac	Barseem	1hac			12600
			preventive vaccination	100unit	preventive vaccination	300unit	preventive vaccination	100unit	10000
			AI(sex sorted seaman)	25 unit	AI(sex sorted seaman)	50unit	AI(sex sorted seaman)	25unit	15000
							Income generation through mushroom production	5unit	40000
					Goatery unit(2+1)	3 unit	Goatery unit(2+1)	2 unit	150000
					Poultry unit	5 unit	Poultry unit	5 unit	24000
	Sub-Total								**337600**

Institutional/ Others	Establishment` of seed bank of pulses, oil seed and millets	1 unit	Establishment of seed bank of pulses, oil seed and millets and fodder	1 unit	Establishment of seed bank of pulses, oil seed and millets and fodder	1 unit			-
	Serrated sickle	50 unit	Serrated sickle	50 unit	Serrated sickle	50 unit			60000
	Sub-Total								**60000**
	Total								**1753500**

B-NON RECURRING CONTINGENCY EQUPMENT

Proposal for procurement of farm machinery/implements for Custom Hiring Centre

Sl. No.	Item	Cost	No of unit	Total Amount
1	Harrow 16 disc	95000	1	95000
2	Rotavater	125000	1	125000
3	Deep Plough Reversal	80000	1	80000
4	Ridge Maker	20000	1	20000
5	Foot Sprayer	6000	1	6000
6	Micro Irrigation System	130000/acr	1	130000
7	HDPE pipe (1000 fit)	50/Fit	500	25000
8	Double Peti Seed Dril	70000	1	70000
9	Ridge and farrow Seed Dril Machine	60000	1	60000
10	Weeder	120000	1	120000
	Total			**731000**

C- Capacity Building and Training Programme

Training courses proposed from April 2023-March 2024

S. N.	Theme	Title of training course	Proposed month	No. of beneficiaries	Budget
1	Draught management	Package and practices for drought management	June	25	3000
2	Moisture conservation.	In situ moisture conservation techniques	July	25	3000
3	Weed management	Weed management of pulse crop.	July	25	3000
4	Natural farming	Natural farming	July	25	3000
5	Poultry farming	Poultry broiler farming	August	25	3000
6	FPO	FPO and group formation	August	25	3000
7	Value addition	Food processing /value addition	August	25	3000
8	Resource conservation technology	Resource conserving agri-technologies	September	25	3000
9	Kitchen garden.	Household food security through establishment of kitchen garden	September	25	3000
10	Nursery management.	Management of Nursery for vegetables	September	25	3000
11	Millets	Training on millets	October	25	3000
12	Goat farming	Scientific rearing of goats	October	25	3000
13	Seed production	Seed production Techniques	November	25	3000
14	Bee keeping	Training on bee keeping	December	25	3000
15	Information technology(IT)	Digital technology and social media	December	25	3000
16	Pest management(IPM)	IPM practices for vegetables	January	25	3000
17	Feed and fodder management	Feed and fodder management techniques	February	25	3000
18	Mushroom culture	Package and practices of mushroom cultivation	February	25	3000
19	Exposer visit	Strengthening capacity building for farmers	-	30	40000
	Total				**94000**

Total A+B+C= 1753500+731000+94000=2578500/-

Krishi Vigyan Kendra-Jhansi

Action Plan 2023-24

Details about the villages involved in the programme

S No	Details	Village 1	Village 2	Village 3
1	Name of the village	Gandhinagar	Birgua	Bawaltanda
2	Involved in TDC since (year)	2012	2017	2021
3	Total area (ha)	200	572	534
4	Cultivated area (ha)	185	535	374
5	Rainfed Area (ha)	76	120	185
6	Irrigated Area (ha)	109	415	189
7	No. of households in the village	149	455	200
8	Approximate households covered so far	100	90	75

Predominant Farming systems typologies of the NICRA villages (area)

FST (Farming system Typologies identified	Village - Ghandinagar			Village- Birgua			Village- Bawaltanda		
	Area (ha)	No of farmers	% coverage	Area (ha)	No of farmers	% coverage	Area (ha)	No of farmers	% coverage
Rainfed + Animal	76	100	41	120	100	22	185	150	41
Irrigated with animal (Agri+Animal)	45	50	24	170	120	32	119	80	32
Irrigated with animal (Agri+ horti+Livestock's)	64	25	35	245	150	46	70	85	27
Total	**185**	**175**	**100%**	**535**	**370**	**100%**	**374**	**170**	**100%**

Predominant climatic, crop, animal and resource constraints of the major identified farming system typologies of NICRA villages

S No	Farming System Typologies	Village 1		Village 2		Village -3	
		Climate constraints	Resource /Crop/Animal constraints	Climate constraints	Resource /Crop/Animal constraints	Climate constraints	Resource /Crop/Animal constraints
1	Rainfed + Animal	Drought; long dry spell	Requirement of Drought tolerant cultivars of pulses and oil seeds , Limited resources of fodder and nutrients deficiency	Drought; long dry spell	Requirement of Drought tolerant cultivars of pulses and oil seeds , Limited resources of fodder and nutrients deficiency	Drought; long dry spell	Requirement of Drought tolerant cultivars of pulses and oil seeds , Limited resources of fodder and nutrients deficiency
2	Irrigated with animal (Agri+ Animal)	Heat and limited rainfall for dug wells recharging	Requirement of Heat tolerant cultivars of cereals and pulses , Limited resources of fodder and nutrients deficiency	Heat and limited rainfall for dug wells recharging	Requirement of Heat tolerant cultivars of cereals and pulses , Limited resources of fodder and nutrients deficiency	Heat and limited rainfall for dug wells rechargin g	Requirement of Heat tolerant cultivars of cereals and pulses , Limited resources of fodder and nutrients deficiency
3	Irrigated with animal (Agri+ horti+Livestock's)	Heat and limited rainfall for dug wells recharging	Requirement of Heat tolerant cultivars of cereals and pulses , Limited production of vegetables and fruits,iciency	Heat and limited rainfall for dug wells recharging	Requirement of Heat tolerant cultivars of cereals and pulses , Limited production of vegetables and fruits,	Heat and limited rainfall for dug wells rechargin g	Requirement of Heat tolerant cultivars of cereals and pulses , Limited production of vegetables and fruits,

Identify Promising resilient technologies for addressing the constraints

S No	Farming System Typologies*	All villages: Technologies identified to minimise the impact of constraints shortlisted	
		Climate constraints	Resource /Crop/Animal constraints
1	**Rainfed + Animal**	• Deep Summer ploughing, • Bunding • Estiblishement of farm pond • NADEP & Vermi compost	• Application of drought tolerant cultivars pulsed and oilseeds • Application mineral supplement for animals
2	**Irrigated with animal (Agri+ Animal)**	Renovation of dug open wells	• Application Heat tolerant cultivars of cereals and pulses • Application mineral supplement for animals • Round the year fodder production (Napiar grass, M.P. Chari, barseem etc)
3	**Irrigated with animal (Agri+ horti+Livestock's)**	Renovation of dug open wells	• Application Heat tolerant cultivars of cereals and pulses • Application mineral supplement for animals • Establishment of new orchard with inter cropping (vegetables) • Round the year fodder production (Napiar grass, M.P. Chari, barseem etc)

No. of farmers involved in villages for demonstrations during 2023-24 (technology wise)

S No	Farming System Typologies	All villages			
		NRM	Crop	Livestock	Total
1	Rainfed + Animal	50	120	50	220
2	Irrigated with animal (Agri+ Animal)	20	100	40	160
3	Irrigated with animal (Agri+ horti+Livestock's)	10	100	60	170

Activities and Cost

NRM Intervention

S No	Intervention	Dimensions	No. of units	No. of farm households proposed to be involved	Cost to project (Rs)
1	Deep Summer ploughing,	10 hac	25	25	20000
2	Bunding	4	20	20	40000
3	Estiblishement of farm pond	30*40	3	10	
4	NADEP & Vermi compost		10	10	100000

Activities and Cost

NRM Intervention

Sl No.	Village 1, 2, 3, etc.	Intervention	Unit cost Rs/ha A	Coverage Proposed		Total amount (Rs) A x B
				Area (ha)	No. of farm households proposed to be involved B	
1	All NICRA Village	Renovation of open dug wells	10000	10	10	100000
2	All NICRA Village	Water saving/Drip/ sprinkler irrigation	50000	0.2	2	100000

Activities and Cost

Crop Production

Sl No.	Village 1,2,3 etc.	Intervention	Description		Cost (Rs/ha)	Coverage Proposed		Total amount (Rs)
			Crop	Variety (s)		Area (ha)	No. of farm households to be involved	
1	All NICRA Village	Lack of suitable Drought Tolerant variety	Green Gram	Shikha	9000	5	15	45000
2		Lack of suitable Drought Tolerant variety	Groundnut	Raj Moongfali-2 TG-37A	10000	10	25	100000
3		Lack of suitable heat	Chick pea	RVG-202	9000	10	25	90000

		Tolerant variety						
4		Lack of suitable heat Tolerant variety	Field pea	IPFD10-12/12-2	9000	10	25	90000
5		Lack of suitable heat Tolerant variety	Mustard	RH-749/406	6000	10	25	60000
6		Lack of suitable heat Tolerant variety	Wheat	Raj-4079/4120	5000	20	50	100000
7		high value vegetables	Broccoli	Titanic	20000	2	20	40000
8		Lack of suitable heat Tolerant variety	Lentil	L-4727	9000	10	25	90000
9		New citrus orchard	Citrus group	Kinnow, Daisy, W.Murcott and sweet orange	40000	2.5	30	100000

FST Wise:- livestock & Fisheries interventions

Year round fodder production strategies (annual/perennial fodder) in the village

Livestock & Fisheries interventions

Season	**Name of fodder**	**Variety**	**Area (ha)**	**Unit cost of demo Rs/ha)***	**No. of demos**	**Total amount (Rs/ha)***	**Remarks (purpose of intervention & No. of farmers covered)**
Kharif	Jwar	PC-6	1.0	500	10	5000	Year round availability of green fodder 50 farmers
	Maize	J-1006	0.5	500	05	2500	
Rabi	Barseem	BB-3	2.5	500	25	12500	
Sub-total			**5.0**		**50**	**37500/-**	

FST Wise:- Livestock & Fisheries interventions

Feed demonstrations for crop residue management / stress management: silage / feed blocks/ mineral mixture (MM) blocks / feed enrichment

Details of feed demonstrations	**Unit cost of demo (Rs)**	**No. of demos**	**Total amount (Rs/ha)**	**Remarks (purpose of intervention & No. of farmers covered)**
Silage demos	1500/-	15	22500/-	To improve the productivity of milking animals
b)Feed block demos	1000	10	10000/-	To improve the productivity of milking animals
eral mixture demos	450	25 X 6 month	67500	To improve the productivity of milking animals
Sub-total			**100000/-**	

FST Wise:- Livestock & Fisheries interventions

Improved housing / shelter for protection of livestock against extreme weather & Upgradation Programme

Type of shelter improvement*	**Unit cost of demo (Rs)**	**Cost to project (Rs**	**Farmer's share (Rs)**	**No. of demos**	**Total amount (Rs)**	**No. of farmers covered**	***Remarks (purpose of intervention)***
Poultry Shelter for 50 layer birds @ 2.5 ft^2 /bird	10000	5000	5000	05	25000	05	To improve the productivity of poultry system and income generation of farmers 05 farmers
Sub-total				**05**	**25000/-**	**05**	

Enterprise/unit*	**Unit cost (Rs)**	**Convergence share in unit cost, if any** (Rs)**	**Project share in unit cost (Rs)**	**No. of units/ farmers**	**Cost to Project (D x E) (Rs)**	***Remarks (purpose of intervention& farmers covered)***
Goatery (Bundelkhandi)	15000	5000	10000	02	20000	To increase heat tolerant breads and 2 farmers
Sub-total					**20000/-**	

Community interventions

Establishment of Seed banks

Name of the SHG	**Crop and variety**	**Quantity of storage (t)**	**Unit cost (Rs.)**	**No. of units**	**Amount (Rs.)**
Jai Ambay SHG	Black Gram	0.5	2000	05	10000
	Wheat	0.5	3000	05	15000
					25000/-

Capacity Building & Training Programmes

Theme	Title of training course	Proposed month	No. of participants	Cost to project (Rs.)
NRM	How to collect soil for nutrient analysis	April	30	3000
NRM	Reclamation of Sodic soil	April	30	3000
NRM	Deep summer ploughing with chisel plough	May	30	3000
NRM	Burning effect of crop residue on climate	May	30	3000
LPM	Shelter & Feed management for milch animals	June	30	3000
CP	Seed treatment in Kharif Pulse crops (Urd/Moong)	June	30	3000
NRM	Technology of NADEP compost preparation under NICRA village	July	30	3000
ICM	Integrated crop management in pulse crops	July	30	3000
CP	Production technology in Pearlmillet	August	30	3000
IPM	Important disease of Groundnut & their management	August	30	3000
IPM	Control of virus transmission in Pulse crops	September	30	3000
IPM	Role of Trichoderma & PGPRs in plant disease management & yield production	September	30	3000
NRM	Technology of Vermicompost preparation under NICRA village	October	30	3000
CP	Production technology of Rabi vegetables crops	October	30	3000
ICM	Integrated crop management in Pulses	November	30	3000
IPM	Effect of systemic fungicides to control seed borne disease of Wheat	November	30	3000
CP	Production technology of Mustard crops	December	30	3000
IPM	Environmental safe insecticides for the management of pulse insect-pests	December	30	3000
IPM	Mustard aphid & their management with systemic & contact insecticides	January	30	3000
NRM	Preparation of CPP-500(Cow pet pest)	January	30	3000
NRM	Preparation of Jeeva-amrit	February	30	3000
IPM	Management of fruit borer of vegetable crops	February	30	3000
CP	Post-harvest management of Rabi crops	March	30	3000
CP	Commercial seed production of Wheat	March	30	3000
Sub-total			**720**	**72000/-**

Activities and Costs

Non-recurring contingencies– Equipment

S. No.	*Item*	*Unit cost* (Rs)*	*No. of units*	*Total amount (Rs)*
1.	Disc harrow	90000/-	1	90000/-
2.	Land leveler	35000/-	1	35000/-
	Total		**2**	**125000**

Contractual Manpower (SRFs/YPs) & Media Products to be developed

Category	Rate/month (Rs.)	No. of months	Amount (Rs.)
SRF	41000	12	
Sub-total			**491000/-**

Summary of budget Estimates for 2023-24 (Tentative)

Item number	Title of the Item	Amount (Rs.)
1.	NRM	360000/-
2.	Crop Production	715000/-
3.	Live stocks	58700/-
4	Community interventions Establishment of Seed banks	25000/-
5.	Capacity Building & Training Programmes	72000/-
6.	Procurement of farm machinery/implements for CHC	125000/-
7.	Contractual Manpower (SRFs/YPs	491000/-
Grand total (Rs.)		1946700/-

Krishi Vigyan Kendra, Kanpur Dehat
Action Plan 2023

Name of village – Aurangabad **Block – Maitha**

Module	Farming System Typology			
	Irrigated (Agriculture+ Live Stock)		Irrigated (Agriculture +Livestock+ Horticulture)	
NRM	Activity	Area (ha/unit)	Activity	Area (ha/unit)
	Plantation of agro-forestry	2	Mulching in vegetable crops	2
	Deep ploughing	5	Deep laughing	3
	Green manuaring through Dhaincha	6	Green manuaring through Dhaincha	2
	Soil testing	50	Soil testing	50
Crop Production	**Demonstration**		**Demonstration**	
	Paddy	2	Paddy	2
	Perennial fodder crop		Orchard establishment	0.2
	Millets	1	Millets	1
			Okra	1
	Kitchen garden	20 unit	Kitchen garden	20unit
	Chickpea	2	Chickpea	2
	Wheat	10	Wheat	10
	Mustard	10	Mustard	10
			Tomato	1
			Brinjal	1
			Okra	1
			Bottle gourd	0.5
			Sponge gourd	0.5
			Moong	1
Livestock			Urd	1
	Animal health camp	1	Animal health camp	1
	Napier	0.25	Napier	0.25
	Chari	2.5	Chari	2.5
	Animal health camp	1	Animal health camp	1
	Stress tolerant fodder variety of Cluster bean		Stress tolerant fodder variety of cluster bean	
	Napier	0.25	Napier	0.25
	Chari	2.5	Chari	2.5
	Vermicompost bed	2unit	Vermicompost bed	2unit
	Barseem	1	Barseem	1

Capacity Building and Training Programme

S. No.	Theme	Title of training course	Proposed month	No. of beneficiaries
	Resource conservation technology	Resource conserving agri-technologies	June	30
	Natural farming	Natural farming	July	30
	FPO	FPO and group formation	August	30
	Value addition	Food processing /value addition	August	30
	Kitchen garden.	Household food security through establishment of kitchen garden	September	30
	Mushroom culture	Package and practices of mushroom cultivation	February	30
	Nursery management.	Management of Nursery for vegetables	September	30
	Millets	Training on millets	October	30
	Value Addition	Value addition in Pulses	October	30
	Information technology(IT)	Awareness and use of different digital marketing platforms	December	30
	Orchard Management	Rejuvenation of old orchards	December	30
	Pest management(IPM)	IPM practices in vegetables	January	30

	Feed and fodder management	Feed and fodder management techniques	February	30
	Development of Orchards	Establishment of new orchards	March	30
	Vegetable production	Cultivation practices of cucurbits	March	30

Krishi Vigyan Kendra-Kushinagar

Action Plan for the year 2023-24

Details about the existing NICRA village

S No	Details	Village 1	Village 2
1	Name of the village	Amwakhas	Nandpur Dashahwa
2	Involved in TDC since (year)	2011	2021
3	Cultivated area (ha)	2382	329.96
4	Rainfed Area (ha)	656.28	115
5	Irrigated Area (ha)	1190	139.9
6	Flood/ Salt affected area (ha)	579.44	75.9
7	Total Area of village (ha)	3085	564
8	No. of households in the village	2425	1017
9	Approximate households covered so far	35%	25%

2. Divide the NICRA villages into predominant farming system typologies

S No	Farming System Typologies*	Amwakhas			Nandpur Dashahwa		
		Area (ha)	No. of farmers (approx.)	% coverage of the typology (area in the village)	Area (ha)	No. of farmers (approx.)	% coverage of the typology (area in the village)
1	FST-1 Flood Prone without animal (Agriculture+Horticulture)	321.57	552	55.5	46.0	278	60.7
2	FST-2 Flood Prone with animal. (Agriculture+Livestock)	257.5	564	44.5	29.9	215	39.3
3	FST-3 Irrigated without animal (Agriculture+Horticulture)	583.00	401	48.9	82.0	235	58.7
4	FST-4 Irrigated with animal. (Agriculture+Horticulture+Livestock)	607.00	632	51.00	57.9	170	41.3

3. Identify Promising resilient technologies for addressing the constraints

S No	Farming System Typologies*	Amwakhas Technologies identified to minimize the impact of constraints shortlisted			Nandpur Dashahwa Technologies identified to minimize the impact of constraints shortlisted		
		Climate constraints	Resource /Crop/ Animal constraints	Other constraints	Climate constraints	Resource /Crop/Animal constraints	Other constraints
1	FST-1 Flood Prone without animal (Agriculture+Horticulture)	1) Low Production of Paddy Due to Submerged condition 2) Low soil fertility due to flood 3) Due to flood paddy crop damage 4) Frequently prone of flash flood.	1) Introducing flood tolerant varieties 2) Green manuring to enhance the soil fertility 3) Growing toria as catch crop to increase productivity in frequently flood 4) Crop diversification with high value vegetables after the withdrawal of flood water.	1) Use of Paddy (MTU-7029) against Submerged condition 2) In-situ growing Dhaincha 3) Short duration variety toria 4) Income generation activities(Vegetables)	1)Low Production of Paddy Due to Submerged condition 2)Low soil fertility due to flood 3)Due to flood paddy crop damage Frequently prone of flash flood.	1)Introducing flood tolerant varieties 2)Green manuring to enhance the soil fertility 3)Growing toria as catch crop to increase productivity in frequently flood 4)Crop diversification with high value vegetables after the withdrawal of flood water.	1)Use of Paddy (MTU-7029) against Submerged condition 2)In-situ growing Dhaincha 3)Short duration variety toria 4)Income generation activities(Vegetables)
2	FST-2 Flood Prone with animal. (Agriculture+Live stock)	1) Due to flood Paddy crop damage 2) Milk production is vary low due to rainfall variability and poor health of milch animal 3) Animal owners face problem	1) Demonstration of paddy cum fish culture with flood tolerant varieties.To increase the profitability per unit area. 2) Introduction of Berseem as fodder crop. 3) Feeding management & disease control programme in livestock (Total Mixed ration, Mineral block,medicines & disinfectant solution) .	1) Integrated paddy cum fish culture is a system of producing fish in combination with paddy cultivation using the same resources in the same unit area. 2) Introduction of Berseem) as fodder	1)Due to flood Paddy crop damage 2)Milk production is vary low due to rainfall variability and poor health of milch 3)Animal owners face problem regarding	1)Demonstration of paddy cum fish culture with flood tolerant varieties.To increase the profitability per unit area. 2)Introduction of Berseem as fodder crop. 3)Feeding management & disease control programme in livestock (Total Mixed ration, Mineral block,medicines & disinfectant solution)	1)Integrated paddy cum fish culture is a system of producing fish in combination with paddy cultivation using the same resources in the same unit area.2)Introduction of Berseem as fodder crop.Feedi

		regarding unavailability of feed and fodder during flood period.		crop. 3) Feeding management & disease control programme in livestock (Total Mixed ration, Mineral block,medicines & disinfectant solution)	unavailability of feed and fodder durian flood period.		ng management & disease control programme in livestock (Total Mixed ration, Mineral block,medicines & disinfectant solution)
3	FST-3 Irrigated without animal (Agriculture+Horticulture)	1) Delayed sowing of wheat due to let harvesting of sugarcane and paddy. 2) Economic loss due to crop damage by flood	1) Sowing wheat by Zero tillage. 2) Sugarcane planting by trench method to conserve moisture and to minimize the impact of flood.	1) Sowing of wheat by zero tillage machine to reduce the cast of cultivation.Sowing of wheat 10 to 15 days earlier. 2) Intercropping to compensate yield loss sugarcane	1) Delayed sowing of wheat due to let harvesting of sugarcane and paddy 2) Economic loss due to crop damage by flood 3) Frequently prone of flash flood.	1) Sowing wheat by Zero tillage 2) Sugarcane planting by trench method to conserve moisture and to minimize the impact of flood. 3) Crop diversification with high value vegetables after the withdrawal of flood water.	1) Sowing of wheat by zero tillage machine to reduce the cast of cultivation.Sowing of wheat 10 to 15 days earlier. 2) Intercropping to compensate yield loss 3) Income generation activities(Vegetables)
4	FST-4 Irrigated with animal. (Agriculture+Horticulture+Livestock)	1) Inadequate nutrition is one of the factors that frequently limit the full utilization of the productive and reprodu	1) Use of mineral and vitamins mixture after deworming 2) Improve the fertility and productivity of soil 3) Crop diversification with high value vegetables after the withdrawal of flood water.	1) Use of mineral and vitamins blend liquid mixture@ 100 ml/day for period of two months after deworming 2) Use	1) Inadequate nutrition is one of the factors that frequently limit the full utilization of the productive and reproductive	1) Use of mineral and vitamins mixture after deworming 2) Improve the fertility and productivity of soil 3) Crop diversification with high value vegetables after the withdrawal of flood water.	1) Use of mineral and vitamins blend liquid mixture@ 100 ml/day for period of two months after deworming 2) Use

		ctive potential of livestock in this region 2) Due to flood low soil fertility 3) Frequently prone of flash flood		Bio-Dicomposer to Improve the fertility and productivity of soil 3) Income generation activities(Vegetables	potential of livestock in this region 2) Due to flood low soil fertility 3) Frequently prone of flash flood		Bio-Dicomposer to Improve the fertility and productivity 3) Income generation activities(Vegetables

4. Categorization of the identified technologies in to NRM, Crops and Livestock in each of the village for taking up demonstrations during 2023-24

S No	FST	Village 1-Amwakhash				Village 2-Nandpur Dashawa			
		NRM	Crop	Livestock	Total	NRM	Crop	Livestock	Total
1	FST-1 Flood Prone without animal (Agriculture+Horticulture)	1) RCT on Pddy 2)Green manuring	1) Introducing flood tolerant varieties 2)Short duration variety (specify) Toria 3)Income generation activities (Vegetables etc.)	-	5	1) RCT on Pddy 2) Green manuring	1) Introducing flood tolerant varieties 2)Short duration variety (specify) Toria 3)Income generation activities (Vegetables etc.)	-	5
2	FST-2 Flood Prone with animal. (Agriculture+Livestock)	1)Paddy cum fish culture(including Bund and trench digging and net) 2)Composite fish culture in	1)Introduction of Berseem as fodder crop.	Year round fodder production strategies (Napier grass,Berseem grass,Sudan grass) 2)Feedin	5	1)Paddy cum fish culture(including Bund and trench digging and net) 2)Composite fish culture in	1)Introduction of Berseem as fodder crop.	1)Year round fodder production strategies (Napier grass,Berseem grass,Sudan grass) 2)Feeding management & disease control	5

		seasonal drain & ponds.		g managem ent & disease control program me in livestock (Total Mixed ration, Mineral block,me dicines & disinfecta nt solution) .		seasonal drain & ponds.		programme in livestock (Total Mixed ration, Mineral block,medicin es & disinfectant solution) .	
3	FST-3 Irrigated without ani mal (Agriculture+Hortic ulture)	1)RCT on Wheat	1)Intercr opping of potato in autumn sugarcan e. 2)Intercr opping of cowpea in spring sugarcan e 3)Intercr opping of onion in autumn sugarcan e. 4)Intercr opping of green gram in autumn sugarcan e		5	1)RCT on Wheat	1)Intercr opping of potato in autumn sugarca ne. 2)Intercr opping of cowpea in spring sugarca ne 3)Intercr opping of onion in autumn sugarca ne. 4)Intercr opping of green gram in autumn sugarca ne		5
4	FST-4 Irrigated with animal . (Agriculture+Hortic ulture+Livestock)	1)RCT on Wheat 2)Bio-Dicompo	1)Income generation activities (Vegetable etc.)	Mineral mixture demos.	4	1)RCT on Wheat 2)Bio-Dicompo	1)Incom e generati on activitie s	Mineral mixture demos.	4

		ser.				ser.	(Vegetables etc.)		

5. No. of farmers involved in each of the village for demonstrations during 2023-24 (technology wise)

Sl. No.	Farming System Typologies	Village 1-Amwakhash				Village 2-Nandpur Dashawa			
		NRM	Crop	Livestock	Total	NRM	Crop	Livestock	Total
1	FST- 1 Flood Prone without animal (Agriculture+Horticulture)	1)50 2)12	1)40 2)30 3)25	-	157	1)25 2)8	1)10 2)10 3)25	-	78
2	FST- 2 Flood Prone with animal. (Agriculture+Livestock)	1) 10 2) 4	1) 20	1)50 2)200	248	1) 4 2) 1	1)5	1)20 2)50	80
3	FST- 3 Irrigated without animal (Agriculture+Horticulture)	1) 50	1) 60	-	110	1)30	1)20	-	50
4	FST- 4 Irrigated with animal. (Agriculture+Horticulture+ Livestock)	1)15 2)15	1)90	1)15	135	1) 10 2) 5	1)60	1)5	80

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

SNo	Farming System Typologies	Village 1-Amwakhash				Village 2-Nandpur Dashawa			
		Climate Resilient Technology	Convergence with Scheme	No. of farmers proposed to be involved	Area to be covered (ha)	Climate Resilient Technology	Convergence with Scheme	No. of farmers proposed to be involved	Area to be covered (ha)
1	FST-1 Flood Prone without animal (Agriculture+Horticulture)	1) Introducing flood tolerant varieties 2)Demonstration HVY of Toria-Uttara compensate losse during	1) Use of Paddy (MTU-7029) against Submerged condition 2) Crop diversification by introducing HVY of Toria Uttara to	1)53 2)15	1)12 2)3.5	1)Introducing flood tolerant varieties 2)Demonstration HVY of Toria - Uttara compensate losse during kharif	1)Use of Paddy (MTU-7029) against Submerged condition 2)Crop diversification by introducing HVY of Toria-	1)12 2)10	1)6.6 2)2

		kharif crop	compensate losse during *kharif* crop			crop	Uttara compensate losse during kharif crop		
2	FST-2 Flood Prone with animal. (Agriculture+Livestock)	1)Use of green fodder (Berseem)	1)Low milk production in Dairy animals	1)30	1)1	1)Use of green fodder (Berseem)	1)Low milk production in Dairy animals	1)10	1)0.5
	FST-3 Irrigated without animal (Agriculture+Horticulture)	1) Wheat sowing by Zero tillage & line sowing 2) Demonstration of intercropping Potato with sugarcane via trench method	1) Delayed sowing of wheat due to let harvesting of sugarcane and paddy 2) inter croppin g to compensate yield loss of sugarcane	1)67 2)16	1)9.4 2)2	1) Wheat sowing by Zero tillage & line sowing 3) Demonstration of intercropping Potato with sugarcane via trench method	1) Delayed sowing of wheat due to let harvesting of sugarcane and paddy 2) inter croppin g to compensate yield loss of sugarcane	1)20 2)6	1)2.6 2)0.5
4	FST-4 Irrigated with animal. (Agriculture+Horticulture+Livestock)	1)Mineral Mixture and Dewormer	1)Low milk production in Dairy animals	1)15	1)15	1)Mineral Mixture and Dewormer	1)Low milk production in Dairy animals	1)5	1)5

Activities and Cost

7. NRM Interventions;

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

Sl No.	Village 1, 2	Intervention	Unit cost Rs/ha A	Coverage Proposed		Total amount (Rs)A x C
				Area (ha)B	No. of farm households proposed to be involving C	
		RCT on paddy	4500	4	50	18000
		RCT on wheat	5000	20	100	100000
		Green Manuring	1250	5	20	6250
1	Amwakhas	Bio-Dicomposer	2500	6	10	15000
2	Nanadpur Dashahwa	RCT on paddy	4500	2	25	9000

		RCT on wheat	5000	10	40	50000
		Green Manuring	1250	3.2	10	1000
		Bio-Dicomposer	2500	2	5	5000
		Sub-total 8.2.	**26500**	**52.2**	**260**	**204250**

8.Crop Interventions;

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

Sl No.	**Village 1, 2**	**Intervention**	**Description**		**Cost (Rs/ ha)A**	**Coverage Proposed**		**Total amo unt (Rs) A x C**
			Crop	**Variety (s)**		**Area (ha) B**	**No. of farm households to be involved C**	
1.	Amwakhas	Introducing flood tolerant varieties	Paddy	MTU7029,Rajshree, S warna sub1, Sudha, Vai dhehi,	5000	8	40	40000
		Short duration vari eties	Toria	Uttara	3000	4	30	12000
2.	Nanadpur Dasha hwa	Introducing flood tolerant varieties	Paddy	MTU7029,Rajshree, Swa rna sub-1 , Sudha, Vaidhehi,	5000	2	10	10000
		Short duration vari eties	Toria	Uttara	3000	1	10	3000
		Sub Total 9.1.			**1600 0**	**15**	**90**	**65000.00**

Sl No.	**Village 1, 2**	**Intervention**	**Description**		**Cost (Rs/ha) A**	**Coverage Proposed**		**Total amou nt (Rs)A x C**
			Crop	Variety (s)		Area (ha)B	No. of farm households to be involved C	
		Intercropping of Potato in Autumn sugarcane.	Sugarcane w ith Potato	Kufari Sindhuri	3250 0	2	20	65000
		Intercropping of Cow pea in Spring sugarcane.	Sugarcane w ith Cow pea	Kashi Ka nchan	1500 0	1	10	15000
		Intercropping of Onion in Spring sugarcane.	Sugarcane w ith Onion	NHRDF RED-3&4	3000 0	1	10	30000
		Intercropping of Green gr am in Spring sugarcane.	Sugarcane with Green gram	Virat	3750	1.5	20	5625
		Sub Total 9.1.			**8125 0**	**5.5**	**60**	**115625.00**

Sl No.	**Village 1,2**	**Intervention**	**Description**		**Cost (Rs/ha)A**	**Coverage Proposed**		**Total amou nt (Rs)A x C**
			Crop	Variety (s)		Area (ha)B	No. of farm household s to be involved C	
		Intercropping of Potato in Autumn sugarcane.	Sugarcane wit h Potato	Kufari Si ndhuri	32500	0.5	5	16250
		Intercropping of Cow pea in Spring sugarcane.	Sugarcane wit h Cow pea	Kashi Kanchan	15000	0.5	5	7500
		Intercropping of Onionin Spring sugarcane.	Sugarcane with Onion	NHRD F RED-3&4	30000	0.5	5	15000
		Intercropping of Green gr am in Spring sugarcane.	Sugarcane wit hGreen gram	Virat	3750	0.5	5	1875
		Sub Total 9.1.			**81250**	**2**	**20**	**40625.00**

9.Crop Interventions;

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

Sl No.	village	Intervention	Description		Cost (Rs/ha) A	Coverage Proposed		Total amount (Rs)A x C
			Crop	Variety (s)		Area (ha)B	No. of farm households to be involved C	
	Amwakhas	Direct seeding rice (DSR) Drum seeder	Paddy	-	7500	8	40	60000
		Income generation activities (vermin compost)	vermin compost	-	4000	10	10	40000
		Income generation activities (Vegetables etc.)	Vegetables	-	200	1	200	20000
	Nanadpur Dashahwa	Direct seeding rice (DSR) Drum seeder	Paddy	-	7500	2	25	15000
		Income generation activities (vermin compost)	vermin compost	-	4000	5	5	20000
		Income generation activities (Vegetables etc.)	Vegetables	-	200	1	200	20000
		Sub Total 9.2.			**23400**	**27**	**480**	**175000.00**

10. Livestock and Fisheries

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

Sl No.	Details of feed intervention	Unit cost of intervention (Rs.)	No. of farm households to be involved	Total amount (Rs/ha)	Remarks
1.	Mineral mixture demos	1000	20	20000	20
2.	Introduction of Berseem as fodder crop	7500	25	15000	25
3.	Feeding management & disease control programme in livestock (Total Mixed Ration, Mineral block, medicines & disinfectant solution)	40	200	8000	5
	Sub-total 10.1.	**8540**	**245**	**43000.00**	**50**

10.2. Establishment of Seed banks / Fodder banks, etc..

Sl No	Seed bank/Fodder Bank	Seed of crop and variety/ Fodder crop/ variety	Quantity of seed/ fodder produced/ storage (t)	Unit cost (Rs.)	No. of farmers involved	Amount (Rs.)	Remarks
1	Community seeds production of paddy	Paddy MTU 7029, BPT 5204,	5	2000	5	10000	10
2	Community seeds production of wheat	Wheat-HD-2967,DBW-252	10	2000	5	10000	10
3	Community fodder bank	Wheat straw, Berseem Green fodder	3	3000	4	12000	20
	Sub-total 10.2.		**18**	**7000**	**14**	**32000.00**	**40**

11. Non-recurring contingencies – Equipment

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

S. No.	Item	Unit cost(Rs)	No. of units	Total amount (Rs)
1.	Zero till	90000	2	180000
2.	Drum Seeder	10000	4	40000
3.	Sprayer (battery Chargeable)	5000	4	20000
4.	Computer & Printer	60000	1	60000
	Total	**165000.00**	**11**	**300000.00**

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.)
Group Formation	Formation of Agri-Input and Service Provider group	May	100	10000
RCT of paddy	Resource conservation technology of paddy cultivation	May	80	5000
Paddy cum fish culture	Management of composite fish farming	June	40	4000
Preparation of vermi-compost	Preparation of vermi-compost	July	40	4000
Seed production	Seed production technology of paddy	August	20	2000
RCT of wheat	Resource conservation technology of wheat cultivation	October	80	5000
Package and practices	Package and practices of Zero-till wheat cultivation	November	80	5000
Income generation.	Income generation activities(Vegetables etc.)	February	80	5000
Seed production and storage.	Wheat Seed production technology and storage.	March	20	2000
Production technology.	Production technology of Mushroom	September	20	2000
Animal Health.	Backyard poultry and Goatery	April	20	2000
Sub-total 12.1.			**540**	**46000.00**

12.2. Field Days/Exposure visits/Awareness programmes/Kisan melas/Kisan ghosti proposed for the year

Theme	Title of Programme	Proposed month	No. of participants	Cost (Rs.)
Field day on paddy	Field day on paddy	September	50	7500
Field day on wheat	Field day on wheat	April	50	7500
Field Day on Sugar cane	Field Day on Sugarcane	November	100	10000
Field Day on Potato	Field Day on Potato with sugarcane inter cropping	March	50	7500
Sub-total 12.2.			**250**	**32500.00**

13.1 Publications

Publication	Nature of Publication (Book/Bulletin/ Brochure etc.)	Proposed during the month	No. of Copies	Cost (Rs.)
Publication	Training Material	January	500	50000
Sub-total 13.1.			**500**	**50000.00**

13.2 Video Films

Video Film to be prepared	Duration (Minutes)	Proposed during the month	Cost (Rs.)
1	30	January	25000
Sub-total 13.2.			**25000.00**

14. Summary of cost Estimates for 2023-24

Item No.	Title of the Item	Amount (Rs.)
7.	In situ conservation – Resource Conservation Technologies (RCTs), etc.	204250.00
8.	Stress tolerant / improved varieties / Short duration / Legume crops, etc..	221250.00
9.	Improved agronomic practices and other crop interventions, etc..	175000.00
10.1	Feed demonstrations for crop residue management / stress management: silage / feed blocks/ mineral mixture (MM) blocks / feed enrichment, etc..	43000.00
10.2	Establishment of Seed banks / Fodder banks, etc	32000.00
11.0	Proposal for Procurement of climate related farm machinery/ implements for Custom Hiring centre	300000.00
12.1.	Training programmes proposed for the year	46000.00
12.2	Field Days/Exposure visits/Awareness programmes/Kisan melas/Kisan ghosti proposed for the year	23500.00
13.1	Publications	50000.00
13.2	Video Films	25000.00
14.0	Contractual Manpower (SRFs/YPs) 01	440000.00
	Grand total	**1560000.00**

Krishi Vigyan Kendra–Mahrajganj
Action Plan 2023-24

1. Details about the existing NICRA villages

S No	Details	Village 1	Village 2	Village 3
1	Name of the village	Karuata urf Nebuiya	Ledwa	Laxmipur Mahant
2	Involved in TDC since (year)	2021	2021	2021
3	Cultivated area (ha)	196	160	172
4	Rainfed Area (ha)	19	14	12
5	Irrigated Area (ha)	83	62	75
6	Flood/ Salt affected area (ha)	94	84	85
7	Total Area of village (ha)	295	278	245
8	No. of households in the village	592	448	456
9	Approximate households covered so far	50%	45%	60%

2. Divide the NICRA villages into predominant farming system typologies

S No	Farming System Typologies*	Karuata urf Nebuiya			Ledwa		
		Area (ha)	No. of farmers (approx.)	% coverage of the typology (area in the village)	Area (ha)	No. of farmers (approx.)	% coverage of the typology (area in the village)
1	Flood Irrigated without Animal- (Ag.+Hort)	84	255	42.85	74	207	46.25
2	Flood Irrigated with Animal (Ag.+Live Stock)	69	208	35.20	48	134	30
3	Flood Irrigated with Animal(Ag.+Hort.+Live Stock)	43	129	21.93	38	107	23.75

Divide the NICRA villages into predominant farming system typologies

S No	Farming System Typologies*	Laxmipur Mahant		
		Area (ha)	No. of farmers (approx.)	% coverage of the typology (area in the village)
1	Flood Irrigated without Animal- (Ag.+Hort)	89	236	51.74
2	Flood Irrigated with Animal (Ag.+Live Stock)	44	117	25.58
3	Flood Irrigated with Animal- (Ag.+Hort.+Live Stock)	39	103	22.67

3. Predominant climatic, crop, animal and resource constraints of the major identified farming system typologies of NICRA villages

S No	Farming System Typologies*	Karuata urf Nebuiya			Ledwa		
		Climate constraints	Resource /Crop/Animal constraints	Other constraints	Climate constraints	Resource /Crop/Animal constraints	Other constraints
1	Flood Irrigated without Animal- (Ag.+Hort)	Flood, water logging, water stagnation, Heat stress	No use of Submergence and flood tolerant varieties, No use of RCT, late sowing of wheat, Poor SRR	Poor soil fertility, Lack of diversification , poor resource of house hold	Flood, water logging, water stagnation, Heat stress	No use of Submergence and flood tolerant varieties, No use of RCT, Not sown early/late varieties	Poor soil fertility, Lack of diversification
2	Flood Irrigated	Flood,	FST-1+Lack of balance	Poor soil	Flood, water	FST-1+Lack of	Poor soil fertility,

	with Animal (Ag.+Live Stock)	water logging, water stagnation, Heat stress,	feeding and green fodder, disease and parasitic infestation , poor management of live stock	fertility, Lack of diversification , poor resource of house hold	logging, water stagnation, Heat stress	balance feeding and green fodder, disease and parasitic infestation	Lack of diversification
3	Flood Irrigated with Animal- (Ag.+Hort.+Live Stock)	Flood, water logging, water stagnation, Heat stress	FST-1+FST-2 + No use of improved varieties ,IPM and INM	Poor soil fertility, Lack of diversification , poor resource of house hold	Flood, water logging, water stagnation, Heat stress	FST-1+FST-2 + No use of improved varieties ,IPM and INM	Poor soil fertility, Lack of diversification

Predominant climatic, crop, animal and resource constraints of the major identified farming system typologies of NICRA villages

S No	Farming System Typologies*	Laxmipur Mahant		
		Climate constraints	Resource /Crop/Animal constraints	Other constraints
1	Flood Irrigated without Animal- (Ag.+Hort)	Flood, water logging, water stagnation, Heat stress	No use of Submergence and flood tolerant varieties, No use of RCT, Not sown early/late varieties	Poor soil fertility, Lack of diversification , poor resource of house hold
2	Flood Irrigated with Animal (Ag.+Live Stock)	Flood, water logging, water stagnation, Heat stress	FST-1+Lack of balance feeding and green fodder, disease and parasitic infestation , poor management of live stock	Poor soil fertility, Lack of diversification , poor resource of house hold
3	Flood Irrigated with Animal- (Ag.+Hort.+Live Stock)	Flood, water logging, water stagnation, Heat stress	FST-1+FST-2 + No use of improved varieties ,IPM and INM	Poor soil fertility, Lack of diversification , poor resource of house hold

4. Identify Promising resilient technologies for addressing the constraints

S No	Farming System Typologies*	Karuata urf Nebuiya			Ledwa		
		Climate constraints	Resource /Crop/Animal constraints	Other constraints	Climate constraints	Resource /Crop/Animal constraints	Other constraints
1	Flood Irrigated without Animal- (Ag.+Hort)	use of Submergence and flood tolerant varieties	use of improved, Submergence and flood tolerant varieties, use of RCT, sowing early/late varieties, short duration & off season vegetables	Green manuring, composting, crops and veg. based diversification, support of Govt. schemes with line departments	use of Submergence and flood tolerant varieties	use of improved, Submergence and flood tolerant varieties, use of RCT, sowing early/late varieties, short duration & off season vegetables	Green manuring, composting, crops and veg. based diversification, support of Govt. schemes with line departments
2	Flood Irrigated with Animal (Ag.+Live Stock)	use of Submergence and flood tolerant varieties	FST-1+supplementation of mineral mixture after deworming, vaccination, green fodder production, improved breeds of live stock	Green manuring, composting, crops and veg. based diversification, support of Govt. schemes with line departments	use of Submergence and flood tolerant varieties	FST-1+supplementation of mineral mixture after deworming, vaccination, green fodder production, improved breeds of live stock	Green manuring, composting, crops and veg. based diversification, support of Govt. schemes with line departments
3	Flood Irrigated with Animal- (Ag.+Hort.+Live Stock)	use of Submergence and flood	FST-1+FST-2 + use of improved varieties ,IPM and INM	Green manuring, composting, crops and veg. based	use of Submergence and flood tolerant	FST-1+FST-2 + use of improved varieties ,IPM and INM	Green manuring, composting, crops and veg. based

		tolerant varieties		diversification, support of Govt. schemes with line departments	varieties		diversification, support of Govt. schemes with line departments

Identify Promising resilient technologies for addressing the constraints

S No	Farming System Typologies*	Laxmipur Mahant		
		Climate constraints	**Resource /Crop/Animal constraints**	**Other constraints**
1	Flood Irrigated without Animal-(Ag.+Hort)	use of Submergence and flood tolerant varieties, Heat tolerant wheat varieties	use of improved, Submergence and flood tolerant varieties, use of RCT, Early sowing/late varieties, short duration & off season vegetables	Green manuring, composting, crops and veg. based diversification, support of Govt. schemes with line departments
2	Flood Irrigated with Animal (Ag.+ Live Stock)	use of Submergence and flood tolerant varieties Heat tolerant wheat varieties	FST-1+supplementation of mineral mixture after deworming, vaccination, green fodder production, improved breeds of live stock	Green manuring, composting, crops and veg. based diversification, support of Govt. schemes with line departments
3	Flood Irrigated with Animal-(Ag.+ Hort.+ Live Stock)	use of Submergence and flood tolerant varieties Heat tolerant wheat varieties	FST-1+FST-2 + use of improved varieties ,IPM and INM	Green manuring, composting, crops and veg. based diversification, support of Govt. schemes with line departments

5. Categorization of the identified technologies in to NRM, Crops and Livestock in each of the village for taking up demonstrations during 2023-24

S No	Farming System Typologies	Karuata urf Nebuiya			
		NRM	**Crop**	**Livestock**	**Total**
1	Flood Irrigated without Animal-(Ag.+Hort)	1.In situ Residue management 2.RCT 3.Green manuring	1. Submergence tolerant rice variety 2. Heat tolerant wheat variety 3. Early sowing of wheat. 4. Increases in no of irrigation 5. Crop diversification 6. Short duration crops	-	6
2	Flood Irrigated with Animal (Ag.+Live Stock)	Same as above	Same as above	1. Supplementation of mineral mixture after deworming 2. Green fodder production 3. Breed improvement 4. Vaccination	10
3	Flood Irrigated with Animal-(Ag.+Hort.+Live Stock)	Same as above	Same as above	1. Supplementation of mineral mixture after deworming 2. Green fodder production 3. Breed improvement 4. Vaccination	10

Categorization of the identified technologies in to NRM, Crops and Livestock in each of the village for taking up demonstrations during 2023-24

S No	Farming System Typologies	Ledwa			
		NRM	Crop	Livestock	Total
1	Flood Irrigated without Animal-(Ag.+Hort)	1.In situ Residue management 2.RCT 3.Green manuring	7. Submergence tolerant rice variety 8. Heat tolerant wheat variety 9. Early sowing of wheat. 10. Increases in no of irrigation 11. Crop diversification 12. Short duration crops	-	6
2	Flood Irrigated with Animal (Ag.+Live Stock)	Same as above	Same as above	1. Supplementation of mineral mixture after deworming 2. Green fodder production 3. Breed improvement 4. Vaccination	10
3	Flood Irrigated with Animal-(Ag.+Hort. +Live Stock)	Same as above	Same as above	1. Supplementation of mineral mixture after deworming 2. Green fodder production 3. Breed improvement 4. Vaccination	10

Categorization of the identified technologies in to NRM, Crops and Livestock in each of the village for taking up demonstrations during 2023-24

S No	Farming Syste Typologies	Laxmipur Mahant			
		NRM	Crop	Livestock	Total
1	Flood Irrigated without Animal-(Ag.+Hort)	1.In situ Residue management 2.RCT 3.Green manuring	13. Submergence tolerant rice variety 14. Heat tolerant wheat variety 15. Early sowing of wheat. 16. Increases in no of irrigation 17. Crop diversification 18. Short duration crops	-	6
2	Flood Irrigated with Animal (Ag.+Live Stock)	Same as above	Same as above	1. Supplementation of mineral mixture after deworming 2. Green fodder production 3. Breed improvement 4. Vaccination	10
3	Flood Irrigated with Animal-(Ag.+Hort. +Live Stock)	Same as above	Same as above	1. Supplementation of mineral mixture after deworming 2. Green fodder production 3. Breed improvement 4. Vaccination	10

6. No. of farmers involved in each of the village for demonstrations during 2023-24 (technology wise)

S No	Farming System Typologies	Karuata urf Nebuiya				Ledwa			
		NRM	Crop	Livestock	Total	NRM	Crop	Livestock	Total
1	Flood Irrigated without Animal- (Ag.+Horti)	1)20 2)20 3)20	1)60 2)40 3)50 4)40 5)30 6)20	-	300	1)20 2)20 3)20	1)50 2)40 3)50 4)40 5)30 6)20	-	290
2	Flood Irrigated with Animal (Ag.+Live Stock)	1)20 2)20 3)20	1)50 2)40 3)40 4)40 5)40 6)20	1)30 2)30 3)30 4)30	410	1)20 2)20 3)20	1)50 2)40 3)40 4)40 5)40 6)20	1)30 2)30 3)20 4)20	390
3	Flood Irrigated with Animal- (Ag.+Hort.+Live Stock)	1)20 2)20 3)20	1)40 2)40 3)50 4)40 5)30 6)20	1)10 2)10 3)10 4)10	320	1)20 2)20 3)20	1)40 2)40 3)40 4)40 5)30 6)20	1)10 2)10 3)10 4)10	310

No. of farmers involved in each of the village for demonstrations during 2023-24 (technology wise)

S No	Farming System Typologies	Laxmipur Mahant			
		NRM	Crop	Livestock	Total
1	Flood Irrigated without Animal- (Ag.+Horti)	1)20 2)20 3)20	1)60, 2)40 3)50, 4)40 5)30, 6)20	-	300
2	Flood Irrigated with Animal (Ag.+Live Stock)	1)20 2)20 3)20	1)50, 2)40 3)40, 4)40 5)40, 6)20	1)20, 2)20 3)20, 4)20	370
3	Flood Irrigated with Animal- (Ag.+Hort.+Live Stock)	1)20 2)20 3)20	1)40, 2)40 3)40, 4)40 5)30, 6)20	1)10, 2)10 3)10 , 4)10	310

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

S No	Farming System Typologies	Karuata urf Nebuiya			
		Climate Resilient Technology	Convergence with Scheme	No. of farmers proposed to be involved	Area to be covered (ha)
1	Flood Irrigated without Animal- (Ag.+Hort)	1.Green manuring 2.Flood tolerant varieties 3. RCT	1. Agriculture Department 2. CSISA	1. 100 2. 40	1. 40 2. 16
2	Flood Irrigated with Animal (Ag.+Live Stock)	1. Green manuring 2. Vaccination 3. Breed improvement	Agriculture Department ASCAD & FMDEP (AH & Dairy Deptt.) RGM (AH & Dairy Deptt.)	1. 60 2. 30 3. 25	1. 24 2. 30 3. 25
3	Flood Irrigated with	1.Green manuring	Agriculture Department	1. 80	1. 100

	Animal- (Ag.+Hort.+Live Stock)	2.Vaccination 3.Breed improvement	ASCAD & FMDEP (AH & Dairy Deptt.) RGM (AH & Dairy Deptt.)	2. 30 3. 35	2. 30 3. 35

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

S No	FST	Ledwa			
		Climate Resilient Technology	Convergence with Scheme	No. of farmers proposed to be involved	Area to be covered (ha)
1	Flood Irrigated without Animal- (Ag.+Hort)	1.Green manuring 2.Flood tolerant varieties 3. RCT	1. Agriculture Department 2. CSISA	1. 50 2. 20	1. 20 2. 10
2	Flood Irrigated with Animal (Ag.+Live Stock)	1.Green manuring 2.Vaccination 3.Breed improvement	1. Agriculture Department 2. ASCAD & FMDEP (AH & Dairy Deptt.) 3. RGM (AH & Dairy Deptt.)	1. 60 2. 20 3. 20	1. 24 2. 20 3. 20
3	Flood Irrigated with Animal(Ag.+Hort.+Live Stock)	1.Green manuring 2.Vaccination 3.Breed improvement	1. Agriculture Department 2. ASCAD & FMDEP (AH & Dairy Deptt.) 3. RGM (AH & Dairy Deptt.)	1. 50 2. 25 3. 25	1. 20 2. 25 3. 25

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

S No	FST	Laxmipur Mahant			
		Climate Resilient Technology	Convergence with Scheme	No. of farmers proposed to be involved	Area to be covered (ha)
1	Flood Irrigated without Animal- (Ag.+Hort)	1.Green manuring 2.Flood tolerant varieties 3. RCT	1. Agriculture Department 2. CSISA	1. **50** 2. **20**	1. **20** 2. **10**
2	Flood Irrigated with Animal (Ag.+Live Stock)	1.Green manuring 2.Vaccination 3.Breed improvement	1. Agriculture Department 2. ASCAD & FMDEP (AH & Dairy Deptt.) 3. RGM (AH & Dairy Deptt.)	1. 50 2. 25 3. 25	1. 20 2. 25 3. 25
3	Flood Irrigated with Animal(Ag.+Hort.+Live Stock)	1.Green manuring 2.Vaccination 3.Breed improvement	1. Agriculture Department 2. ASCAD & FMDEP (AH & Dairy Deptt.) 3. RGM (AH & Dairy Deptt.)	1. 50 2. 25 3. 25	1. 20 2. 25 3. 25

Activities and Cost

8. NRM Interventions;

8.1. Repair / Renovation of existing water harvesting structures, drainage channels etc.:

Sl No.	Village 1, 2, 3, etc.	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)
1	Karuata urf Nebuiya	-	-	-	-	-	-	-
2	Ledwa	-	-	-	-	-	-	-
3	Laxmipur Mahant	-	-	-	-	-	-	-
	Sub-total 8.1 -			-	-	-	-	-

Activities and Cost

8. NRM Interventions;

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

Sl No.	Village 1, 2, 3, etc.	Intervention	Unit cost Rs/ha A	Coverage Proposed		Total amount (Rs) A x C
				Area (ha) B	No. of farm households proposed to be involved C	
1	Karuata urf Nebuiya	1. Sowing with supper seeder 2.Ridge bed sowing 3.DSR 4.Green Manuring	7500 8000 7500 4000	10 5 10 10	30 30 30 20	75000 40000 75000 40000
2	Ledwa	1. Sowing with supper seeder 2.Ridge bed sowing 3.DSR 4.Green Manuring	7500 8000 7500 4000	10 5 10 10	30 30 30 20	75000 40000 75000 40000
3	Laxmipur Mahant	1. Sowing with supper seeder 2.Ridge bed sowing 3.DSR 4.Green Manuring	7500 8000 7500 4000	10 5 10 10	30 30 30 20	75000 40000 75000 40000
		Sub-total 8.2.	81000			690000

Activities and Cost

9.Crop Interventions;

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

Sl No.	Village 1,2,3 etc.	Intervention	Description		Cost (Rs/ha) A	Coverage Proposed		Total amount (Rs) A x C
			Crop	Variety (s)		Area (ha)B	No. of farm households to be involved C	
1	Karuata urf Nebuiya	Submergence tolerant varieties Heat stress tolerant varieties Short duration crops Legume crops Green fodder	Rice Wheat Cowpea Lentil Barseem	Sambha sub-1/Swarna S-1 DBW 187 Kashi kanchan IPL315 VL-10	3500 3500 4000 5000 4000	30 25 2 2 2	60 60 25 25 20	105000 87500 8000 10000 8000
2	Ledwa	Submergence tolerant varieties Heat stress tolerant varieties Short duration crops Legume crops Green fodder	Rice Wheat Cowpea Lentil Barseem	Sambha sub-1/Swarna S-1 DBW 187 Kashi kanchan IPL315 VL-10	3500 3500 4000 5000 4000	30 25 2 2 2	60 60 25 25 20	105000 87500 8000 10000 8000
3	Laxmipur Mahant	Submergence tolerant varieties Heat stress tolerant	Rice Wheat Cowpea	Sambha sub-1/Swarna S-1 DBW 187	3500 3500 4000	30 25 2	60 60 25	105000 87500 8000

		varieties Short duration crops Legume crops Green fodder	Lentil Barseem	Kashi kanchan IPL315 VL-10	5000 4000	2 2	25 20	10000 8000
		Sub Total 9.1.						655500

Activities and Cost

9.Crop Interventions;

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

Sl No.	village	Intervention	Description		Cost (Rs/ha) A	Coverage Proposed		Total amount (Rs) A x C
			Crop	Variety's		Area (ha) B	No. of farm households to be involved C	
1	Karuata urf Nebuiya	Sub mergence tolerant rice variety DSR Early sowing wheat Line sowing + Thinning Line sowing + Seed treatment Sowing on bunds Line sowing + PSB	Rice Wheat Mustard Lentil Cowpea	Sambha sub-1 DBW-187 RH-725 IPL-315 Kashi Kanchan	3500 3500 5000 6000 8000	10 10 5 5 2	25 30 10 10 5	35000 35000 25000 30000 16000
2	Ledwa	Sub mergence tolerant rice variety DSR Early sowing wheat Line sowing + Thinning Line sowing + Seed treatment Sowing on bunds Line sowing + PSB	Rice Wheat Mustard Lentil Cowpea	Sambha sub-1 DBW-187 RH-725 IPL-315 Kashi Kanchan	3500 3500 5000 6000 8000	10 10 5 5 2	25 30 10 10 5	35000 35000 25000 30000 16000
3	Laxmipur Mahant	Sub mergence tolerant rice variety DSR Early sowing wheat Line sowing + Thinning Line sowing + Seed treatment Sowing on bunds Line sowing + PSB	Rice Wheat Mustard Lentil Cowpea	Sambha sub-1 DBW-187 RH-725 IPL-315 Kashi Kanchan	3500 3500 5000 6000 8000	10 10 5 5 2	25 30 10 10 5	35000 35000 25000 30000 16000
		Sub Total 9.2.						423000

Activities and Cost

10. Livestock and Fisheries

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

Sl No.	Details of feed intervention	Unit cost of intervention (Rs.)	No. of farm households to be involved	Total amount (Rs/ha)	Remarks
1	Supplementation of mineral mixture after deworming	1. 1500	30	45000	
	Sub-total 10.1.			45000	

10.2. Establishment of Seed banks / Fodder banks, etc..

Sl No.	Seed bank/Fodder Bank	Seed of crop and variety/ Fodder crop/ variety	Quantity of seed/ fodder produced/ storage (t)	Unit cost (Rs.)	No.of farmers involved	Amount (Rs.)
-	Sub-total 10.2.	-	-	-	-	-

Activities and Cost

11. Non-recurring contingencies – Equipment

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

S. No.	Item	Unit cost (Rs)	No. of units	Total amount (Rs)
1.	Super Happy Seeder	400000	3	1200000
2.	Tractor Mounted Power Spary	100000	3	300000
3.	Power Beeder	300000	1	300000
	Total NRC			1800000

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.)
NRM	Green manuring	May	30	5000
NRM	Improved technique for Direct seeded rice	June	30	5000
Crop management	Recent advances in rice production technique under flood affected area	June	30	5000
Nutrient management	Nutrient management in wet land situation	July	30	5000
Weed management	Weed management in rice	July	30	5000
Crop production	Residue incorporation and production technique of wheat	October	30	5000
Weed control	Weed control in cereals and pulses of rabi season.	December	30	5000
Crop management	Production technique of late sown rabi crops	November	30	5000
Live stock management	Live stock management for milk production	June	30	5000
Fodder and feed management	Fodder and feed management for milch animals in flood prone village	July	30	5000
Disease Management in Livestock	Vaccination in Livestock after rainy season	August	30	5000
Vermi-compost	Goat farming	November	30	5000
Integrated Farming	Commercial cultivation of marigold and Gladiolus	October	30	5000
Seed Production	Seed production Tech. of Cow pea, & green gram	January	30	5000
Sub-total 12.1.			**420**	**70000**

12.2. Field Days/Exposure visits/Awareness programmes/Kisan melas/Kisan ghosti proposed for the year

Theme	Title of Programme	Proposed month	No. of participants	Cost (Rs.)
DSR	Cultivation of Paddy through DSR	September	50	10000
RCT	Cultivation of wheat through Super seeder/ Zero Till Technique	March	50	10000
Varietal	Use of Shambha sub-1 in flood affected areas	November	50	10000
Crop Diversification	Production techniques of mustard, lentil and C.pea	October	50	10000
	Production of Improved variety (Kashi Kanchan) of Cowpea	March	50	10000
Nutrition Management	Use and importance area specific mineral mixture after deworming in live stock	October	50	10000
Feed and Fodder management	Green fodder production around the year	December	50	10000
Meeting	Strengthening SHGs		50	10000
Awareness	Training		50	10000
Sub-total 12.2.			**450**	**90000**

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	ost (Rs.)
Natural farming	Bulletin	October	1000	25000
Sustainable technology for flood prone area	Bulletin	Janauary	1000	25000
Success story	Bulletin	January	1000	25000
Sub-total 13.1.				**75,000**

13.2 Video Films

Video Film to be prepared	Duration (Minutes)	Proposed during the month	Cost (Rs.)
Sub-total 13.2.	-	-	-

14. Summary of cost Estimates for 2023-24

Item number	Title of the Item	Amount (Rs.)
8.1	Repair / Renovation of existing water harvesting structures, drainage channels etc	-
8.2	In situ conservation – Resource Conservation Technologies (RCTs)	690000
9.1	Crop Interventions;	655500
9.2	Crop Interventions;	423000
10.1	Livestock and Fisheries	45000
10.2	Seed bank	-
11	Non-recurring contingencies – Equipment	1800000
12.1	Capacity Building & Other extension activities	70000
12.2	Capacity Building & Other extension activities	90000
13.1	Publications and Media products	75000
13.2	Video	-
	Grand total (Rs.)	3848500

15. Plan for the spread of the proven practices (Convergence with departments, linkages with development organisations, etc.,)

Sl. No	Proven technology/ Capacity building	Department involved	Strategy	Input arrangement / contribution from the department	Amount mobilised (Rs. In Lakhs)
1.	Green manuring	Deptt of Ag.	Demo, training & print media	Seed	250000
2.	DSR	CSISA & Deptt. Of Ag.	Demo, training & print media, Field day, Field visit	Seed, Herbicide & machine	100000
3	Residue incorporation	CSISA & Deptt. Of Ag.	Demo, training & print media	Seed, Herbicide & machine	487000
4.	Submergence tolerant Varieties	CSISA & Deptt. Of Ag.	Demo, training & print media, Field day &FV	Seed,	50000
5.	Early sowing of wheat with heat stress tolerant varieties	CSISA & Deptt. Of Ag.	Demo, training & print media	Seed, Herbicide & machine	50000
6.	Irrigation management in wheat	CSISA & Deptt. Of Ag.	Demo, training & print media	Seed, Herbicide & machine	
7	Crop diversification Kharif onion for veg. Radish, Cowpea, Okra	Deptt. Of Ag. & Deptt. Of Hort	Demo, training & print media	Seed	300000
8	Mineral mixture for milch animalVaccination	Deptt of animal Husbandry & SHG	Demo, training & print media	Vaccination	30000

Krishi Vigyan Kendra Pratapagarh
Action Plan 2023-24

PREDOMINANT CLIMATIC AND RESOURCE CONSTRAINTS OF THE MAJOR FARMING SYSTEM TYPOLOGIES OF NICRA VILLAGES

Village Name	Farming System typology	Constraints	Modules	Solution
Village – I Chhachhamau	**Agriculture + Livestock**	➢ High 8.5-9.2 ➢ Poor health management of animal ➢ Unavailability of proper feed and fodder for animal . ➢ Poor resources of household. ➢ Lack of diversification ➢ Poor soil fertility natural content uptake ➢ Limited cropping options of agricultural crops ➢ Poor production potential per unit area	NRM	➢ Laser land leveling and bunding ➢ Green manuring ➢ Plantation under social forestry +including MP trees (Subabool)
Village – II Ainthu			Crop Production	➢ Salt tolerant varieties of **Mustard** (Var. CS-58 & CS-60) **Paddy** (Var. CSR-36, CSR-46) **wheat** (Var. KRL-210,283) **Chick pea** (Karnal chana -1) ➢ Zero-tillage/Super seeder sowing ➢ Nutrient Management in paddy, wheat and mustard crop (Soil test Based) ➢ Rice residue management in wheat crop ➢ Round the year foodder production of barseem & oat (Vardan & JHO-822)
Village – III Kandai			Livestock and fisheries	➢ Round the year foodder production of barseem & oat (Vardan & JHO-822) ➢ Plantation of popular/Subabool at ponds bund ➢ Composite fish culture ➢ Supplementation of zinc and copper for treatment of anoestrus ➢ Proper helth management of animal i.e. vaccination, feed management
			Institutional	➢ Training and extension activities ➢ Facilitate state govt. Schemes under convergence ➢ Establishment of seed bank

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

Village Name	Farming System typology	Constraints	Modules	Solution
Village – I Chhachhamau	**Agriculture + Horticulture**	➢ High ph 8.5-9.2 ➢ Traditional practice of crop cultivation. ➢ No use of salt tolerant specific crop varieties. ➢ Lack of diversification ➢ Limited cropping options of agricultural & Horticultural crops ➢ Unaware about resource conservation technology	NRM	➢ Laser land leveling and bunding ➢ Green manuring ➢ Rice-residue management ➢ Plantation under social forestry
Village – II Ainthu			Crop Production and Horticulture	➢ Salt tolerant varieties of **Mustard** (Var. CS-58 & CS-60) **Paddy** (Var. CSR-36, CSR-46) **wheat** (Var. KRL-210,283) **Chick pea** (Karnal chana -1) ➢ Zero-tillage/Super seeder sowing ➢ Nutrient Management in paddy, wheat and mustard crop (Soil Test Basis) ➢ Cultivation of salt tolerant horticulture crop (Spinach, Fenugreek, Beetroot, Chrysanthemum) ➢ Rice residue management ➢ Nutrient Management in paddy, wheat and mustard

		➢ Poor productivity		crop (Soil test Based)
Village – III Kandai			Livestock and fisheries	-
			Institutional	➢ Training and extension activities ➢ Facilitate state govt. Schemes under convergence ➢ Establishment of seed bank

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

Village Name	Farming System typology	Constraints	Modules	Solution
Village – I Chhachhamau	**Agriculture + Horticulture + Livestock**	➢ High 8.5-9.2 ➢ Traditional practices of crop cultivation. ➢ No use of salt tolerant specific crop varieties. ➢ Limited cropping options ➢ Unavailability of proper feed and fodder for animal . ➢ Poor resources of household. ➢ Lack of diversification practices ➢ Poor soil fertility & nutrient content uptake ➢ Limited cropping options of agricultural and horticultural crops ➢ Poor technical skill and adoption ➢ Lack of nutrient security options ➢ Unavailability of soil conservation technologies ➢ Low income per unit area	NRM	➢ Laser land leveling and bunding ➢ Green manuring ➢ Rice-residue manageme ➢ Plantation under social forestry +including MP trees (Subabool)
			Crop Production	➢ Salt tolerant varieties of **Mustard** (Var. CS-58 & CS-60) **Paddy** (Var. CSR-36, CSR-46) **wheat** (Var. KRL-210,283) **Chick pea** (Karnal chana -1) ➢ Zero-tillage/Super seeder sowing ➢ Nutrient Management in paddy, wheat and mustard crop (Soil test Based) ➢ Cultivation of salt tolerant horticulture crop (Spinach, Spinach, Fenugreek, Beetroot, Chrysanthemum) ➢ Rice residue management in wheat crop ➢ Nutrient Management in paddy, wheat and mustard crop (Soil Test Basis) ➢ Round the year foodder production of barseem & oat (Vardan & JHO-822)
Village – II Ainthu			Livestock and fisheries	➢ Round the year foodder production of barseem & oat (Vardan & JHO-822) ➢ Plantation of perennial fodder i.e.- Napiar in orchard ➢ Plantation of popular/Subabool at ponds bund ➢ Composite fish culture ➢ Supplementation of zinc and copper for treatment of anoestrus ➢ Proper helth management of animal i.e. vaccination, feed management
Village – III Kandai			Institutional	➢ Training and extension activities ➢ Facilitate state govt. Schemes under convergence ➢ Establishment of seed bank

AES – I
(Agriculture + Livestock)

Intervention		**Area in Acre (Target)**	***Remarks***
Salt tolerant Paddy–CSR-52/56/60		100	Production dynamics of Salt tolerant/Stress tolerant varieties
Salt tolerant variety (Wheat – KRL-283)		70	Production dynamics of Salt tolerant/Stress tolerant varieties
Salt tolerant variety (Mustard – CS-58/60)		100	Production dynamics of Salt tolerant/Stress tolerant varieties
Salt tolerant (Chick Pea - *Karnal Chana*-1)		10	Production dynamics of Salt tolerant/Stress tolerant varieties
Nutrient Management (Soil Test Basis)	Paddy	10	For enhancement in yield BCR and improvement of sodic land
	Wheat	10	For enhancement in yield BCR and improvement of sodic land
Green Mannuring		25	For enhancement in yield BCR and improvement of sodic land
Brown Mannuring		50	For enhancement in yield BCR and improvement of sodic land
Total		**375**	

LIVESTOCK / FISHERIES UNITS		
Intervention	**Area in Acre (Target)**	***Remarks***
Income generation activities (Paddy cum fish culture)	**10**	For enhance the additional income in farm family
Fodder Production For Milch Animal	**20**	To provide the green fodder to animals round the year for health
Mineral mixture demos	**500**	Enhance the milk production & Reproduction
Poultry	**2**	For Integrated Farming System to increase family income
Vermi-compost unit	**5**	For Integrated Farming System to increase family income
Total	**537**	

AES – II
(Agriculture + Horticulture)

CROP PRODUCTION			
Intervention		**Area in Acre (Target)**	***Remarks***
Salt tolerant variety (Paddy – CSR-52/56/60)		**100**	Production dynamics of Salt tolerant/Stress tolerant varieties
Salt tolerant variety (Wheat – KRL-283)		**70**	Production dynamics of Salt tolerant/Stress tolerant varieties
Salt tolerant variety (Mustard – CS-58/60)		**100**	Production dynamics of Salt tolerant/Stress tolerant varieties
Salt tolerant variety (Chick Pea - *Karnal Chana*-1)		**10**	Production dynamics of Salt tolerant/Stress tolerant varieties
Nutrient Management (Soil Test Basis)	Paddy	**10**	For enhancement in yield BCR and improvement of sodic land
	Wheat	**10**	For enhancement in yield BCR and improvement of sodic land
Green Mannuring		**25**	For enhancement in yield BCR and improvement of sodic land
Brown Mannuring		**50**	For enhancement in yield BCR and improvement of sodic land
Total		**375**	

HORTICULTURE UNITS		
Intervention	**No. of units**	***Remarks***
Spinach	**10**	For enhance the additional income in farm family & Nutritional security
Fenugreek	**10**	
Beetroot	**10**	
Chrysanthemum	**10**	
Marry gold	**10**	
Calendula	**10**	
Total	**60**	

AES – III
(Agriculture + Horticulture + Livestock)

CROP PRODUCTION			
Intervention		**Area in Acre (Target)**	***Remarks***
Salt tolerant variety (Paddy – CSR-36/43/60)		**100**	Production dynamics of Salt tolerant/Stress tolerant varieties
Salt tolerant variety (Wheat – KRL-283)		**70**	Production dynamics of Salt tolerant/Stress tolerant varieties
Salt tolerant variety (Mustard – CS-58/60)		**100**	Production dynamics of Salt tolerant/Stress tolerant varieties
Salt tolerant variety (Chick Pea - *Karnal Chana*-1)		**10**	Production dynamics of Salt tolerant/Stress tolerant varieties
Nutrient Management (Soil Test Basis)	Paddy	**10**	For enhancement in yield BCR and improvement of sodic land
	Wheat	**10**	For enhancement in yield BCR and improvement of sodic land
Green Mannuring		**25**	For enhancement in yield BCR and improvement of sodic land
Brown Mannuring		**50**	For enhancement in yield BCR and improvement of sodic land
Total		**375**	

LIVESTOCK / FISHERIES UNITS		
Intervention	**Area in Acre (Target)**	***Remarks***
Composite fish culture	10	For enhance the additional income in farm family
Fodder Production For Milch Animal	20	To provide the green fodder to animals round the year for health
Cooper based Mineral mixture demos	500	Enhance the milk production & Reproduction
Poultry	2	For Integrated Farming System to increase family income
Vermi-compost unit	5	For Integrated Farming System to increase family income
Total	**537**	

HORTICULTURE UNITS		
Intervention	**No. of units**	*Remarks*
Spinach	**10**	For enhance the additional income in farm family
Fenugreek	**10**	
Beetroot	**10**	
Chrysanthemum	**10**	
Marry gold	**10**	
Calendula	**10**	
Total	**60**	

Other Programe

NATURAL RESOURCE MANAGEMENT		
Intervention	**Area in Acre (Target)**	***Remarks***
Bunding , Leveling (Laser leveling)	100	To maintain Homogeneous condition to crop as well as sodic field
Rice-residue retention / Residue management	50	For protect the plant damage due to water logging.
Total	150	

CAPACITY BUILDING & TRAINING PROGRAMMERS		
TRAINING COURSES		
Theme Of Training	**No of Training Proposed**	**No. of participants**
In-situ moisture conservation	2	60
Soil health	6	180
RCT	4	120
Live stock (Copper based Feed Management)	2	60
Weed Management	4	120
Storage	1	30
Capacity Building	1	30
Income Generation	3	90

Total	**23**	**690**
FIELD DAY		
Theme	**No. of Field Day Proposed**	**No. of participants**
To Aware & Convince the farmers about performance of new variety	4	200
To Aware & Convince the farmers about performance of new variety	6	300
Total	**10**	**500**

Krishi Vigyan Kendra- SONBHADRA
Action Plan 2023-24

Details about the villages involved in the programme

S No	Details	Village 1	Village 2
1	Name of the village	Bari Mahewa	Semari
2	Involved in TDC since (year)	2023	2023
3	Total area (ha)	429.0	605.0
4	Cultivated area (ha)	398	477
5	Rainfed Area (ha)	248	312
6	Flood prone Area (ha)	-	-
7	Irrigated Area (ha)	150	162
8	No. of households in the village	523	642
9	Approximate households covered so far	386	321

Predominant Farming systems typologies of the NICRA villages (area)

FST (Farming system Typologies identified	Village – Bari Mahewa			Village- Semari		
	Area (ha)	No of farmers	% coverage	Area (ha)	No of farmers	% coverage
Rainfed + Animal	172	225	44	265	210	56
Irrigated with animal (Agri+ Animal)	85	110	21	67	60	14
Irrigated with animal (Agri+horti+Livestock's)	141	180	35	145	125	30
Total	**398**	**515**	**100%**	**477**	**395**	**100%**

Predominant climatic, crop, animal and resource constraints of the major identified farming system typologies of NICRA villages

Sl No	Farming System	Village 1		Village 2		Village -3	
		Climate constraints	Resource /Crop/Animal constraints	Climate constraints	Resource /Crop/Animal constraints	Climate constraints	Resource /Crop/Animal constraints
1	Rainfed + Animal	Drought; long dry spell	Requirement of Drought tolerant cultivars of pulses and oil seeds , Limited resources of fodder and nutrients deficiency	Drought; long dry spell	Requirement of Drought tolerant cultivars of pulses and oil seeds , Limited resources of fodder and nutrients deficiency	Drought; long dry spell	Requirement of Drought tolerant cultivars of pulses and oil seeds , Limited resources of fodder and nutrients deficiency
2	Irrigated with animal (Agri+	Heat and limited rainfall for dug wells recharging	Requirement of Heat tolerant cultivars of cereals and pulses , Limited resources of fodder and nutrients deficiency	Heat and limited rainfall for dug wells recharging	Requirement of Heat tolerant cultivars of cereals and pulses , Limited resources of fodder and nutrients deficiency	Heat and limited rainfall for dug wells recharging	Requirement of Heat tolerant cultivars of cereals and pulses , Limited resources of fodder and nutrients deficiency
3	Irrigated with animal (Agri+ horti+Livestock's)	Heat and limited rainfall for dug wells recharging	Requirement of Heat tolerant cultivars of cereals and pulses , Limited production of vegetables and fruits, L	Heat and limited rainfall for dug wells recharging	Requirement of Heat tolerant cultivars of cereals and pulses , Limited production of vegetables and fruits, Li	Heat and limited rainfall for dug wells recharging	Requirement of Heat tolerant cultivars of cereals and pulses , Limited production of vegetables and fruits,

Identify Promising resilient technologies for addressing the constraints

S No	Farming System Typologies*	All villages: Technologies identified to minimise the impact of constraints shortlisted	
		Climate constraints	Resource /Crop/Animal constraints
1	**Rainfed+Animal**	• Deep Summer ploughing,	• Application of drought tolerant cultivars pulses and oilseeds

		• Bunding • Establishment of farmpond • NADEP & Vermi compost	• Application mineral supplement for animals
2	**Irrigated with animal (Agri+Animal)**	Renovation of dug open wells	• Application Heat tolerant cultivars of cereals and pulses • Application mineral supplement for animals • Round the year fodder production (Napiar grass, M.P. Chari, barseem etc)
3	**Irrigated with animal (Agri+ horti+Livestock's)**	Renovation of dug open wells	• Application Heat tolerant cultivars of cereals and pulses • Application mineral supplement for animals • Establishment of new orchard with inter cropping (vegetables) • Round the year fodder production (Napiar grass, M.P. Chari, barseem etc)

No. of farmers involved in villages for demonstrations during 2023-24 (technology wise)

Sl. No	Farming System Typologies	All villages			
		NRM	Crop	Livestock	Total
1	Rainfed + Animal	30	245	80	355
2	Irrigated with animal (Agri+ Animal)	10	168	30	208
3	Irrigated with animal (Agri+ horti+Livestock's)	10	150	65	225

Activities and Cost- NRM Intervention

Sl. No	Intervention	Dimensions	No. of units	No. of farm households proposed to be involved	Cost to project (Rs)
1	Deep Summer ploughing,	22 ha	30	30	25000
2	Bunding	5	20	20	40000
3	Estiblishement of farm pond	30*40	4	12	-
4	NADEP & Vermi compost		15	15	150000

Activities and Cost-NRM Intervention

Sl. No.	Village 1, 2, 3, etc.	Intervention	Unit cost Rs/ha A	Coverage Proposed		Total amount (Rs) A x B
				Area (ha)	No. of farm households proposed to be involved B	
1	All NICRA Village	Renovation of open dug wells	10000	10	10	100000
2	All NICRA Village	Water saving/Drip/sprinkler irrigation	50000	0.2	2	100000

Activities and Cost--Crop Production

Sl. No.	Village 1,2,3 etc	Intervention	Description		Cost (Rs/ha)	Coverage Proposed		Total amount (Rs)
			Crop	Variety (s)		Area (ha)	No. of farm households to be involved	
1	All NICRA Village	Lack of suitable Drought Tolerant variety	Green Gram	Virat	9000	5	15	45000
2		Lack of suitable Drought Tolerant variety	Paddy	Shusk Samrat	5000	30	60	150000
3		Lack of suitable heat Tolerant variety	Chick pea	RVG-202	9000	20	50	18000
4		Lack of suitable heat Tolerant variety	Field pea	IPFD10-12/4-9	9000	20	50	18000
5		Lack of suitable heat Tolerant variety	Mustard	RH-749/406	6000	20	50	12000
6		Lack of suitable heat Tolerant variety	Wheat	Raj-HD-2888	5000	100	250	500000
7		high value vegetables	Broccoli	Titanic	20000	2	20	40000
8		Lack of suitable heat Tolerant variety	Lentil	IPL-316	9000	20	50	180000

FST Wise:- livestock & Fisheries interventions

Year round fodder production strategies (annual/perennial fodder) in the village

Livestock & Fisheries interventions

Season	Name of fodder	Variety	Area (ha)	Unit cost of demo (Rs/ha)*	No. of demos	Total amount (Rs/ha)*	Remarks (purpose of intervention & No. of farmers covered)
Kharif	Jwar	PC-6	1.0	500	10	5000	Year round availability of green fodder 50 farmers
	Maize	J-1006	0.5	500	05	2500	
Rabi	Barseem	BB-3	2.5	500	25	12500	
	Sub-total		**5.0**		**50**	**37500/-**	

FST Wise:- Livestock & Fisheries interventions

Feed demonstrations for crop residue management / stress management: silage / feed blocks/ mineral mixture (MM) blocks / feed enrichment

Details of feed demonstrations	Unit cost of demo (Rs)	No. of demos	Total amount (Rs/ha)	Remarks (purpose of intervention & No. of farmers covered)
Silage demos	1500/-	20	30000/-	To improve the productivity of milking animals
eed block demos	1000	20	20000/-	To improve the productivity of milking animals
eral mixture demos	450	25 X 6 month	67500	To improve the productivity of milking animals
Sub-total			**117500/-**	

FST Wise:- Livestock & Fisheries interventions

Improved housing / shelter for protection of livestock against extreme weather & Upgradation Programme

Type of shelter improvement*	Unit cost of demo (Rs)	Cost to project (Rs)	Farmer's share (Rs)	No. of demos	Total amount (Rs)	No. of farmers covered	Remarks (purpose of intervention)
Poultry Shelter for 50 layer birds @ 2.5 ft^2 / bird	10000	5000	5000	05	25000	05	To improve the productivity of poultry system and income generation of farmers 05 farmers
Sub-total				**05**	**25000/-**	**05**	

Enterprise/unit*	Unit cost (Rs)	Convergence share in unit cost, if any** (Rs)	Project share in unit cost (Rs)	No. of units/ farmers	Cost to Project (D x E) (Rs)	*Remarks (purpose of intervention& farmers covered)*
Goatery (Bundelkhandi)	15000	5000	10000	02	20000	To increase heat tolerant breads and 2 farmers
Sub-total					**20000/-**	

Capacity Building & Training Programmes

Theme	Title of training course	Proposed month	No. of participants	Cost to project (Rs.)
NRM	How to collect soil for nutrient analysis	April	30	3000
NRM	Deep summer ploughing with chisel plough	May	30	3000
NRM	Burning effect of crop residue on climate	May	30	3000
LPM	Shelter & Feed management for milch animals	June	30	3000
NRM	Technology of NADEP compost preparation under NICRA village	July	30	3000
ICM	Integrated crop management in pulse crops	July	30	3000
CP	Production technology in Pearlmillet	August	30	3000
IPM	Important disease of Groundnut & their management	August	30	3000
IPM	Role of Trichoderma & PGPRs in plant disease management & yield production	September	30	3000
NRM	Technology of Vermicompost preparation under NICRA village	October	30	3000
CP	Production technology of Rabi vegetables crops	October	30	3000
ICM	Integrated crop management in Pulses	November	30	3000
IPM	Effect of systemic fungicides to control seed borne disease of Wheat	November	30	3000
CP	Production technology of Mustard crops	December	30	3000
IPM	Environmental safe insecticides for the management of pulse insect-pests	December	30	3000
IPM	Mustard aphid & their management with systemic & contact insecticides	January	30	3000
IPM	Management of fruit borer of vegetable crops	February	30	3000
CP	Post-harvest management of Rabi crops	March	30	3000
CP	Commercial seed production of Wheat	March	30	3000
Sub-total			**570**	**57000/-**

Activities and Costs

Non-recurring contingencies– Equipment

S. No.	*Item*	*Unit cost* (Rs)*	*No. of units*	*Total amount (Rs)*
1.	Disc harrow	90000/-	1	90000/-
2.	Land leveler	35000/-	1	35000/-
	Total		**2**	**125000**

Contractual Manpower (SRFs/YPs) & Media Products to be developed

Category	Rate/month (Rs.)	No. of months	Amount (Rs.)
YP-II	30000	12	360000
Sub-total			**360000/-**

Summary of budget Estimates for 2023-24 (Tentative)

Item number	Title of the Item	Amount (Rs.)
1.	**NRM**	**415000/-**
2.	**Crop Production**	**963000/-**
3.	**Live stocks**	**200000/-**
4	**Community interventions Establishment of Seed banks**	**0/-**
5.	**Capacity Building & Training Programmes**	**57000/-**
6.	**Procurement of farm machinery/implements for CHC**	**125000/-**
7.	**Contractual Manpower (SRFs/YPs**	**36000/-**
Grand total (Rs.)		**1796000/-**

Krishi Vigyan Kendra-Basti

Action Plan 2023-24

1. Details about the existing NICRA villages

S No	Details	Village 1	Village 2
1	Name of the village	Chando	Majha
2	Involved in TDC since (year)	2023	2021
3	Cultivated area (ha)	360	170
4	Rainfed Area (ha)	0	00
5	Irrigated Area (ha)	280	170
6	waterlogged/ Salt affected area (ha)	50	80
7	Total Area of village (ha)	360	270
8	No. of households in the village	305	500
9	Approximate households covered so far	210	350

** Add columns if necessary*

2. Divide the NICRA villages into predominant farming system typologies

3. Predominant climatic, crop, animal and resource constraints of the major

S No	Farming System Typologies*	Village 1			Village 2		
		Area (ha)	No. of farmers (approx.)	**% coverage of the typology (area in the village)**	Area (ha)	No. of farmers (approx.)	**% coverage of the typology (area in the village)**
1	Irrigated without animal(Crop+ horti)	40	55	13.3	30	50	11.11`
2	Irrigated with animal(Crop+horti+ animal)	45	60	15	40	50	14.8
3	Irrigated with animal (Crop+animal)	98	140	32.66	80	120	29.6
4	Irrigated without animal(Crop)	37	60	12.33	30	50	13.7

identified farming system typologies of NICRA villages

S.No	Farming System Typologies*	Chando		Majha	
		Climate constraints	**Resource /Crop/Animal constraints**	**Climate constraints**	**Resource /Crop/Animal constraints**
1	Irrigated without animal (Crop+ horti)	Drought, Heat wave	-	Drought, Heat wave , waterlogged	-
2	Irrigated with animal(Crop+horti+animal)	Drought, Heat wave	Unavailability of fodder round the year Low yielding variety, Low Organic Carbon, Low milk yield, worms, Low yielding breeds	Drought, Heat wave, , waterlogged	Unavailability of fodder round the year Low yielding variety, Low Organic Carbon, Low milk yield, worms, Low yielding breeds

3	Irrigated with animal (Crop+animal)	Drought, Heat wave	Unavailability of fodder round the year Low yielding variety, Low Organic Carbon, Low milk yield, worms, Low yielding breeds	Drought, Heat wave, waterlogged	Unavailability of fodder round the ye arLow yielding variety, Low Organic Carbon, Low milk yield, worms, Low yielding breeds
4	Irrigated without animal (Crop)	Drought, Heat wave	Unavailability of fodder round the year ,Low yielding variety, Low Organic Carbon, Low milk yield, worms, Low yielding breeds	Drought, Heat wave, waterlogged	Unavailability of fodder round the year Low yielding variety, Low Organic Carbon, Low milk yield, worms, Low yielding breeds

5. Categorization of the identified technologies in to NRM, Crops and Livestock in each of the village for taking up demonstrations during 2023-24

Sl. No	Farming System Typologies	CHANDO				MAJHA			
		NRM	Crop	Livestock	Total	NRM	Crop	Livestock	Total
1	Irrigated without animal (Crop+ horti)	1)Residue management 2)RCT(Sowing of wheat by super seeder and sowing of paddy by DSR) 3)Green Manuring	1) Short duration Rice 2) Varities 3) Aromatic Rice Varieties(Pusa NarendrKala Namak-1) 4) High Yielding Varieties (DBW303, DBW 187) 5) Crop diversification (Mustard, Lentil, Pointed gourd (Narendra Parwal-307)etc Short duration crops(Onion var. ADR , Cow pea var. Kashi Kanchan and Okra var. Kashi kranti, Mango (Amrapali), Litchi (Shahi), Guava(Lalit), Bael (NB-07) Forest plantation- Semal, teakMoringa , Bumboo etc 6) Seed treatment in cerealsand pulses.	-	8	1)Residue management 2)RCT (Sowing of wheat by super seeder and sowing of paddy byDSR) 3)Green Manuring	1) Short duration Rice Varities 2) Aromatic Rice Varieties (PusaNarendr Kala Namak-1) 3) High Yielding Varieties (DBW303, DBW 187) 4) Crop diversification (Mustard, Lentil, Pointed gourd (Narendra Parwal-307)etc Short duration crops(Onion var. ADR , Cow pea var. Kashi Kanchan and Okra var. Kashi kranti, Mango (Amrapali), Litchi (Shahi), Guava(Lalit), Bael (NB-07) Forest plantation- Semal, teak Moringa , Bumboo etc . 5) Seed treatment in cereals andpulses.	-	8

2	Irrigated with animal (Crop +horti+animal)	1)Residue managem ent 2)RCT(Sowing of wheat by super seeder and sowing of paddy by DSR) 3)Green Manuring	1) Short duration Rice Varities 2) Aromatic Rice Varieties(Pusa NarendrKala Namak-1) 3) High Yielding Varieties (DBW303, DBW 187) 4) Crop diversification (Mustard, Lentil, Pointed gourd (Narendra Parwal-307)etc Short duration crops(Onion var. ADR , Cow pea var.Kashi Kanchan and Okra var. Kashi kranti, Mango (Amrapali), Litchi (Shahi), Guava(Lalit), Bael (NB-07) Forest plantation- Semal, teak Moringa , Bumboo etc . 5) Seed treatment in cerealsand pulses.	1. Green fodderround the year (Barseem, , Oat ,sorghum and Hybrid Napier Grass) 2Mineral mixture Vaccination Deworming Awareness on AI forbreed improvement Upgradation of Desi goat breed Back yard poultry	15	1)Residue managem ent 2)RCT(Sowing of wheat by super seeder and sowing ofpaddy byDSR) 3)Green Manuring	1) Short duration Rice Varities 2) Aromatic Rice Varieties(Pusa Narendr Kala Namak-1) 3) High Yielding Varieties (DBW303, DBW 187) 4) Crop diversification (Mustard, Lentil, Pointed gourd (Narendra Parwal-307)etc Short duration crops(Onion var. ADR , Cow pea var. Kashi Kanchan and Okra var. Kashi kranti, Mango (Amrapali), Litchi (Shahi), Guava(Lalit), Bael (NB-07) Forest plantation- Semal, teak Moringa , Bumboo etc . 5) Seed treatment in cereals andpulses.	1. Green fodder throughout the year(Barseem, , Oat , sorghum and Hybrid Napier Grass) 2.Mineral mixture 3.Vaccination 4.Deworming 5.Awareness on AI for breed improvement Up gradation of Desi goat breed Back yard poultry	15

3	Irrigated with animal (Crop+ animal)	1)Residue management 2)RCT(Sowing of wheat by super seeder and sowing of paddy by DSR) 3)Green Manuring	1) Short duration Rice Varities 2) Aromatic Rice Varieties(Pusa Narendr Kala Namak-1) 3) High Yielding Varieties (DBW303, DBW 187) 4) Crop diversification (Mustard, Lentil, Pointed gourd (Narendra Parwal-307)etc Short duration crops(Onion var. ADR , Cow pea var. Kashi Kanchan and Okra var. Kashi kranti, Mango (Amrapali), Litchi (Shahi), Guava(Lalit), Bael (NB-07) Forest plantation- Semal, teak Moringa , Bumboo etc . 5) Seed treatment in cerealsand pulses.	. Green fodder throughout the year (Barseem, ,Oat and HybridNapier Grass) 1. Mineral mixture 2. Vaccination 3. Deworming 4. Awareness on Alfor breed improvement 5. Up gradation of Desi goat breed 6. Back yard poultry	1 1	Irrigated with animal (Crop+ animal)	1)Residue management 2)RCT(Sowing of wheat by super seeder and sowing of paddy by DSR) 3)Green Manuring	6) Short duration RiceVarities 7) Aromatic Rice Varieties(Pusa NarendrKala Namak-1) 8) High Yielding Varieties (DBW303, DBW 187) 9) Crop diversification (Mustard, Lentil, Pointed gourd(Narendra Parwal-307)etc Shortduration crops(Onion var. ADR , Cow pea var. Kashi Kanchan and Okra var. Kashi kranti, Mango (Amrapali), Litchi (Shahi), Guava(Lalit), Bael (NB-07) Forest plantation- Semal, teak Moringa , Bumboo etc . 10) Seed treatment in cereals and pulses.	. Green fodder throughout the year (Barseem, ,Oat and HybridNapier Grass) Mineral mixture 8. Vaccination 9. Deworming Awareness on Alfor breed improvement 1. Up gradation of Desi goat breed . Back yard poultry

4	Irrigated without animal (Crop)	1)Residue management 2)RCT(Sowing of wheat by super seeder and sowing of paddy by DSR) 3)Green Manuring	1) Short duration RiceVarities 2) Aromatic Rice Varieties(Pusa NarendrKala Namak-1) 3) High Yielding Varieties(DBW303, DBW 187) 4) Crop diversification (Mustard, Lentil, Pointed gourd(Narendra Parwal-307)etc Shortduration crops(Onion var. ADR , Cow pea var. Kashi Kanchan and Okra var. Kashi kranti, Mango (Amrapali), Litchi (Shahi), Guava(Lalit), Bael (NB-07) Forest plantation- Semal, teak Moringa , Bumboo etc . 5) Seed treatment in cerealsand pulses	-	5	Irrigated with animal (Crop+ animal)	1)Residue management 2)RCT (Sowing of wheatby super seeder and sowing of paddy by DSR) 3)Green Mannuring	1) Short duration Rice Varities 2) Aromatic Rice Varieties(PusaNarendr Kala Namak-1) 3) High Yielding Varieties (DBW303,DBW 187) 4) Crop diversification (Mustard, Lentil, Pointed gourd (Narendra Parwal-307)etc Short duration crops(Onion var. ADR , Cow pea var. Kashi Kanchan and Okra var.Kashi kranti, Mango (Amrapali), Litchi (Shahi), Guava(Lalit), Bael (NB-07) Forest plantation- Semal,teak Moringa , Bumboo etc . 5) Seed treatment in cereals andpulses.	Green fodder throughout the year (Barseem, ,Oat and HybridNapier Grass) 1. Mineral mixture 2. Vaccination 3. Deworming 4. Awareness on AIfo breed improvemen 5. Up gradation ofDe goat breed 6. Back yard poultry

6.No. of farmers involved in each of the village for demonstrations during 2023-24 (technology wise)

S No	Farming System Typologies	Village 1				Village 2			
		NRM	Crop	Livestock	Total	NRM	Crop	Livestock	Total
1	Irrigated without animal(Crop+ horti)	26	38	0	64	20	35	0	55
2	Irrigated with animal(Crop+horti+animal)	45	56	52	153	35	50	45	130
3	Irrigated with animal (Crop+animal)	90	106	110	306	70	90	90	250
4	Irrigated without animal(Crop)	44	55	0	99	35	44	0	9

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

S. No.	Farming System Typologies	Village 1				Village 1			
		Climate Resilient Technology	Conver gence With Scheme	No. of farmers proposed to be involved	Area to be covered (ha)	Climate Resilient Technology	Convergence with Scheme	No. of farmers proposed to be involved	Area to be covered (ha)
1	Irrigated without animal(Crop+ horti)	-	-	-	-	-	-	-	-
2	Irrigated with animal(Crop+h orti+animal)	Vaccinat ion of animals	Animal husbandry deptt.	150	-	Vaccination of animals	Animal	150	-
3	Irrigated with animal (Crop+animal)	Vaccinat ion of animals	Animal husbandry deptt.	150	-	Vaccination of animals	husbandry deptt.	150	-
4	Irrigated without animal(Crop)	-	-	-	-	-	-	-	-

Activities and Cost

8. NRM Interventions;

8.1. Repair / Renovation of existing water harvesting structures, drainage channels etc.

Sl. No.	Village 1, 2, 3, etc.	Intervention	Dimensions	No. of units	No. of farm household ds proposed to be involved	Convergence value, if any (Rs)	Value of farmers share (Rs)	Cost to project (Rs)
1	Chando	Establishment of small check dams		1		350000		350000
2	Chando	Polythene lining of existing water harvesting Structure (Pond)		3		100000		100000
3	MAJHA	Renovation of existing water harvesting Structure		5		100000		100000
		Sub-total 8.1				**550000**		**550000**

- Is to be prepared for each village and can be merged

Activities and Cost

8. NRM Interventions-

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

S. No.	Village 1,2,3 etc.	Intervention	Description	Cost (Rs/ha) A	Coverage Proposed	Total amount (Rs) A x C
1.	Chando	Sowing of wheat by Super seeder	12000	8	20	96000
2.	Chando	Direct Seeded Rice	7500	8	20	60000
3.	Chando	Green Manuring	5000	8	20	40000
4.	Majha	Sowing of wheat by Super seeder	12000	8	20	96000
5.	Majha	Direct Seeded Rice	7500	8	20	60000
6.	Majha	Green Manuring	5000	8	20	40000
		Sub-total 8.2.-3	**24500**	**22.2**	**60**	**196000**

Activities and Cost

9.Crop Interventions-

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

Sl No.	Village 1,2,3 etc.	Intervention	Description		Cost (Rs/ha) A	Coverage Proposed		Total amount (Rs) A x C
			Crop	Variety (s)		Area (ha) B	No. of farm households to be involved (C)	
1.	Chando	High Yielding Variety	Wheat	DBW-303, DBW-187, DBW-252	4000	10	40	40000
2.	Chando	High Yielding Variety	Mustard	RH-725	900	10	40	9000
3.	Chando	High Yielding Variety	Lentil	L-4727	6000	10	40	60000
4.	Chando	High Yielding Variety	Barley	RD-2907	4000	10	40	40000
5.	Chando	Short duration crop	Okra	Kashi Lalima	1000	5	40	5000
	Chando		Cowpea	Kashi Kanchan	1000	5	40	5000
	Chando		Onion	Agrifound Dark Red	1000	5	40	5000
6.	Chando	Fruit Plantation	Mango	Amrapali	96000	1	80	96000
7.	Chando		Litchi	Shahi	20000	1	40	20000
8.	Chando		Guava	Lalit	14000	1	40	14000
9.	Chando		Bael	NB-07	16000	1	40	16000
13.	Chando	Forest Plantation	Semal, Teak, Mahogani, Bamboo etc.	-	10000	1	40	10000
-	-	**Sub Total 9.1.**		-	-	**130**	-	**433500**

Activities and Cost-

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	Variety (s)		Area (ha) B	No. of farm households to be involved C		
1	MAJHA	Community nursery	-	-	10000	8	10	60000	
2	CHANDO	Critical input for integrated Farming system(Suran & Turmeric)	-	-	7500	0.4	10	70000	
3	CHANDO	Other inputs (soil testing)	-	-	175000	20	50	50000	
4	MAJHA	Income generation activities(Mushroo m etc.)	-	-	2500	10 unit	10	70000	

9. Crop Interventions-

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

Sl No.	village	Intervention	Description		Cost (Rs/ha) A	Coverage Proposed		Total amount (Rs) A x C	Remarks
			Crop	Variety (s)		Area (ha) B	No. of farm household ds to be involved C		
1	CHANDO	Critical Inputs for integrated crop management (weed management in wheat)	-	-	5000	4	20	20000	
2	CHANDO	Critical Inputs for integrated farming system (Nutritional garden)	-	-	12500	4	20	20000	
3	MAJHA	Income generation activities(vegetable seed etc.)	-	-	25000	2	20	25000	
4	MAJHA	Organic/Natural farming(Urine tank, drum etc.)	-	-	5000	0.4	5	50000	

Livestock and Fisheries

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

Sl No.	Details of feed intervention	Unit cost of intervention (Rs.)	No. of farm household s to be involved	Total amount (Rs/ha)	Remarks
1.	a) Mineral mixture Demon.	1500	30	45000	
2.	b) Probiotic	2000	30	60000	

10.2. Establishment of Seed banks / Fodder banks, etc..

Sl No.	Seed bank/Fodder Bank	Seed of crop and variety/ Fodder crop/ variety	Quantity of seed/ fodder produced/ storage (t)	Unit cost (Rs.)	No.of farmers involved	Amount (Rs.)	Remarks
1.	Narendra SHG	Paddy	5	-	-	-	Farmer contribution
		Wheat	5	-	-	-	Farmer contribution
		Pulses	1	-	-	-	Farmer contribution
	Sub-total 10.2.		**11**	-	-	-	-

Activities and Cost-

11. Non-recurring contingencies – Equipment

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

S. No.	Item	Unit cost (Rs)	No. of units	Total amount (Rs)
1.	Ferti Seed Drill	100000	1	100000
2.	Multi crop Planter	250000	1	250000
3.	Sugarcane Planter	150000	1	300000
4.	Sugar cane bud cutter	10000	2	20000
4.	Raised Bed planter	200000	1	200000
5.	Power sprayer cum Duster	50000	2	100000
6.	Power winnower	50000	1	50000
7.	Vertical reaper windrower	250000	1	250000
8.	Paddy drum seeder	10000	5	50000
9.	Power weeder	100000	1	100000
10.	Sprinkler set	50000	2	100000
11.	Superseeder	250000	1	250000
	Total NRC		**19**	**1770000**

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.)
Crop Diversification	Crop diversification for adverse climatic condition	May	30	6000
Crop Management	Crop management for adverse climatic condition	June	30	6000
Nursery raising	Nursery raising technique of paddy	June	30	6000
Nutrient management	Nutrient management in wet land situation	July	30	6000
Pest and disease management	Pest and disease management in rainy season crop	August	30	6000
Weed control	Weed control in cereals and pulses	October	30	6000
Live stock management	Care and managment for animal during rainy season	February	30	6000
feed and Fodder management	feed and Fodder management during rainy season	September	30	6000
Disease management in Farm Animals	Vaccination in farm animals	June	30	6000
Employment generation	Employment sources for villagers	August	30	6000
Vermi- compost	Production Technique of Vermi-Compost	January	30	6000
Home Science	Preparation of pickles	November	30	6000
Protected Cultivation	Protected cultivation of vegetable crop	February	30	6000
Integrated farming	IFS model for employment generation	September	30	6000
Seed Production	Seed production technique of Rabi crops	October	30	6000
Sub-total 12.1.			**450**	**90000**

13.Capacity Building & Other extension activities

13.1. Field Days/Exposure visits/Awareness programmes/Kisan melas/Kisan ghosti proposed for the year

Theme	Title of Programme	Proposed month	No. of participants	Cost (Rs.)
Protected Cultivation	cultivation of onion crop	February	100	25000
Plant protection	Maintenance and use of Plant Protection equipment	September	100	25000
INM	INM in Kharif crop	July	100	25000
INM	INM in Rabi Crop	November	100	25000
Nutrition Management	Use and Importance of mineral mixture in live stock	October	100	25000
Sub-total 12.2.			**500**	**125000**

•Assess the impact of capacity building programmes organized in a systematic manner

13. Publications and Media products proposed to be Developed

13.2 Publications

Publication	Nature of Publication (Book/Bulletin/Brochure etc.)	Proposed during the month	No. of Copies	Cost (Rs.)
	Book	February	-	25000
	Training Manual	August	-	10000
	Book chapters	July	-	5000
	Research papers	February	-	50000
Sub-total 13.2.				**90000**

13.3 Video Films

Video Film to be prepared	Duration (Minutes)	Proposed during the month	Cost (Rs.)
On Rice crop	15	August	-
Harvesting of crop	15	November	-
On Wheat and mustard crop	15	January	-

14. Summary of cost Estimates for 2023-24

Item number	Title of the Item	Amount (Rs.)
8.1	Procurement of farm machinery/implement for CHC	3630000
8.2	Repair/Renovation of existing water harvesting structures & drainage channels etc.	850000
9.1	In Situ Conservation- Resource Conservation Technologies (RCTs)	1395000
9.2	Stress tolerant/Improved varieties	**8448000**
10.1	Improved Agronomics practices and other crop intervention	1455000
10.2	Year round fodder production Strategy(annual/perennial fodder) in the village	237000
11	Feed demonstration for crop residue management/stress management: silage/feed blocks/mineral mix. Blocks/feed enrichments	315000
12.1	Training courses	270000

	Field days	375000
	Exposure Visits	300000
12.2	Up scaling of successful interventions	120000
13.1	Contractual man power (SRFs)	1800000
13.2	Media Products to be Developed	180000
	Grand total (Rs.)	**19375000**

15. Plan for the spread of the proven practices (Convergence with departments, linkages with development organizations, etc.)

Sl. No.	Proven Technology	Deptt. Involved	Strategy	Input Arrangement/Contribution from the depatt.	Amount Mobilised in Lakh Rs.
1.	Vaccination of live stock	Animal Husbandry	Prevention from EMD	Vaccine and staff	0.50

Krishi Vigyan Kendra- Kaushambi
Action Plan 2023

1.Details about the existing NICRA villages

S.No.	Details	Village1	Village2	Village3
1	Name of the village	Rasoolpur girsa	Parsara	Dariyapur maghiyawa
2	Involved in TDC since (year)	2017-18	2017-18	2021-22
3	Cultivated area (ha)	252.64	567.8	220.96
4	Rainfed Area (ha)	42	75	32
5	Irrigated Area (ha)	252.64	492	220.96
6	Flood/ Salt affected area (ha)	130	260	107
7	Total Area of village (ha)	355.76	617.8	299.96
8	No. of households in the village	486	777	425
9	Approximate households covered so far	65%	58%	12%

2. Divide the NICRA villages in to predominant farming system typologies

		Village-1(RasulpurGircha)			Village-2(Parsara)			Village-3(Dariyapur majhiyawa)		
Sl. No	**FST**	**Area (ha)**	**No.of farmers (approx.)**	**% coverage (area in the village)**	**Area (ha)**	**No.of farmers (approx.)**	**%coverage (area in the village)**	**Area (ha)**	**No.of farmers (approx.)**	**%coverage (area in the village)**
1.	Rainfedwith animal Crop+Livestock)	14	35	5.54	43	60	7.57	15	38	46.87
2.	Rainfedwith animal Crop+ Horticulture+ Livestock)	15.5	38	6.14	45	70	7.93	17	43	53.13
3.	Irrigated without animalCrop+ Horticulture	32	80	12.67	31	63	5.46	99	248	44.80
4.	Irrigated with animal Crop+ Horticulture + Livestock	178.64	304	70.70	443	564	78.02	121	303	54.76

3. Predominant climatic,crop,animal and resource constraints of the major identified farming system typologies of NICRA villages

1	Rainfed with animal (Crop+Live stock)	sodicity	Limited cropping options of agricultural crops Lack of diversification Poor soil fertility Poor management of animal. Unavailability of proper feed and fodder for animal Poor resources of household.	Low level of technology adoption. Lack of plantation in respect of rainfed agriculture. Lack of institutional support for establishment of fodder bank	sodicity	Limited cropping options of agricultural crops Lack of diversification Poor soil fertility Mineral Deficiency of lactating animal. Green fodder unavailability throughout the year for dairy animal Poor resources of household.	Low level of technology adoption. Lack of plantation in respect of rainfed agriculture. Lack of institutional support for establishment of fodder bank.	sodicity	Limited cropping options of agricultural crops Lack of diversification Poor soil fertility Poor management of animal. Unavailability of proper feed and fodder for animal Poor resources of household.	Low level of technology adoption. Lack of plantation in respect of rainfed agriculture. Lack of institutional support for establishment of fodder bank.
2	Rainfedwithanimal(Crop+Horticulture+ Livestock)	sodicity	Unavailabilityofsoilandwater conservation technology.Lack of diversification. Poor soil fertility. Lackofproper management of rain water. Limited croppingoptions of agricultural andhorticultural crops. Lack of plantations. Unavailabilityof proper feed	Lack of plantation in respectofrainfed agriculture. Rainfed of institutional support for livestocksectorin rainfed agriculture (Shelter, Fodder bank &Animal Health camp.)	sodicity	Unavailability ofsoil and water conservation technology. Lack of diversification n Poor soil fertility. Lack of proper management of rain water Limited cropping options of agricultural and horticultural crops. Lack	Scaricityof plantationin respect of rainfed agriculture. Rainfed of institutional support for livestock sector in rainfed agriculture (Shelter, Fodderbank & Animal Healthcamp.)	sodicity	Unavailability ofsoil and water conservation technology. Lack of diversification. Poor soil fertility. Lack of proper management of rain water. Limited cropping options of agricultural and horticultural crops. Lack	Lack of plantationinrespectof rainfed agriculture. Lackof institutional supportfor livestock sector in rainfed agriculture (Shelter, Fodderbank & Animal Health camp.)

			andfodder for animal. Low level of input and technology adoption.			of plantations. Unavailability of properfeed and fodder for animal. Lowlevel ofinputand technology adoption			of plantations. Unavailabilityofproper feed and fodder for animal. Low level ofinputand technology adoption	
3	Irrigatedwithoutanimal Crop+Horticulture	sodicity	Traditional practice of crop cultivation.No use of salt tolerant specific crop varieties. Lack of diversification. Limited cropping options of agricultural& Horticultural crops. Unavailability of soil conservation technology.	Resource poor and inadequate credit facilities. Unavailableofseed bank.	sodicity	Traditional practice of crop cultivation.No use of salt tolerant specific crop varieties. Lack of diversification. Limited croppingoptions of agricultural& Horticultural crops. Unavailability of soil conservation technology.	Resource poor and inadequate credit facilities. Unavailableofseed bank.	sodicity	Traditional practice of crop cultivation.No use of salt tolerant specific crop varieties. Lack of diversification Limited cropping options of agricultural& Horticultural crops. Unavailability of soil conservation technology	Resource poor and inadequate credit facilities. Unavailableofseed bank.
4	Irrigatedwithanimal Crop+Horticulture+Livestock	sodicity	Traditional practice of crop cultivation.No use of salt tolerant specific crop varieties. Lack of diversification	Resource poor and	sodicity	Traditional practice of crop cultivation. No use of salt tolerant specific crop	Resource poor and inadequate credit facilities. Unavailable ofseed bank.Lack of knowledge	sodicity	Traditional practice of crop cultivation.No use of salt tolerant specific crop varieties. Lack	Resource poor and inadequate credit facilities. Unavailable ofseed bank. Lack of

			Limited cropping. Unavailability of proper feed and fodderfor animal. Poor resources of household. Lack of diversification Poor soil fertility. Lack of proper management of rain water. Limited Cropping options of agricultural and horticultural crops. Lack of plantations. Low level of input and technology adoption. Poor Nutritional security. Unavailability of soil conservation technology.			varieties. Lack of diversificati on. Limited cropping. Unavailability of proper feed and fodderfor animal. Poor resources of household. Lack of diversification. Poor soil fertility. Lack of proper management of rain water. Limitedcroppin g optionsof agricultural and horticultural crops. Lack of plantations.Lo w level of input and technology adoption. Poor notional security. Unavailabili ty of soil conservation technology.	of income generation activity through livestock& horticulture sector.		of diversification . Limited cropping. Unavailability of proper feed and fodderfor animal. Poor resources of household. Lack of diversification. Poor soil fertility. Lack of proper management of rain water. Limited cropping options of agricultural and horticultural crops. Lack of plantations. Low level of input and technology adoption. Poor notional security. Unavailability of soil conservation technology	knowledgeof income generation activity through livestock & horticulture sector.	**4.**

Identify Promising resilient technologies for addressing the constraints

	Village-1				Village-2				Village-3			
Farming SystemTypology	**NRM Interventions**	**CropProductionIntervention**	**LivestockInterventions**	**Institutionalinterventions**	**NRMInterventions**	**CropProduction Intervention**	**LivestockInterventions**	**Institutionalinterventions**	**NRMInterventions**	**CropProductionIntervention**	**LivestockInterventions**	**Institutionalinterventions**
Rainfed with animal (Crop+Livestock)	*Maintain of community pond.	Use of Nutri Bajra. Use of Kitchen Garden kit for nutritional security. Impact of High Yielding Mustard variety (CS-60).	Use of Napier grass for fodder production use of mineral mixture according ASMM Income generation through Back Yard Poultry farming	Fodder Bank/SHG	*Maintain of community pond.	Use of Nutri Bajra. Use of Kitchen Garden kit for nutritional security. Impact of High Yielding Mustard variety (CS-60).	Use of Napier grass for fodder production use of mineral mixture according ASMM Income generation through Back Yard Poultry farming	Fodder Bank/SHG	*Maintain of community pond.	Use of Nutri Bajra. Use of Kitchen Garden kit for nutritional security. Impact of High Yielding Mustard variety (CS-60).	Use of Napier grass for fodder production use of mineral mixture according ASMM Income generation through Back Yard Poultry farming	Fodder Bank/SHG

Irrigated withoutanimal Crop + Horticulture	Green manuring through Dhaincha	Demonstration of specific varieties of Paddy (CSR-46, CSR-56). Use of intercropping in vegetables. Use of CSR-Bio, haloazo and halo PSB culturein Paddyand wheat crop. Use of specific vegetables crops varieties. Use of specific variety of oilseeds crop.Use of specific variety of Wheat crop-Establishment of seed bank for Paddy and Wheat	-	Seed Bank	Green manuring through Dhaincha	Demonstration of specific varieties of Paddy (CSR-46, CSR-56). Use of inter-cropping in vegetables. Use of CSR-Bio, haloazo and halo PSB culturein Paddy and wheat crop. Use of specific vegetables crops varieties. Use of specific variety of oilseedscrop. Use of specific variety of Wheat crop. Establishment of seed bank for Paddy and Wheat	-	Seed Bank	Irrigat ed without animal Crop + Horticulture	Green manuring through Dhaincha	Demonstration of specific varieties of Paddy (CSR-46, CSR-56). Use of intercropping in vegetables- Use of CSR-Bio, halo azo and halo PSB culture in Paddy and wheat crop. Use of specific vegetables crops varieties. Use of specific variety of oilseeds crop. Use of specific variety of Wheat crop-Establishmentof seed bank for Paddy and Wheat	Seed Bank

Irrigatedwith animal Crop +Horticulture+ Livestock	Useof levelin g & bundin g.Gree n manuri ng throug h Dhainc ha-	Demonstration of specific varieties ofPaddy (CSR-46, CSR-56). Use of intercropping in vegetables.-4 ha. Use of CSR-Bio, halo azo and halo PSB culture in Paddy and wheat crop. Use of specific vegetables crops varieties. Use of specific variety of oilseeds crop. Use of specific variety of Wheat crop Year round fodder production demonstration. Income generating through Mushroom cultivation. Establishment of seed bank for Paddy andWheat	Feed Manag ement & diseas e contro l. Useof Shelte r for lactati ngani mal for reduci ng heat stress conditi on-Incom e gener ation activit y. (Goat farmin g). Income generatio	Seed Bank. Fodder Bank	Useof leveling & bunding .Green manurin g through Dhainch a-	Demonstration of specific varieties of Paddy (CSR-46, CSR-56). Use of intercropping in vegetables-4ha. Use of CSR-Bio, halo azoand halo PSB culture in Paddy and wheat crop. Use of specific vegetables crops varieties. Use of specific variety of oilseeds crop. Use of specific variety of Wheat crop Year round fodder production demonstration Income generating through Mushroom	Feed Manage ment & disease control. Use of Shelter for lactating animal for reducing heat stress conditio n-Inco me generation activity. (Goat farming). Income generation through BackYard Poultry farming	Seed Bank. Fodder Bank	Use of leveli ng& bundi ng. Green manurin g through Dhainch a-	Demonstrat ion of specific varieties of Paddy (CSR-46, CSR-56). Use of intercroppin g in vegetables.-4 ha. Use of CSR-Bio, halo azo and halo PSB culture in Paddy and wheat crop. Use of specific vegetables crops varieties. Use of specific variety of oilseeds crop. Use of specific variety of Wheat crop.	Feed Management & disease control. Use of Shelter for lactating animal for reducing heat stress condition. Income generation activity. (Goat farming). Income generation through BackYard Poultry farming. 1	Seed Bank. Fodder Bank

Irrigated with animal Crop + Horticulture + Livestock	Use of leveling & bunding. Green manuring through Dhaincha-	Demonstration of specific varieties of Paddy (CSR-46, CSR-56). Use of intercropping in vegetables. Use of CSR-Bio, halo azo and halo PSB culture in Paddy and wheat crop. Use of specific vegetables crops varieties. Use of specific variety of oilseeds crop. Use of specific variety of Wheat crop iYear round fodder production demonstration Income generating through Mushroom cultivation Establishment of seed bank for Paddy and Wheat	Feed Management & disease control Use of Shelter for lactating animal for reducing heat stress condition- Income generation activity. (Goat farming) Income generation through Back Yard Poultry farming	Seed Bank Fodder Bank	Use of leveling & bunding. Green manuring through Dhaincha-	Demonstration of specific varieties of Paddy (CSR-46, CSR-56) Use of intercropping in vegetables.-4 ha. Use of CSR-Bio, halo azo and halo PSB culture in Paddy and wheat crop. Use of specific vegetables crops varieties. Use of specific variety of oilseeds crop. Use of specific variety of Wheat crop Year round fodder production demonstration Income generating through Mushroom cultivation Establishment of seed bank for Paddy and Wheat	Feed Management & disease control Use of Shelter for lactating animal for reducing heat stress condition- Income generation activity. (Goat farming) Income generation through Back Yard Poultry farming	Seed Bank Fodder Bank	Use of leveling & bunding. - Green manuring through Dhaincha-	Demonstration of specific varieties of Paddy (CSR-46, CSR-56) Use of intercropping in vegetables. Use of CSR-Bio, halo azo and halo PSB culture in Paddy and wheat crop. Use of specific vegetables crops varieties. Use of specific variety of oilseeds crop. Use of specific variety of Wheat crop Year round fodder production demonstration Income generating through Mushroom cultivation Establishment of seed bank for Paddy and Wheat	Feed Management & disease control Use of Shelter for lactating animal for reducing heat stress condition- Income generation activity. (Goat farming) Income generation through Back Yard Poultry farming	Seed Bank Fodder Bank

4.Identify Promising resilient technologies for addressing the constraints

SNo	FST	Village1-Technologiesidentifiedtominimizetheimpactofconstraintsshortlisted			Village-2Technologiesidentifiedtominimizetheimpactofconstraintsshortlisted		
		Climate constraints	**Resource/Crop/ Animalconstraints**	**Otherconstraints**	**Climateconstraints**	**Resource/Crop/Animalconstraints**	**Otherconstraints**
1	Rainfedwithanimal	Agar hold technology for alternate land use pattern. Maintenance of checkdam& pond.	Use of Nutri Bajra. Use ofKitchen Garden kit for nutritional security. Impact of High Yielding Mustard variety (CS-60). UseofNapiergrass for fodder production use of mineral mixture according ASMM. Incomegeneration through Back Yard Poultry farming.	Improvedthe Skill & adoption of technology through capacity building. programme. Establishment of fodder bank.	Agarhold technology foralternate land use pattern. Maintenance of checkdam& pond.	UseofNutri Bajra. Use of KitchenGarden kit for nutritional security. Impact of High Yielding Mustard variety (CS-60). UseofNapier grassforfodder production useofmineral mixture according ASMM. Income generation throughBack Yard Poultry farming	Improved the Skill & adoption of technology through capacity building programme. Establishment offodderbank.

2.	Rainfed with animal(Crop+ Horticulture+Livestock)	Agar hold technology for alternate land use pattern. Maintenance of checkdam & pond.	Use of Nutri Bajra. Use of Kitchen Garden kit for nutritional security. Impact of High Yielding Mustard variety (CS-60). Income generation through Mushroom Production. Use of Napier grass for fodder production. use of mineral mixture according ASMM. Income generation activity. (Goat farming) Plantation of Aonla & bel.	Improved the Skill & adoption of technology through capacity building programme. Establishment of fodder bank.	Agar hold technology for alternate land use pattern. Maintenance of checkdam & pond.	Use of Nutri Bajra. Use of Kitchen Garden kit for nutritional security. Impact of High Yielding Mustard variety (CS-60). Income generation through Mushroom Production. Use of Napier grass for fodder production use of mineral mixture according ASMM – Income generation activity. (Goat farming) Plantation of Aonla & bel	Improved the Skill & adoption of technology through capacity building programme. Establishment of fodder bank.

3.	Irrigated without animal Crop + Horticulture	Levelling & Bunding Green Manuring through Dhaincha	Green manuring through Dhaincha Demonstration of specific varieties of Paddy (CSR-46, CSR-56). Use of intercropping in vegetables Use of CSR-Bio, halo azo and halo PSB culture in Paddy and wheat crop. Use of specific vegetables crops varieties. Use of specific variety of oilseeds crop. Use of specific variety of Wheat crop- Establishment of seed bank for Paddy and Wheat	Improved the Skill & adoption of technology through capacity building programme. Establishment of seed bank.	Levelling & Bunding Green Manuring through Dhaincha	Green manuring through Dhaincha. Demonstration of specific varieties of Paddy (CSR-46, CSR-56). Use of intercropping in vegetables Use of CSR-Bio, halo azo and halo PSB culture in Paddy and wheat crop. Use of specific vegetables crops varieties. Use of specific variety of oilseeds crop. Use of specific variety of Wheat crop. Establishment of seed bank for Paddy and Wheat	Improved the Skill & adoption of technology through capacity building programme. Establishment of seed bank.

Sl. No	FST	Village1- Technologiesidentifiedtominimizetheimpactofconstraintsshortlisted			Village-2Technologiesidentifiedtominimizetheimpactofconstrainsshortlisted		
		Climateconstraints	**Resource/Crop/Animalconstraints**	**Otherconstraints**	**Climateconstraints**	**Resource/Crop/Animalconstraints**	**Otherconstraints**
4.	**IrrigatedwithanimalCrop+Horticulture+Livestock**	Levelling & Bunding Green Manuring through Dhaincha	Use of leveling Greenmanuring through Dhaincha-Demonstration of specific varieties of Paddy (CSR-46, CSR-56). Use of intercropping in vegetables. Use of CSR-Bio, halo azo and halo PSB culture in Paddy and wheat crop. Use of specific vegetables crops varieties. Use of specific variety of oilseeds crop. Useofspecificvarietyof Wheat Feed Management UseofShelterforlactating animal forreducingheat stress condition- Incomegenerationactivity. (Goat farming) Incomegenerationthrough Back Yard Poultry Farming Incomegeneratingthrough Mushroom cultivation Establishmentofseedbank for Paddy and Wheat	Improved the Skill & adoption of technology through capacity building programme. establishment ofseed bank	Levelling & Bunding Green Manuring through Dhaincha	Use of leveling Greenmanuring through Dhaincha-Demonstration of specific varieties of Paddy (CSR-46, CSR-56). Use of intercropping in vegetables. Use of CSR-Bio, halo azo and halo PSB culture in Paddy and wheat crop. Use of specific vegetables crops varieties. Use of specific variety of oilseeds crop. Useofspecificvarietyof Wheat c Feed Management UseofShelterforlactating animal forreducingheat stress condition- Incomegenerationactivity. (Goat farming). Incomegenerationthrough Back Yard Poultry farming. Incomegeneratingthrough Mushroom cultivation. Establishmentofseedbank for Paddy and Wheat.	Improved the Skill & adoption of technology through capacity building programme. establishment ofseed bank

SNo	FST	Village3-Technologiesidentifiedtominimizetheimpactofconstraintsshortlisted		
		Climateconstraints	**Resource/Crop/Animalconstraints**	**Otherconstraints**
1	Rainfed with animal	Agar hold technology for alternate land use pattern. Maintenance of checkdam & pond.	Use of Nutri Bajra. Use of Kitchen Garden kit for nutritional security. Impact of High YieldingMustardvariety (CS-60). Use ofNapier grass for fodder production use ofmineral mixtureaccording ASMM – Income generation through BackYard Poultry farming	Improved the Skill & adoption of technology through capacity building programme. Establishment of fodder bank.
2	Rainfedwithanimal (Crop+Horticulture +Livestock)	Agar hold technology for alternate land use pattern. Maintenance of checkdam & pond.	Use of Nutri Bajra. Use of Kitchen Garden kit for nutritional security. Impact of High YieldingMustardvariety (CS-60). Income generation through Mushroom Production. Use ofNapier grass for fodder production. use of mineral mixtureaccording ASMM – Income generating activity. (Goat farming). Plantation of Aonla & bel	Improved the Skill & adoption of technology through capacity building programme. Establishment of fodder bank.
3.	IrrigatedwithoutanimalCrop+Horticulture	Levelling & Bunding Green Manuring through Dhaincha	Greenmanuringthrough Dhaincha Demonstrationof specific varieties of Paddy (CSR-46, CSR-56) Use of intercropping in vegetables- Use of CSR-Bio, halo azo and halo PSB culture in Paddy and wheat crop. Use of specific vegetables crops varieties. Use of specific variety of oilseeds crop. Use of specific variety of Wheat crop- Establishment of seed bankfor Paddy and Wheat	Improved the Skill & adoption of technology through capacity building programme. establishment of seed bank.

4.	Irrigatedwithanimal Crop+Horticulture+ Livestock	Levelli ng & Bundin g Green Manuring through Dhaincha	Use of leveling &bunding. Greenmanuringthrough Dhaincha. Demonstrationof specific varieties of Paddy (CSR-46, CSR-56). Use of intercropping in vegetables. Use of CSR-Bio, halo azo and halo PSB culture in Paddy and wheat crop. Use of specific vegetables crops varieties. Use of specific variety of oilseeds crop. UseofspecificvarietyofWheatcrop year-round fodderproduction demonstration. Feed Management & disease control. Use of Shelter for lactating animalfor reducing heat stress condition. Income generation activity. (Goat farming). Income generation through BackYard Poultry farming. Income generating throughMushroom cultivation. Establishment of seed bankfor Paddy and Wheat.	Improved the Skill & adoption of technology through capacity building programme. Establishment of seed bank

16

5.Categorization of the identified technologies in to NRM, Crops and Livestock in each of the village for taking up demonstrations during 2023-24

S N o	FST	Village 1				Village 2			
		NRM	Crop	Livestock	Total	NRM	Crop	Livestock	Total
1	Rainfed with animal (Crop+Livestock)	*Maintain of communitypond.	Use of UseofKitchen Garden kit ImpactofHigh Yielding Mustard variety (CS-60).	UseofNapier grassforfodder production. Useofmineral mixture accordingASMM. Income generation through Back Yard Poultry farming.	10	*Maintain of community pond.	Use of Nutri Bajra. Useof Kitchen Garden kit fornutritional security. Impact of HighYielding Mustard variety (CS-60).	Use of Napiergrass for fodder production useof mineral mixture according ASMM. Income generating activity (Goat farming). Income generation through BackYard Poultry farming.	10
2	Rainfed with animal(Crop + Horticulture+ Livestock	Maintain of community pond	Use of Nutri Bajra. Use of Kitchen Garden kit for nutritional security. Impact of High Yielding Mustard variety (CS-60). Income generation through Mushroom Production. Plantation of tree under rained system	Use of Napier grass for fodder production. use of mineral mixture according ASMM – Income generation activity. (Goat farming)	10	*Maintain of community pond	Use of Nutri Bajra. Use of Kitchen Garden kit for nutritional security. Impact of High Yielding Mustard variety (CS-60). Income generation through Mushroom Production Plantation of tree under rained system	Use of Napier grass for fodder production use of mineral mixture according ASMM – Income generation activity. (Goat farming) Income generation through Back Yard Poultry farming	10

3	Irrigated without animal Crop + Horticulture	Green manuring through Dhaincha	Demonstration of specific varieties of Paddy (CSR-46, CSR-56) Use of intercropping in vegetables- Use of CSR-Bio, halo azo and halo PSB culture in Paddy and wheat crop. Use of specific vegetables crops varieties. Use of specific variety of oilseeds crop. Use of specific variety of Wheat crop- Establishment of seed bankfor Paddy and Wheat	-	**8**	Green manuring through Dhaincha	Demonstration of specific varieties of Paddy (CSR-46, CSR -56) Use of intercropping in vegetables- Use of CSR-Bio, halo azo and halo PSB culture in Paddy and wheat crop. Use of specific vegetables crops varieties. Use of specific variety of oilseeds crop. Use of specific variety of Wheat crop- Establishment of seed bankfor Paddy and Wheat	-	**8**

4	Irrigate d with animal Crop + Horticu lture + Livesto ck	Useof leveling & bunding. - Green manurin gthrough Dhainch a -	Demonstration of specificvarieties of Paddy (CSR-46, CSR-56). Use of intercropping in vegetables. Use of CSR-Bio, halo azo and halo PSB culture in Paddy and wheat crop. Use of specific vegetables crops varieties. Use of specific variety of oilseeds crop. Useofspecific varietyofWheat crop. **Year** round fodderproduction. Demonstration. Income generationthroug hMushroom	Feed Management & disease control. Use of Shelter for lactating animal for reducingheat stress condition. Income generation activity(Goatfarming). Income generation throughBack YardPoultry farming	**14**	Use	Demonstration of specificvarietie s of Paddy (CSR-46, CSR-56). Use of intercropping in vegetables. Use of CSR-Bio, halo azo and halo PSB culture in Paddy and wheat crop. Use of specific vegetables crops varieties. Use of specific variety of oilseeds crop. Useofspecific varietyofWheat crop. Year-round fodderproductio n demonstration. Income	Feed Management & disease control. UseofShelter for lactating animal for reducing heat stress condition. Income generation activity. (Goat farming). Income generation through Back Yard Poultry farming	**14**

5.Categorization of the identified technologies into NRM, Crops and Livestock in each of the village for taking up demonstrations during 2023-24

SNo	FST	Village3			
		NRM	Crop	Livestock	Total
1	Rainfedwith animal (Crop+Livestock)	*Maintain of community pond .	Use ofNutri Bajra. UseofKitchenGardenkit for nutritional security. ImpactofHighYielding Mustardvariety (CS-60).	Useof Napiergrass for fodder production useofmineralmixture according ASMM. Income generationthroughBack Yard Poultry farming.	10
2	Rainfedwith animal(Crop+ Horticulture+Live stock	*Maintain of community pond	Use of Nutri Bajra. UseofKitchenGardenkit for nutritional security. ImpactofHighYielding Mustardvariety (CS-60). Incomegenerationthrough Mushroom Production. Plantationoftreeunder rainedsystem.	UseofNapiergrass for fodder production. Useofmineralmixture according ASMM. Income generation activity (Goat farming).	10
3	Irrigatedwithout animal Crop + Horticulture	Green manuring through Dhaincha	Demonstration of specific varieties of Paddy (CSR-46, CSR-56). Use of intercropping invegetables. Use of CSR-Bio, halo azo and halo PSB culture in Paddy and wheat crop. Use of specific vegetables crops varieties. Use of specific variety of oilseeds crop. Use of specific variety of Wheat crop-KRL-283 Establishment of seed bankfor Paddy and Wheat	-	8

4	Irrigated Crop	Useof leveling & bunding. Green manuring through Dhaincha.	Demonstrationof specific varieties of Paddy (CSR-46, CSR-56). Use of intercropping invegetables. Use of CSR-Bio, halo azo and halo PSB culture in Paddy and wheat crop. Use of specific vegetables crops varieties. Use of specific variety of oilseeds crop. UseofspecificvarietyofWheatcrop KRL-283. **Year** round fodder production demonstration Income generation through Mushroom cultivation EstablishmentofseedbankforPaddy and Wheat	Feed Management UseofShelterforlactating animalforreducingheat stress condition. Incomegenerationactivity (Goat farming). Incomegenerationthrough BackYard Poultry farming.	14

6. No. of farmers involved in each of the village for demonstrations during 2023-24 (technology wise)

S No	FST	Village 1				Village 2				Village3			
		NRM	Crop	Livestock	Total	NRM	Crop	Livestoc k	Total	NRM	Crop	Livestoc k	Total
1	Rainfed with animal (Crop+L iv estock	1.-1	1.-32.-10 3.-3	1.-5 2.-1 3.-5 4.-0	28	-	1.-62.-10 3-3	1.-5 2.-1 3.-5 4.-0	30	-	1.-62.-10 3-3	1.-5 2.-1 3.-5 4.-0	30
2	Rainfed with animal(Cr op+ Horticultu re+Livest o ck	1.-1	1.-32.-10 3.-34.-15.-5	1.-5 2.-0 3.-5 4.-1	34	-	1.-32.-10 3.-34.-15.-5	1.-5 2.-0 3.-5 4.-1	33	-	1.-32.-10 3.-34.-15.-5	1.-5 2.-0 3.-5 4.-1	33
3	Irrigated without animal Crop + Horticult ure	8	1.-7 2.-2 3.-3 4.-3 5.-3 6.-8		34	8	1.-7 2.-0 3.-3 4.-3 5.-3 6.-8		32	6	1.-7 2.-1 3.-3 4.-3 5.-3 6.-8		31
4	Irrigate d wit h animal Crop+ Horticult ure + Livestock	8	1.-7 2.-0 3.-3 4.-3 5.-3 6-8. 7.-1	1.-1 2-0 3.-0 4.-5	39	8	1.-7 2.-0 3.-3 4.-3 5.-3 6.-8 7.-1	1.-1 2-1 3.-1 4.-5	41	6	1.-7 2.-0 3.-3 4.-3 5-3. 6.-8 7.-0	1.-1 2-1 3.-1 4.-5	38

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

S No	Farming System Typologies	Village 1				Village 2				Village 3			
		Climate Resilient Technology	Convergence with Scheme	No. of farmers proposed to be involved	Area to be covered (ha)	Climate Resilient Technology	Convergence with Scheme	No. of farmers proposed to be involved	Area to be covered (ha)	Climate Resilient Technology	Convergence with Scheme	No. of farmers proposed to be involved	Area to be covered (ha)
1	Rainfed with animal (Crop+Livestock)	Use of Nutri Bajra. Impact of High Yielding Mustard variety (CS-60	Dept. of Agri. Shree Anna Yojna	15	3	Use of Nutri Bajra. Impact of High Yielding Mustard variety (CS-60	Dept. of Agri. Shree Anna Yojna	15	3	Use of Nutri Bajra. Impact of High Yielding Mustard variety (CS-60	Dept. of Agri. Shree Anna Yojna	15	3
2	Rainfed with animal(Crop+ Horticulture+Livestock	Income generation through Mushroom Production	Dept. of Horticulture	2	2	Income generation through Mushroom Production	Horticulture	2	2	Income generation through Mushroom Production	Horticulture	2	2

3	Irrigated without animal Crop + Horticulture	Demonstration of specific varieties of Paddy (CSR-46, csr-56) Use of specific variety of Wheat crop- KRL-283	Harit Kranti	**45**	**15**	Demonstration of specific varieties of Paddy (CSR-46, csr-56) Use of specific variety of Wheat crop- KRL-283	Harit Kranti	**45**	**15**	Demonstration of specific varieties of Paddy (CSR-46, csr-56) Use of specific variety of Wheat crop- KRL-283	Harit Kranti	**45**	**15**
4	**Irrigated with animal Crop + Horticulture + Livestock**	Demonstration of specific varieties of Paddy (CSR-46, csr-56) Use of specific variety of Wheat crop- KRL-283	Harit Kranti	**45**	**15**	Demonstration of specific varieties of Paddy (CSR-46, csr-56) Use of specific variety of Wheat crop- KRL-283 283	Harit Kranti	**45**	**15**	Demonstration of specific varieties of Paddy (CSR-46, csr-56) Use of specific variety of Wheat crop- KRL-283	Harit Kranti	**45**	**15**

Activitiesand Cost

8. NRM Interventions;

8.1.Repair/Renovationofexistingwaterharvestingstructures,drainagechannelsetc.:

SlNo.	Village1,2,3, etc.	Intervention	Dimensions	No.of units	No.offarmhouseholdsproposedtobeinvolved	Convergencevalue,ifany(Rs)	Valueoffarmersshare(Rs)	Cost to project(Rs)
1.	Village2, 3	Maintenanceof check dam & community pond.	50x20square meter	2	6	30000	0	180000.0
2.		Leveling & Bunding	2.0 ha.	8	8	2500	0	20000.0
		Sub-total 8.1		11	18	32500	0	200000.0

8.2.Insitu conservation–ResourceConservationTechnologies (RCTs),etc.

SlNo.	Village1,2,3,etc.	Intervention	UnitcostRs/ha A	CoverageProposed		Totalamount(Rs) AxC	Remarks
				Area (ha) B	No. of farm households proposedto be involvedC		
	Village 1, 2, 3	RCT on Wheat	5000.0	6.0	24	30000.0	
		Green Manuring through Dhaincha	8000.0	2.0	8.0	16000.0	
		Sub-total 8.2	**13000.0**	**8.0**	**32**	**46000.0**	

ActivitiesandCost

9.Crop Interventions;

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

SlNo.	Village1,2,3 etc.	Intervention	Description		Cost (Rs/ha) A	Coverage Proposed		Total amount(Rs) AxC	Remarks
			Crop	Variety (s)		Area (ha) B	No. of farm househol ds to be involvedC		
	Village 1,2,3	Use ofNutri Bajra variety.	Bajra	AHB-299	3800	5.0	20	19000.0	
		Salt tolrent variety	Paddy Wheat Mustard	CSR-46 KRL-283 CS-58, CS-60	6000 6000 3000	15.0 12.0 8.0	48 48 35	90000.0 72000.0 24000.0	
		Use of CSR-Bio	Paddy	CSR-46	2500	4.0	10	10000.0	
		Use of Hallo Azo Hallo-PSB	Wheat	KRL-283	2500	6.0	15	15000.0	
		Use of High Yielding Veg. Variety	Beet root Spinach	Ragini F-1 All Green	11000 8000	2.0 2.0	8 8	22000.0 16000.0	
		Intercroppingof Spinach in Cabbage/Cauliflower.	Spinach	All Green	7000	2.0	8	14000.0	
		Salt tolrent fruits plant	Aonla	NA-7	9000	2.0	30	18000.0	
		Sub Total 9.1.			**58000.0**	**58**	**230**	**300000.0**	

9.2.Improved agronomic practices and othe rcropinterventions,Income Generation etc..

SlNo. 1.	village	Intervention	Description		Cost (Rs/ha) A	CoverageProposed		Totalamount (Rs) AxC	Remarks
			Crop	Variety (s)/Specie s		Area (ha)B	No. of farm househol ds to be involved C		
	Village 1,2,3	Mushroom cultivation	Mushroom	Button & Oyester Mushroo m	30000	10x10 square feet	5	150000.0	
		Sub Total 9.2.			**30000.0**		**5**	**150000.0**	

Activities and Cost 10. Livestock and Fisheries

10.1.Feed demonstrations forcropresiduemanagement/stressmanagement:silage/feedblocks/mineralmixture(MM)blocks/feedenrichment,etc.

SlNo.	Detailsoffeedintervention	Unitcostofinte rvention(Rs.)	No.of farm house holds to be involved	Totalamount (Rs/ha)	Remarks
	Round the year fodder production	3000.0	20	60000.0	Availabilityof green fodder
2.	Napier Grass Demonstration	1500.0	50	75000.0	Availabilityof green fodder
3.	Mineral Mixture	800.0	50	40000.0	Supply of mineral mixture for maintaining health
4.	Disease control programme in livestock	35000.0	2	70000.0	Animal health camp tosafe the animalin adverse climatic condition.
5.	Shelterfor protection of livestock against extreme weather (Heat & Cold)	50000.0	5	125000.0	To provide shelter for animals against extreme heat waves.
6	Goatry	42500.0	3	127500.0	For income generation activity
7	Backyard Poultry	30000.0	3	90000.0	For income generation activity
	Sub-total10.1.	**162800.0**	**133**	**460000.0**	

10.2.Establishment of Seedbanks/Fodder banks,etc.

SlNo.	Seedbank/ Fodder Bank	Seed of crop and variety/Foddercrop /variety	Quantity of seed/fodder produced/storage(t)	Unit Cost (Rs.)	No.of farmers involved	Amount (Rs.)	Remarks
1.	Seed Production Group	Paddy –CSR-46 Wheat- KRL-283	0.25 0.25	5000.0 5000.0	2 5 2 5	75000.0 75000.0	Establishment of seedbank to ensure the quality seed availability in the village for timely sowing
2.	Fodder Bank	Napier	1500 slips	3500.0	5	17500.0	Establishment of fodder bank to ensure the fodder availability for betterment of the lactating animals.
	Sub-total10.2.			**13500.0**	**15**	**167500.0**	

Activities and Cost

11. Non-recurring contingencies – Equipment

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

S. No.	Item	Unit cost* (Rs)	No. of units	Total amount (Rs)
1.	Multicrop Thresher	350000.00	1	350000.00
2..	Zero till Cum Ferti seed drill	65000.00	1	65000.00
3.	Wheel Hand Hoe	30000.00	2	60000.00
	Total		**4**	**475000.00**

12.Capacity Building & Other extension activities

12.1.Training programmes proposed for the year

Theme	Titleoftrainingcourse	Proposed month	No.of participants	Cost to project (Rs.)
Seed production	Seed Production technique	April	25	3000
Green manuring	Green manuring through Daincha	May	25	3000
Soil health management	Soil reclamation technology for improvement of problematic soil	June	25	3000
Nursery management	Management of nursery raising for saline soil	June	25	3000
Drought Management	Package and practices for draught Management.	June	25	3000

Disease management	Disease management practices for sheath blight and false smut in paddy	July	25	3000
Poultry farming	Poultry broiler farming	August	25	3000
Pestmanagement	IPM practices for stem borer in paddy	August	25	3000
Moistureconservation	In situ moisture conservation technique	September	25	3000
Resource Conservation Technology	Benefits of zero till seed drill in sodic soil	October	25	3000
Resource Conservation Technology	Improved cultural practices of wheat crop	November	25	3000
Pestmanagement	IPM practices for vegetables	January	25	3000
Feedmanagement	Feed and fodder management in animals	March	25	3000
Sub-total			**325**	**39000.00**

12. Capacity Building & Other extension activities

12.2.Field Days/Exposurevisits/Awarenessprogrammes/Kisanmelas/Kisan ghosti proposed for the year

Theme	**TitleofProgramme**	**Proposed month**	**No.of participants**	**Cost (Rs.)**
Field Day of Paddy	Production technology of Paddy in Sodic soil	Sept.	30	10000.0
Field Day of Wheat	Production technology of Wheatin Sodic soil	March	30	10000.0
Field Day of Mustard	Production technology of Mustardin Sodic soil	March	30	10000.0
Field Day of Bajra	Production technology of Bajra in Sodic soil	Sept.	30	10000.0
Field Day of Horticultural Production	Production technology of Horticultural cropin Sodic soil	Feb.	30	10000.0
Field Day Fodder	Production technology of Fodder cropin Sodic soil	March	30	10000.0
ExposureVisit	Production technology in different farming system typology in sodic soil.	Oct	25	75000.0
Kisan Ghosti		Nov.	100	50000.0
Sub-total12.2.			185	185000.0

13. **Publications and Media products proposed to be Developed**

13.1 Publications

Publication	Nature of Publication (Book/Bulletin/ Brochureetc.)	Proposed during the month	No.of Copies	Cost (Rs.)
Folder	Folder	Oct	1000	10000.0
Production of Training Material	Manual	March	500	45000.0
Sub-total13.1.			1500	55000.0

13.2 Video Films

Video Film to be prepared	Duration(Minutes)	Proposed duringthe month	Cost(Rs.)
CD-Video	20 minutes	December	20000.0
Sub-total13.2.			20000.0

14.Summary of cost Estimates for 2023-24

Item number 8.1	Title of the Item	Amount (Rs.)
	Repair / Renovation of existing water harvesting structures, drainage channels etc.:	200000.0
8.2	In situ conservation – Resource Conservation Technologies (RCTs), etc.	46000.0
9.1	Stress tolerant / improved varieties / Short duration / Legume crops, etc..	300000.0
9.2	Improved agronomic practices and other crop interventions, etc..	150000.0
10.1	Feed demonstrations for crop residue management / stress management: silage / feed blocks/ mineral mixture (MM) blocks / feed enrichment, etc..	460000.0
10.2	Establishment of Seed banks / Fodder banks, etc..	167500.0
11	Proposal for Procurement of climate related farm machinery/ implements for Custom Hiring centre	475000.0
12.1	Training programmes proposed for the year	39000.0
12.2	Field Days/Exposure visits/Awareness programmes/Kisan melas/Kisan ghosti proposed for the year	185000.0
13.1	Publications	55000.0
13.2	Video Films	20000.0
	Plan for contingency major for various cropduring the cropping season 2023-24	195000.0
	Other Contingency (T.A)	100000.0
	Contractual Man power (SRFs)	461760.0
	Grand total (Rs.)	2854260.0

15.Plan for the spread of the proven practices (Convergence with departments, linkages with development to organizations, etc.,)

Sl. No	Proven technology/Capacity building	Departmentinvolved	Strategy	Inputarrangement/contributionfromthedepartment	Amountmobilized(Rs. InLakhs)
1.	Salt tolerant specific varieties of paddy.	Dept. Of Agriculture and FPOs	Through training & demonstration under Harit Kranti		
2.	Salt tolerant specific varieties of Wheat	Dept. Of Agriculture.	Throughtraining&demonstration under Harit Kranti		
3	Salttolerant specific varieties of Mustard	Dept. Of Agriculture.	Through training & demonstration under NFSM		
4	Income generation to Mushroom Cultivation	Dept. Of Horticulture	Training		