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

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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

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| management using waste decomposer @ decomposer management decomposer 2 unit per 100 @ Rs. 20 management farmer / unit / unit Total 2,31,500 | | Crop residue | Waste | Waste | 50 | 20 | Crop residue | 2000 |
| decomposer 2 unit per 100 @ Rs. 20 farmer / unit / unit Total 2,31,500 | | management using waste | decomposer @ | decomposer - | | | management | |
| farmer / unit Total 2,31,500 | | decomposer | 2 unit per | 100 @ Rs. 20 | | | - | |
| Total 2,31,500 | | - | farmer | / unit | | | | |
| | | | | | | | Total | 2,31,500 |

| $v_1ouule-2$: Crop Frouuction | Module-2: | Crop | Production |
|--------------------------------|-----------|------|------------|
|--------------------------------|-----------|------|------------|

| Intervention | Technology to be demonstrated | Technology to be demonstrated (Variety, Fertilizer / Chemicals doses,) | | 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 Vegetable kit food availability | | 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 |
| | | 1 | | 1 | | 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 | Торіс | No. of farmers |
|---------------|---|----------------|
| | In-situ moisture conservation (Green Manuring and Brown Mulching) | 20 |
| HRD training | Integrated pest management through Tricho-card in Sugarcane | 20 |
| The training | Seed production technology in Sugarcane crop | 20 |
| | Introduction to Alternate wetting drying techniques in Paddy for moisture | 20 |
| | conservation | |

| Interventions | Торіс | No. of farmers | | | | | | |
|---------------|--|----------------|--|--|--|--|--|--|
| | Soil health management through green manuring | 20 | | | | | | |
| | Use of Soil Moisture Indicator in irrigation management in sugarcane | | | | | | | |
| | 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 | Exposure to weather station at KVK, Baghpat | 20 |
| station | | |
| Field Day | Field day on sugarcane and wheat demo. Field (03 | 75 |
| | Field visits) | |

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 (@Rs3500 | 00 + 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 r | unning expenditure etc., | 30,000 |
| 5. Miscellaneous Expenditure | 25,000 | |
| II. Т А | | 30,000 |
| | Total | 10,93,750 |

Krishi Vigyan Kendra– Bahraich – I Action Plan 2023

| 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 |

1. Details about the existing NICRA villages

2. Divide the NICRA villages into predominant farming system typologies

| | | Vill. Baundi | | | Vill. Ra | ni Bagh | Vill. Jabdi | | | |
|-------|---|--------------|--------------------------------|--|--------------|--------------------------------|--|--------------|------------------------------------|--|
| S No. | Farming System Typologies | 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 (appros .) | % covera ge of the typolo gy (area in the village) |
| 1 | Rainfed without animal | 162.7 0 | 144 | 25.9 | 94.5 | 96 | 33.64 | 45.6 0 | 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

| | | Vill. Baur | ndi | | Vill. Ran | i Bagh | | Vill. Jabd | i | |
|---|--|----------------------------|---|----------------------------------|----------------------------|---|----------------------------------|----------------------------|---|----------------------------------|
| | Farming System Fypologies | Climate constrain ts | Resource /Crop/ Animal constrain ts | Other constrain ts | Climate constrain ts | Resource /Crop/ Animal constrain ts | Other constrain ts | Climate constrain ts | Resource /Crop/ Animal constrain ts | Other constr aints |
| 1 | Rainfed without animal | | | | | | | | | |
| 2 | Rainfed with animal CROP-1/ Soil-1 | | ion Varieties 1agement | ainings ory access | | ion Varieties 1agement | ainings ory access | | ion Varieties 1agement | ainings ory access |
| 3 | Rainfed with animal CROP-2/ Soil-2 | Flood | Longer Durat Resource Mar | ck of proper tr of Agro advis | Flood | Longer Durat Resource Mar | ck of proper tr of Agro advis | Flood | Longer Durat Resource Mar | ck of proper tr of Agro advis |
| 4 | Irrigated without animal | | Old and 2. Bad | 3. Lac 4. Lack | | Old and 2. Bad | 3. Lac 4. Lack (| | Old and 2. Bad | 3. Lac 4. Lack |
| 5 | Irrigated with animal | | 1. | | | 1. | | | - - | |
| 6 | Other predomina nt system | | | | | | | | | |

| | | Vill. Bau | ındi | 0 | Vill. Rai | ni Bagh | | Vill. Jabd | i | |
|-------------|---|--|---|--|--|---|--|--|---|--|
| S N o | Farming System Typologies | Climate constrai nts | Resource /Crop/ Animal constraints | Other constra ints | Climate constrai nts | Resource /Crop/ Animal constraint s | Other constrai nts | Climate constrai nts | Resourc e /Crop/ Animal constrai nts | Other constrai nts |
| 1 | Rainfed without animal | | | | | | | | | |
| 2 | Rainfed with animal CROP-1/ Soil- | harif Crops pp | 2065, PR-126 HD3118 tard, Lentil | hatsApp | harif Crops pp | 2065, PR-126 HD3118 tard, Lentil | hatsApp | harif Crops pp | 2065, PR-126 HD3118 tard, Lentil | hatsApp |
| 3 | Rainfed with animal CROP-2/ Soil- | insplanting of Kl ving of Rabi Crc nmer sowing | n Paddy : NDR neat : HD3271, H ion : Toria, Mus mmer Maize | acity Building Seed Bank via IT Tools: W | unsplanting of Kl ving of Rabi Crc nmer sowing | n Paddy : NDR neat : HD3271, H ion : Toria, Mus mmer Maize | acity Building Seed Bank via IT Tools: W | ınsplanting of Kl ving of Rabi Crc nmer sowing | n Paddy : NDR neat : HD3271, H ion : Toria, Mus mmer Maize | acity Building Seed Bank via IT Tools: W |
| 4 | Irrigated without animal | Sowing/Tra 2. Late Sov 3. Sur | nid Duratic e Sown Wł Diversificat 4. Su | 1. Cap 2. 5 3. 4 Advisory | Sowing/Tra 2. Late Sov 3. Sur | nid Duratic e Sown Wł Diversificat 4. Su | 1. Cap 2. 5 Advisory | sowing/Tra 2. Late Sov 3. Sur | nid Duratic e Sown Wł Diversificat 4. Su | 1. Cap 2. S Advisory |
| 5 | Irrigated with animal | 1. Early S | . Short to n 2. Lat 3. Crop I | 3. Agr | 1. Early S | . Short to n 2. Lat 3. Crop I | 3. Agr | 1. Early S | . Short to n 2. Lat 3. Crop I | 3. Agr |
| 6 | Other predomi nant system | | 1 | | | I | | | I | |

4. Identify Promising resilient technologies for addressing the constraints

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 | Farming | | Vill Bau | ndi | | | Vill Ra | ni Bagh | | | Vill Jat | odi | |
|--------|-----------------------------|-------------------------------|-------------------------------|---------------------|-----------|--------------------|------------------------|---------------------|-----------|------------------------|------------------------|-----------------------|-----------|
| N 0 | System Typologies | NRM | Crop | Livesto ck | Tota 1 | NRM | Crop | Livesto ck | Tota 1 | NRM | Crop | Livesto ck | To tal |
| 1 | Rainfed without anima | 1.Field Bunding 2. Crop | 1.Medium Duration paddy | 1.Gre en Fodd | 19 0 | 1.Fie ld Bun | 1.Med ium Durati | 1.Gre en Fodd | 19 0 | 1.Field Bundin g | 1.Med ium Durati | 1.Gree n Fodder | 3 4 3 |
| 2 | Rainfed with | Residue | 2.Late | er: | | ding | on | er: | | 2.Crop | on | : | 3 |

| | anima CROP-1/ Soil-1 | manage ment 3. | Wheat 3.Summer Maize | Suda n Chari | 2.Cr op Resi | paddy 2.Late Wheat | Suda n Chari | Residu e manag | paddy 2.Late Wheat | Sudan Chari 2.Napi | |
|---|--|-----------------------|--|--|------------------------------------|---------------------------------------|--|-------------------------------------|--|------------------------------|--|
| 3 | Rainfed with animal CROP-2/ Soil- 2 | Fertilize r Saving | 4.Mustard 5.Lentil 6.Horticultu ral Crops | 2.Na pier Grass 3.Bar seem | due man age ment 3.Fer | 3.Sum mer Maize 4Must ard | 2.Na pier Grass 3.Bar seem | ement 3.Fertil izer Saving | 3.Sum mer Maize 4.Mus tard | er Grass 3.Bars eem | |
| 4 | Irrigated without anima | | | | tilize r Savi ng | 5.Lent il 6.Hort icultur | | | 5.Lent il 6.Hort icultur | | |
| 5 | Irrigated with anima | | | | 115 | al Crops | | | al Crops | | |
| 6 | Other predomina ntsystem | | | | | | | | | | |

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

| S | Farming | Vill Baundi | | | | | Vill R | ani Bagh | | | Vil | l Jabdi | |
|----|--|-------------|------|-----------|-------|-----|--------|-----------|-------|-----|------|-----------|-------|
| No | System Typologies | 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)

| | | Vill Ba | undi | | | Vill Ran | i Bagh | | | Vill Jabo | li | | |
|-------------|---|--|-----------------------------------|--|--------------------------------------|--|---------------------------------------|--|--------------------------------------|--|-----------------------------------|--|-----------------------------------|
| S N o | Farmin g System Typolo gies | Climate Resilien t Technol ogy | Converg ence with Scheme | No. of farme rs propo sed to be involv | Area to be cover ed (ha) | Climate Resilien t Technol ogy | Conve rgence with Schem e | No. of farme rs propo sed to be involv | Area to be cover ed (ha) | Climate Resilien t Technol ogy | Converg ence with Scheme | No. of farme rs propo sed to be involv | Area to be covere d (ha) |

| | | | ed | | | ed | | | ing | |
|---|---------------------------------------|--|----|----|--|----|----|--|-----|--------|
| 1 | Short/ Medium Duration Paddy | | 30 | 12 | | 30 | 12 | | 30 | 1 2 |
| 2 | Late sown wheat | | 30 | 12 | | 30 | 12 | | 40 | 1 6 |
| 3 | Sum mer Maize | | 10 | 2 | | 10 | 2 | | 10 | 2 |
| 4 | Musta rd | | 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.:

| SI No. | Village 1, 2, 3, etc. | Intervention | Dimensions | No. of units | No. of farm households proposed to | Convergence value, if any (Rs) | Value of farmers share (Rs) | Cost to project (Rs) |
|-----------|-----------------------------|---------------|------------|-----------------|--|--------------------------------------|-----------------------------------|----------------------------|
| | | | | | be involved | | | |
| | Field Bunding* | - | - | 100 | 60 | - | - | - |
| | | Sub-total 8.1 | | | | | | |

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

| Sl | Village 1, | Intervention | Unit cost | | Coverage Proposed | Total |
|-----|----------------------------------|---|-----------|---------------|--|----------------------|
| No. | 2, 3, etc. | | Rs/ha A | Area (ha)B | No. of farm households proposed to be involved C | amount (Rs) A x C |
| 1 | Vill | Crop Residue Management using Machinery | 6000 | 20 | 50 | 120000 |
| | Baundi Vill Rani Bach Vill | Fertilizer Management (LCC) | 180 | 18.2 | 45 | 8100 |
| | Jabdi | 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 | Village | Intervention | Descripti | on | Cost | Cover | age Proposed | Total |
|-----|------------|-----------------|-----------|---------------|---------|--------|---------------|---------|
| No. | 1,2,3 etc. | | Crop | Variety (s) | (Rs/ha) | Area | No. of farm | amount |
| | | | | | Α | (ha) B | households to | (Rs)AxC |
| | | | | | | | be involved C | |
| 1 | | Short/Medium | Paddy | NDR-2065 | 1500 | 36 | 90 | 54000 |
| | Vill | Duration Paddy | | | | | | |
| | Baundi | Late Sown | Wheat | HD | 4500 | 40 | 100 | 180000 |
| | Vill Rani | Wheat | | 3271/3118 | | | | |
| | Bagh | Summer Maize | Maize | Hy Ver | 2200 | 15 | 30 | 33000 |
| | Vill | Crop | Mustard | Pant Sweta/RH | 1000 | 25 | 60 | 25000 |
| | Jabdi | Diversification | | 725 | | | | |
| | | | Lentil | PL-9 | 4500 | 25 | 60 | 112500 |
| | | Sub Total 9.1. | | | | | | 404500 |

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

| Sl | village | | Descriptio | n | Cost | Cov | erage Proposed | Total |
|-----|----------|----------|------------|-----------------------|----------|------|----------------|----------|
| No. | | r ve | Crop | Variety (s) | (Rs/ha)A | Area | No. of farm | amount |
| | | ition | - | | | (ha) | households to | (Rs) A x |
| | | ,u II | | | | В | be involved C | С |
| 1. | | | Garlic | G282 | 90000 | 0.4 | 15 | 36000 |
| | | | Onion | NHRDF Red | 25000 | 0.4 | 15 | 10000 |
| | Vill | ion | Okra | Hy ver | 40000 | 2 | 20 | 80000 |
| | Baundi | cati | Bottle | Hy ver | 21000 | 2 | 20 | 42000 |
| | Vill | sifi | Gourd | | | | | |
| | Rani | ver | Bitter | Hy Ver | 12000 | 1 | 15 | 12000 |
| | Bagh | Di | Gourd | | | | | |
| | Vill | do | Fruit – | Amrapali/ other newly | 12500 | 1.6 | 9 | 20000 |
| | Jabdi | C | Mango | release variety | | | | |
| | | | Fruit – | CISH - Lalit/ other | 12500 | 1.6 | 9 | 20000 |
| | | | Guava | newly release variety | | | | |
| | Sub Tota | 19.2. | | | | | | 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 | Details of feed | Unit cost of | No. of farm households | Total | Remarks |
|-----|-----------------|--------------------|------------------------|---------------|--------------|
| No. | intervention | intervention (Rs.) | to be involved | amount(Rs/ha) | |
| 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 | |

| Sl No. | Seed bank/ Fodder Bank | Seed of crop and variety/ Fodder crop/ variety | Quantity fodder storage (t) | of seed/ produced/ | Unit cost (Rs.) | No. of farmers involved | Amount (Rs.) |
|--------|---------------------------|--|-----------------------------------|-----------------------|--------------------|-------------------------------|-----------------|
| 1 | Seed bank | Paddy | 1500 | | | - | |
| 2 | | Wheat | 3000 | | 60000 x | | 100000 |
| 3 | | Mustard | 300 | | 3 | | 180000 |
| 4 | | Lentil | 200 | | | | |
| | Sub-total 10.2. | | | | | | 180000 |

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

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 | No. of | Cost |
|-------------------------|--|----------|--------------|----------------|
| | | month | participants | (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 | | Sept-Oct | 180 | 45000 |
| Wheat | 3-Field Days for each | Feb-March | 180 | 45000 |
| Lentil | crop (one in each | Feb-March | 150 | 45000 |
| Mustard | adopted villages) | 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 | Proposed | No. of | Cost |
|--|-----------------------|-------------|--------|----------------|
| | (Book/Bulletin/ | during the | Copies | (Rs.) |
| | Brochure etc.) | month | | |
| Recommended Interventions in NICRA villages | Book | Feb March | 200 | 100000 |
| of Bahraich for fight against Climate Change | | | | |
| Extension Literatures | Leaflets (10 Nos) | Feb – March | 5000 | 25000 |
| Research Article | In High NAAS Rated | Feb – March | 50000 | 50000 |
| | Journal | | | |
| 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 / Repovation 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 | 277500.00 |
| | blocks/ mineral mixture (MM) blocks / feed enrichment, etc | |
| 10.2 | Establishment of Seed banks / Fodder banks, etc | 180000.00 |
| 11 | Non-recurring contingencies - Equipment Proposal for Procurement of climate related | 1800000.00 |
| | farm machinery/ implements for Custom Hiring center at Vill. Jabdi/KVK Bahraich-I | |
| 12.1 | Training programmes proposed for the year | 198000.00 |
| 12.2 | Field Days/Exposure visits/Awareness programmes/Kisan melas/Kisan ghosti proposed for | 225000.00 |
| | the year | |
| 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.)

| SI. No | Proven technology/ Capacity building | Department involved | Strategy | Input arrangement / contribution from the department | Amount mobilised (Rs. In Lakhs) |
|-----------|---|------------------------|--|--|--|
| 1. | Field Leveling And Bunding | | Soil and Water Conservation strategy | | 25.00 |
| 2. | Cereal Paddy production | State | NRD 2065 | | 10.00 |
| 3. | Cereal Wheat production | Agriculture | HD 3271 | | 10.00 |
| 4. | Cereal Wheat production | Bahraich | 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-<u>Banda</u>

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. Divide the NICRA villages into predominant farming system typologies

| CI | FormingSystem | Village1 | | | |
|----|---|--------------|---------------------------|---|--|
| No | Typologies* | 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 | - | |

| | 60. 16. 16 | | | |
|------|---|---|---|---|
| S.N. | Farmir System Typolo s | Climate constraint | Climate constraint Resource/Crop/Animal constraints | |
| 1 | Rainfed Farming without Animal (FST-1) | 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 • 4 • 6 41 • | • 1 | |
|------------|----------------------------|-----------------------|-------------------------|-------------------------------|---------------------------------|
| | Predominant climatic cro | n animal and resource | constraints of the main | or identified tarming system | n tynologies of NIC RA villages |
| J . | I readminant chinatic, cro | p, ammai and i cource | constraints of the map | or fuction of the ming system | i cypologics of filenal vinages |

CRAvillages.

4. Identify Promising resilient technologies for addressing the constraints

| | | | Village1shortlisted | |
|--------|---|--|--|---|
| SI. No | Farming System Typologies* | Climate constraints | Resource/Crop/Animal constraints | Other constraints |
| 1 | Rainfed Farning 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 withoutAnim al (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) | ı | 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

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

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

• Integratemultipletechnologiesatthehouseholdsothatwecanassesstheimpactofmultipletechnologiesatthehouseholdlevel

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

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

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

7. ScalingoutofPromisingClimateResilientTechnologiesandproposednumberoffarmerstobe involved (in convergence with development departments)

| | ExaminaSystem | Village1 | | | | | |
|--------|--|--------------------------|-------------------------|-------------------------------|--------------|--|--|
| Sl. No | Typologies | Climate Resilient | Convergence with | No. of farmers proposed to be | Area to be | | |
| | Typologies | Technology | Scheme | involved | 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:

Repair/Renovationofexistingwaterharvestingstructures, drainagechannelsetc.:

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

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

| SI No. | Intervention | Unitcost | Coverag | eProposed | Total amount(Rs) |
|--------|--|-------------|----------|---------------------------------------|------------------|
| | | Rs/ha | Area(ha) | No. of farm households proposed to be | AxC |
| | | Α | В | 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 compost | 40000 | - | 1 | 40000 |
| 6. | NADEP compost | 20000 | - | 1 | 20000 |
| | Sub-total8.2. | | | | 125000 |

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

| Sl | Intervention | Descr | iption | Cost | Coverag | e Proposed | Total amount(Rs |
|-----|--------------------------|--------------|-----------------------------|---------|---------|------------------|-----------------|
| No. | | Crop | Variety(s) | (Rs/ha) | Area | No. of farm | AxC |
| | | | | Α | (ha) B | households to be | |
| | | | | | | involved C | |
| 1. | Improved variety | Green gram | Shikha, PDM-11, 54, Pant | 2500 | 4.00 | 10 | 10000 |
| | | | moong-1, 3 | | | | |
| 3. | Stress tolerant variety/ | Sesame | Pragati,GJT-05,Shekhar | 1000 | 4.00 | 10 | 4000 |
| | Short duration | | | | | | |
| 4 | Improved variety | Sorghum | CSH-16,CSH-9,Bundela | 1500 | 4.00 | 10 | 6000 |
| 5. | Improved variety | Pearl millet | ICMB-155,PUSA-322,ICMH- | 500 | 4.00 | 10 | 2000 |
| | | | 451 | | | | |
| 6. | Improved variety | Chickpea | RVG-202,RVG-203,JG-12, JG- | 8000 | 4.00 | 10 | 32000 |
| | | | 36 | | | | |
| 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, | 4000 | 4.00 | 10 | 16000 |
| | | | Parvati | | | | |
| 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, | Dasheri, Amrapali, Narendra Bael- | 20000 | 0.80 | 4 | 80000 |
| | | Bael,Ber./ | 07,Gola,Apple/ | | | | |
| | | Brinjal, Tomato | KashiUttam,KashiTaru, | | | | |
| | | etc. | KashiAman,Kashivikash,Pusa | | | | |
| | | | Ruby etc. | | | | |
| 16. | Kitchen Garden | Kitchen Garden | Seasonal Vegetables | 125/unit | - | 100 | 12500 |
| | | Kit | | | | | |
| | SubTotal9.1. | | | | | | 234500 |

9. Crop Interventions:

Improved agronomic practices and other crop interventions, etc.

| Sl. | Intervention | Dese | cription | Cost | Coverage Pro | posed | Totalamou |
|-----|--------------------------|-----------|---------------------|---------|---------------|------------------|-----------|
| No. | | Crop | Variety(s) | (Rs/ha) | Area | No. of farm | nt |
| | | 1 | | Α | (ha) B | households to be | (Rs) AxC |
| | | | | | | involved C | |
| 1. | Use of Rhizobium culture | Chickpea/ | RVG-202,RVG-203,JG- | 500 | 4.00 | 10 | 2000 |
| | | Fieldpea | 12,JG-36, IPFD11- | | | | |
| | | | 2,IPFD6-3,IPFD12-2 | | | | |
| 2. | Azotobacter | Wheat | K1317,DBW187 | 1000 | 4.00 | 10 | 4000 |
| 3. | Intercropping | Wheat+ | K1317/DBW187+ RH- | 4000 | 4.00 | 10 | 16000 |
| | | Mustard | 749/Giriraj | | | | |
| 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/feedblocks/mineralmixture(MM) blocks/feedblocks/mineral | ed |
|--|----|
| enrichment, etc | |

| Sl No. | Details of feed intervention | Unit cost of | o. of farm households to be involved | Total amount |
|--------|--------------------------------|-------------------|--------------------------------------|--------------|
| | | intervention(Rs.) | | (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 | Seed bank/Fodder | Seed of crop and | Quantity of seed/ fodd | Unit cost | No. of farmers | Amount | Remarks |
|-----|------------------|----------------------|------------------------|----------------|----------------|----------------|-----------|
| No. | Bank | variety/Fodder | produced/ | (Rs.) | involved | (Rs.) | |
| | | crop/variety | storage(t) | | | | |
| 1. | Establishment of | pulses, oil seed and | 25 Qt. | 5000 | 5 | 25000 | Grain Bin |
| | seed bank | millets | | | | | |
| 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 |
| СР | Method and Role of <i>Rhizobium</i> 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 |
| СР | 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 |
| СР | Production technology of Napier Grass. | September | 30 | 3000 |
| LPM | Management of Livestock during Winters | October | 30 | 3000 |
| СР | 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 | Prevention of infectious disease among children in summer | July | 30 | 3000 |
|----------------|---|-----------|----|--------|
| Management | season. | | | |
| Nutrition | Food processing /value addition | August | 30 | 3000 |
| Management | | | | |
| Kitchen Garden | Care and management of kitchen garden in different | September | 30 | 3000 |
| | seasons | | | |
| Nutrition | Role of vaccination to prevent seasonal health issues. | October | 30 | 3000 |
| Management | | | | |
| Sub-total | | | | 110000 |
| 12.1. | | | | |

FieldDays/Exposurevisits/Awarenessprogrammes/Kisanmelas/Kisanghostiproposedforthe year

| Theme | Title of Programme | Proposed month | No. of participants | Cost(Rs.) |
|--------------------|---|----------------|---------------------|-----------|
| СР | Mustard Production Technology | January | 40 | 4000 |
| СР | Field pea production technology | February | 40 | 4000 |
| СР | High-techVegetable Day (Seasonal) | February | 40 | 4000 |
| СР | Chickpea Production Technology | February | 40 | 4000 |
| СР | Til Production Technology | September | 40 | 4000 |
| СР | Sorghum Production Technology | September | 40 | 4000 |
| Sub-total12.2. | | | | 24000 |
| Publications and M | Iedia products proposed to be Developed Publi | cations | I | |

| Publication | Nature of Publication | Proposed during the | No. of Copies | Cost(Rs.) |
|-----------------------------|-------------------------------|---------------------|---------------|-----------|
| | (Book/Bulletin/Brochure etc.) | month | - | |
| 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 | 170000 | |
| | blocks/mineral mixture(MM)blocks/feedenrichment, etc. | | |
| 10.2 | Establishment of Seed banks/Fodder banks, etc. | 25000 | |
| 11 | Non-recurring contingencies-Equipment Proposal for Procurement of climate related | 162000 | |
| | farmmachinery/implements for Custom Hiring centre | | |
| 12.1 | Capacity Building & Other extension activities | | |
| 12.2 | FieldDays/Exposurevisits/Awarenessprogrammes/Kisanmelas/Kisanghostiproposedforthe year | | |
| 13.1 | Publications | | |
| 13.2 | Video Film | 5000 | |
| 14 | Salary (Senior Research Fellow) | 401760 | |
| 15 | ТА | 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 | СРО | 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

| | | | Village 1 | | | | |
|---------|------------------------------------|--------------|-----------------------------|---|--|--|--|
| S No | Farming System Typologies* | 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

| | Farming System | | Village 1 | | | | | |
|------|---------------------------------------|------------------------|--|---|--|--|--|--|
| S No | No Typologies* 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 | Village 1- Technologies identified to minimize the impact of constraints shortlisted | | | | | | |
|---------|--|--|---|---|--|--|--|--|
| | System Typologies* | Climate 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 | A A | Bajra-NSC-1071P Use of mineral mixture and drought resistant group fodder for sustained milk production | supplements improving digestions | for |
|--------------------------|-----------|-----|---|--|-----|
| | | | green lodder for sustained milk production | argestions | |

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

| C No | Forming System Typologies | Village 1 | | | | | |
|-------|------------------------------------|-----------|------|-----------|-------|--|--|
| 5 110 | Farming System Typologies | 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 | | |

| | | Village 1 | | |
|---------|---------------------------------------|--|--|----------------------------|
| S No | FST | 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 |

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

| A stirition 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 | Convergence value, if any (Rs) | Value of farmers share (Rs) | Cost to project (Rs) |
|-----------|-----------------------------|--------------|-------------------|--------------------|--|--------------------------------------|-----------------------------------|-------------------------|
| | | | | | be myorveu | | | |
| 1 | Uchetha | Pond | 90.52 x88.39x45.7 | 1 | 30 | 200000 | - | 200000 |
| | | Renovation | x86.86 m Tot | ä | | | | |
| | | | Area=15859.04 m2 | | | | | |
| | Sub-total 8.1 | | | | | | | 200000 |

9.Crop Interventions;

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

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

9.Crop Interventions;

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

| Sl | village | Intervention | Description | | Cost | Coverage Proposed | | Total |
|-----|---------|---|------------------|------------------|--------------|-------------------|---|-------------------------|
| No. | | | Сгор | Variety (s) | (Rs/ha) A | Area (ha)B | No. of farm households to be involved | amount (Rs) A x C |
| 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 | Oyster | - | - | 15 | 15000 |
| | | Mushroom | Mushroom | | | | |
| | 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 | Cost |
|---------------------------------------|---|----------------|--------------|----------------|
| | | | participants | (Rs.) |
| Village Risk Management | Gosthi on Formation of village risk | 05January 2023 | 20 | 800 |
| committee Formation | Management committee | | | |
| 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 | Oct.2023 | 25 | 1000 |
| Climate resilient Agriculture | Pre advance plant protection through the assimilation of Agromet | Nov,2023 | 25 | 1000 | | | | |
|--|--|-----------|----|-------|--|--|--|--|
| | Bulletin Advisory | | | | | | | |
| Disease management | Use of consortia for bettercrop | Nov 2023 | 25 | 1000 | | | | |
| | health | | | | | | | |
| 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

| 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 |

1. Details about the existing NICRA villages

2. Divide the NICRA villages into predominant farming system typologies

| | | | Vill | age 1 | Village 2^{ϵ} | | | |
|---------|------------------------------------|--------------|--------------------------------|--|------------------------|--------------------------------|--|--|
| S No | Farming System Typologies* | 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

| | | Village 3 | | | Village 4^{ϵ} | | | |
|------|------------------------------------|--------------|--------------------------------|--|------------------------|--------------------------------|--|--|
| S No | Farming System Typologies* | 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 | БСТ | NICRA Villages | | | | |
|----|------------------------|---|--|--|--|--|
| No | F51 | 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 | Extreme weather, Poor quality of drinking water | Lack of assured fodder supply, little green fodder | | | |
| Z | animal | 1 2 0 | 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. | Farming System | n NICRA Villages | | | |
|----|--------------------------|---|--|--|--|
| No | Typologies | 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 | Villages | | | | | |
|---------|---------------------------|--|---|--|--|--|--|
| | Typologies | 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 | Village | | | | | |
|---------|-----------------------------|--|---|---|--|--|--|
| | System Typologies | 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 | | | | |

| C No | | Village 1 | | | | Village 2 | | | |
|------|------------------------------------|-----------|------|-----------|-------|-----------|------|-----------|-------|
| 5 NO | Farming System Typologies | 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

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 | Forming System Typologies | | V | village 3 | | Village 4 | | | |
|----|------------------------------------|-----|------|-----------|-------|-----------|------|-----------|-------|
| No | Farming System Typologies | 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 | Forming System Typologies | | Village 1 | | Village 2 | | | | |
|----|------------------------------------|-----|-----------|-----------|-----------|-----|------|-----------|-------|
| No | Farming System Typologies | 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 | Forming System Typologies | | Vi | illage 3 | | Village 4 | | | |
|----|------------------------------------|-----|------|-----------|-------|-----------|------|-----------|-------|
| No | Farming System Typologies | 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)

| | | | Village | 1 | | | Village 2 | | | | Village 3 | | | |
|-------------|--|--|--------------------------------|--|--------------------------------------|--|--------------------------------|--|--------------------------------------|--|--------------------------------|--|--------------------------------------|--|
| S N o | FST | Climate Resilient Technol ogy | Converge nce with Scheme | No. of farmers propos ed to be involve d | Area to be cover ed (ha) | Climate Resilient Fechnolo gy | Converge nce with Scheme | No. of farmer s propos ed to be involv ed | Area to be cover ed (ha) | Climate Resilient Technol ogy | Converge nce with Scheme | No. of farmer s propos ed to be involve d | Area to be cover ed (ha) | |
| 1 | Rainfe d witho ut anima 1 | - | - | - | - | _ | - | - | - | - | - | - | - | |
| 2 | Rainfe d with anima 1 Crop- 1 | _ | - | _ | - | - | _ | - | - | - | - | - | _ | |
| 3 | Rainfe d with animal CROP- 2/ Soil- 2 | - | - | - | - | Ragee (seed) | Ag (S.G.) | 22 | 3.52 | Ragee (seed) | Ag (S.G.) | 28 | 4.48 | |
| 4 | Irrigate d without animal | - | - | - | - | - | - | - | - | - | - | - | - | |
| 5 | Irrigat ed with anima 1 | - | - | - | - | - | - | - | - | - | _ | - | - | |

| | 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 | - | 2 | 59 | 20000/- | 2000/- | 18000/- |
|---|---------------------|-----------|---|---|-----|----------|---------|----------|
| | | Hand pump | | | | | | |
| | 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 | Village 1, 2, 3, etc. | Intervention | Unit cost | | Total amount | |
|-----|-----------------------|----------------|-----------|----------------|---|------------|
| No. | | | Rs/ha A | Area (ha) B | No. of farm households proposed to be involved C | (Rs) A x C |
| 1. | Titihara , | Banding | 10000/- | 5.0 | 15 | 150000/- |
| | Rampurwa, Baihar | Leveling | 10000/- | 2.0 | 5 | 50000/- |
| | & Hariharpur | 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 | Village | Intervention | Descri | ption | Cost | | Coverage Proposed | Total amount |
|-----|------------|----------------|-----------|------------|----------|-------|------------------------|---------------|
| No. | 1,2,3 etc. | | Crop | Variety | (Rs/ha) | Area | No. of farm households | (R s) |
| | | | | (s) | Α | (ha)B | to be involved C | A x B |
| 1. | | Drought | Chickpea, | All | 47350/- | 10 | 60 | 473500/- |
| | va | | Lentil | varieties | | | | |
| 2. | urv | High | Wheat | Will be | 34690/- | 15 | 50 | 520350/- |
| | mp aril | temperature | | used | | | | |
| 3. | Ra | Oil seed crop | Mustard, | which | 43276/- | 10 | 50 | 432760/- |
| | a, r& | | Sesame | released | | | | |
| 4. | har iha | Seed for | Green | within 5 | 19700/- | 10 | 30 | 197000/- |
| | līti Ba | legume catch | gram | year | | | | |
| | | crops | | | | | | |
| | | Sub Total 9.1. | | | 145016/- | 45 | 190 | 1623610/- |

Activities and Cost

9.Crop Interventions;

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

| SI | village | Intervention | Desc | ription | Cost | Cov | erage Proposed | Total |
|-----|--|----------------------|------------|-------------|--------------|---------------|---|------------------------|
| No. | | | Crop | Variety (s) | (Rs/ha) A | Area (ha)B | No. of farm households to be involved C | amount (Rs)A x B |
| 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 & | Millets crop | Bajra | Dhan shakti | 22616/- | 8.0 | 50 | 180928/- |
| 6. | Hariharpur | | 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 lishmont of Sood banks / Foddor b

| 10.2. Establishment o | f Seed banks / Fodder | banks, etc |
|-----------------------|-----------------------|------------|
| | | |

| Sl | Seed bank/Fodder | Seed of crop and variety/ | Quantity of seed/ fodder | Unit cost | No.of farmers | Amount |
|-----|------------------|---------------------------|--------------------------|----------------|---------------|----------------|
| No. | Bank | Fodder crop/ variety | produced/ storage (t) | (Rs.) | involved | (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 | Climate change to Safe drinking water | October | 50 | 5000/- |
| programmers | | | | |
| | 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 | 385000/- |
| | / feed blocks/ mineral mixture (MM) blocks / feed enrichment, etc | |
| 10.2 | Establishment of Seed banks / Fodder banks, etc | 20000/- |
| 11 | Proposal for Procurement of climate related farm machinery/ implements for | 95000/- |
| | Custom Hiring centre | |
| 12.1 | Training programmes proposed for the year | 33200/- |
| 12.2 | Field Days/Exposure visits/Awareness programmes/Kisan melas/Kisan ghosti | 78250/- |
| | proposed for the year | |
| 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.,)

| | organisations, etc.,) | | | | | | | |
|-----------|--|------------------------|----------|--|---------------------------------------|--|--|--|
| SI. 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

| 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 |

Details about the villages involved in the programme

2. Divide the NICRA villages into predominant farming system typologies

| | | Villag | Village 1 (BAMBAMPURWA) | | Village 2 (RAMBALIPURWA) | | |
|---------|---------------------------------------|--------------|--------------------------------|--|--------------------------|--------------------------------|--|
| S No | Farming System Typologies* | 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 | | Village 3 (SUKAINAYAK) | | | Village 4 (BABAMAJHA) | | |
|---------|--|------------------------|--------------------------|--|-----------------------|--------------------------|--|
| | Farming System Typologies* | 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

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

typologies of NICRA villages

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

| 4. Identify Prom | ising resilient | technologies for | addressing th | ie constraints |
|------------------|-----------------|------------------|---------------|----------------|
| | | | | |

Г

| | 50 b0 | | | | | |
|------|--|-------|--|---------------------|--|--|
| S No | S No Farmin System Typolo ies* | | Village 1- Technologies identified to minimise the impact of constraints shortlisted | Climate onstrain | Village-2 Technologies identified to minimise the impact of constraints shortlisted | |
| _ | Field crops + Live Stock | Flood | Flood tolerant variety of rice Raised bed sowing of crop Introduce short duration variety of wheat Introduce toriya crop as a compensative crop. Vaccination of animals before flood occurs Proper feed and fodder management Proper management of milk and milk production. | Flood | Flood tolerant variety of rice Raised bed sowing of crop Introduce short duration variety of wheat Introduce toriya crop as a compensative crop. Vaccination of animals before flood occurs Proper feed and fodder management Proper management of milk and milk production. | |
| 2 | Field crop + vegetables | Flood | Flood tolerant variety of rice Raised bed sowing of crop Introduce short duration variety of wheat Introduce toriya crop as a compensative crop. Availability of quality seed and seedling of vegetables. Promotion of rabi and summer tomato cultivation. Proper use of net and staking of vegetable crops to save crop from adverse conditions. Use of micro and macro nutrients Applied plant protection measure to save the crop from disease and insect pest. | Flood | Flood tolerant variety of rice Raised bed sowing of crop Introduce short duration variety of wheat Introduce toriya crop as a compensative crop. Availability of quality seed and seedling of vegetables. Promotion of rabi and summer tomato cultivation. Proper use of net and staking of vegetable crops to save crop from adverse conditions. Use of micro and macro nutrients Applied plant protection measure to save the crop from disease and insect pest. | |
| c, | Live Stock + Vegetables | Flood | Vaccination of animals before flood occurs Proper feed and fodder management Proper management of milk and milk production. Availability of quality seed and seedling of vegetables. Promotion of rabi and summer tomato cultivation. Proper use of net and staking of vegetable crops to save crop from adverse conditions. Use of micro and macro nutrients Applied plant protection measure to save the crop from disease and insect pest. | Flood | Vaccination of animals before flood occurs Proper feed and fodder management Proper management of milk and milk production. Availability of quality seed and seedling of vegetables. Promotion of rabi and summer tomato cultivation. Proper use of net and staking of vegetable crops to save crop from adverse conditions. Use of micro and macro nutrients Applied plant protection measure to save the crop from disease and insect pest. | |

| 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 | Flood tolerant variety of rice Raised bed sowing of crop Introduce short duration variety of wheat Introduce toriya crop as a compensative crop. Vaccination of animals before flood occurs Proper feed and fodder management Proper management of milk and milk production. | Flood | Flood tolerant variety of rice Raised bed sowing of crop Introduce short duration variety of wheat Introduce toriya crop as a compensative crop. Vaccination of animals before flood occurs Proper feed and fodder management Proper management of milk and milk production. |
| 2 | Field crop + vegetables | Flood | Flood tolerant variety of rice Raised bed sowing of crop Introduce short duration variety of wheat Introduce toriya crop as a compensative crop. Availability of quality seed and seedling of vegetables. Promotion of rabi and summer tomato cultivation. Proper use of net and staking of vegetable crops to save crop from adverse conditions. Use of micro and macro | Flood | Flood tolerant variety of rice Raised bed sowing of crop Introduce short duration variety of wheat Introduce toriya crop as a compensative crop. Availability of quality seed and seedling of vegetables. Promotion of rabi and summer tomato cultivation. Proper use of net and staking of vegetable crops to save crop from adverse conditions. 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 | Vaccination of animals before flood occurs Proper feed and fodder management Proper management of milk and milk production. Availability of quality seed and seedling of vegetables. Promotion of rabi and summer tomato cultivation. Proper use of net and staking of vegetable crops to save crop from adverse conditions. Use of micro and macro nutrients Applied plant protection measure to save the crop from disease and insect pest. | Flood | Vaccination of animals before flood occurs Proper feed and fodder management Proper management of milk and milk production. Availability of quality seed and seedling of vegetables. Promotion of rabi and summer tomato cultivation. Proper use of net and staking of vegetable crops to save crop from adverse conditions. Use of micro and macro nutrients 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 |

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

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

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

| | | and crop residues management 4. Vermi compost 5-green manuring | 3. Introduction of HYV of mustard4. Introduction of late sown and heat tolerant variety wheat5. Kitchen Gardening | 4. Control of ecto- endo parasites5- vaccination of animals |
|---|---------------------------------------|---|--|--|
| 2 | Field crop + vegetables | Mulching in sugarcane Use of seed cum ferti seed drill (RCT) Incorporation of biomass and crop residues management raised bed sowing of crop | Introduction of paddy variety for up land, medium land and low land Introduction of toriya as a compensatory crop Introduction of HYV of mustard Introduction of late sown variety of wheat Kitchen Gardening Vegetables production Plantation of fruit plants | |
| 3 | Live Stock + Vegetables | 1.Vermi compost 2. Composting (FYM) | Vegetables production Plantation of fruit plants | Fodder production Animal nutrition management (mineral mixture) Animal health camp Control of ecto- endo parasites |
| 4 | Field crop + Live Stock+Vegetables | Mulching in sugarcane Use of seed cum ferti seed drill (RCT) Incorporation of biomass and crop residues management Vermi compost Composting (FYM) | Mulching in sugarcane Use of seed cum ferti seed drill (RCT) Incorporation of biomass Introduction of late sown variety of wheat Kitchen Gardening Vegetables production Plantation of fruit plants Nursery raising | 1.Fodder production 2. Animal nutrition management (mineral mixture) 3. Animal health camp 4. Control of ecto- endo parasites |

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

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

| | 202 | | Village 4 (babamajha) | |
|------|---------------------------------------|---|--|--|
| S.No | FST | NRM | Сгор | Livestock |
| 1 | Field crops + Live Stock | Mulching in sugarcane Use of seed cum ferti seed drill (RCT) Incorporation of biomass and crop residues management 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 | Fodder production Animal nutrition management (mineral mixture) Animal health camp Control of ecto- endo parasites vaccination of animals |
| 2 | Field crop + vegetables | Mulching in sugarcane Use of seed cum ferti seed drill (RCT) Incorporation of biomass and crop residues management 4-raised bed sowing of crop | Introduction of paddy variety for up land, medium land and low land Introduction of toriya as a compensatory crop Introduction of HYV of mustard Introduction of late sown variety of wheat Kitchen Gardening Vegetables production Plantation of fruit plants | |
| 3 | Live Stock + Vegetables | 1.Vermi compost 2. Composting (FYM) | Vegetables production Plantation of fruit plants | Fodder production Animal nutrition manageme (mineral mixture) Animal health camp Control of ecto- endo parasite |
| 4 | Field crop + Live Stock+Vegetables | Mulching in sugarcane Use of seed cum ferti seed drill (RCT) Incorporation of biomass and crop residues management Vermi compost Composting (FYM) | Mulching in sugarcane Use of seed cum ferti seed drill (RCT) Incorporation of biomass Introduction of late sown variety of wheat Kitchen Gardening Vegetables production Plantation of fruit plants Nursery raising | Fodder production Animal nutrition management (mineral mixture) Animal health camp Control of ecto- endo parasites |

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

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

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

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

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

| | | Village 1 | i | | | Village 2 | | | |
|-------|---------------------------------------|---|------------------------------|--|----------------------------------|---|------------------------------|--|----------------------------------|
| S.No. | Farming System Typologies | 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 |
| | Field crop + Live Stock+Vegetables | Animal health camp | Dept. Animal husbandry | 141 | 380 | Animal health camp | Dept. Animal husbandry | 130 | 250 |
| 4 | | Animal nutrition management (mineral mixture) | Dept. Animal husbandry | 40 | 60 packet | Animal nutrition management (mineral mixture) | Dept. Animal husbandry | 30 | 40 packet |

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

| | | | Villag | ge 3 | | | Villag | e 4 | of s Area to becovered (ha) 1.5 1.0 2 | |
|----------|---------------------------------|------------------------------------|------------------------------|--|----------------------------------|------------------------------------|------------------------------|--|---|--|
| S .No | Farming System Typologies | 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 | |
| 5 | | Composting (FYM) | Dept. Animal husbandry | 120 | 195 | Composting (FYM) | Dept. Animal husbandry | 70 | 120 | |

| | Field crop + LiveStock+ | Animal health camp | Dept. Animal husbandry | 95 | 130 | Animal health camp | Dept. Animal husbandry | 80 | 150 |
|---|-------------------------------|---|------------------------------|----|--------------|---|------------------------------|----|--------------|
| 4 | Vegetables | 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. | | | | | | | | | | | | |
|-----|---|------------------------------|-----------|--------|---------------------------|--------------|--|--|--|--|--|--|--|
| SI | Village | Intervention | Unit cost | | Coverage Proposed | Total amount | | | | | | | |
| No. | 1, 2, | | Rs/ha A | Area | No. of farm households | (Rs) A x C | | | | | | | |
| | 3,4 | | | (ha) B | 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 | 2900.00 | 18.0 | 31 | 89900.00 | | | | | | | |
| | | crop residues management | | | | | | | | | | | |
| | | Sub Total 8.2 | | | | 304125 | | | | | | | |

Activities and Cost 9. Crop Interventions; 9.1. Stress tolerant / improved varieties / Short duration / Legume crops, etc.

| SI | Village | Intervention | Des | cription | Cost | | Coverage Proposed | Total |
|-----|---------|---|-------|--------------------|-----------|----------------|--|----------------------|
| No. | 1,2,3,4 | | Crop | Variety (s) | (Rs/ha) A | Area (ha) B | No. of farm households to be involved C | amount (Rs) A x 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 | village | Intervention | Dese | cription | Cost | st Coverage Proposed | | Total |
|-----|---------|---------------------------|---------|------------|---------|----------------------|------------------------|--|
| No. | 1,2,3,4 | | Crop | Variety(s) | (Rs/ha) | Area (ha) | No. of farm households | amount $(\mathbf{D}_{\alpha}) \wedge = \mathbf{C}$ |
| | | | | | A | В | to be involved C | (KS)A X C |
| 1 | | Delay of planting dates o | Wheat | K-9533 | 3750.00 | 7.0 | 40 | 150000.00 |
| | | rabi crops in areas wit | | | | | | |
| | | terminal heat stress | | | | | | |
| 2 | | Timely Sown | Wheat | DBW-187 | 3000.00 | 4.0 | 27 | 81000.00 |
| 3 | | Early sown variety of oil | Toriya | tapeswari | 400.00 | 10.0 | 66 | 26400.00 |
| | | seed | - | - | | | | |
| 4 | | Timely sown variety of oi | Mustard | Giriraj | 400.00 | 20.0 | 83 | 33200.00 |
| | | seed | | 0 | | | | |

| 5 | Latest variety of fodde | Oat | JHO 2000-4 | 4000.00 | 2.0 | 46 | 18400.00 |
|---|-------------------------|---------|------------|---------|-----|----|------------|
| | crops | | | | | | |
| 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 | Details of feed intervention | Unit cost of intervention (Rs.) | No. of farm households to be | Total amount |
|-----|-------------------------------------|---------------------------------|------------------------------|--------------|
| No. | | | involved | (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..

| | | 1 | · · · · | | 1 | |
|-----|------------------|---------------------------|--------------------------|----------------|---------------|----------------|
| SI | Seed bank/Fodder | Seed of crop and variety/ | Quantity of seed/ fodder | Unit cost | No.of farmers | Amount |
| No. | Bank | Fodder crop/ variety | produced/ storage (t) | (Rs.) | involved | (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 | No. of | Cost |
|-----------------|---|-----------|--------------|----------|
| | | month | participants | (KS.) |
| 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 | Preparation of mixed vegetable pickles | October | 26 | 3000.00 |
| Techniques | | | 20 | 3900.00 |
| Nursery raising | Techniques of nursery raising of vegetables, fruits plant and forest plants | November | 25 | 3750.00 |
| Clean milk | Proper method of clean milk production and precautions. | November | 20 | 3000.00 |
| production | | | 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. 1100 | a Days/Exposure visits/Awareness | programmes/ Risammelas/ R | isangnosti proposed for th | c ycai |
|-------------------|----------------------------------|---------------------------|----------------------------|------------|
| Theme | Title of Programme | Proposed month | No. of participants | Cost (Rs.) |
| Exposure visit of | Farmers Visit | | 25 | |
| farmers | | February-2024 | 25 | 62500.00 |
| Field days | Rice, Sugarcane, Toria, Mustard, | October-2023, November- | | |
| - | _ | 2023, December-2023 | 140 | |
| | | March-2024 | 140 | 21000.00 |
| Method | Use of rotary mulcher | November-2023 | 25 | |
| demonstrations | Use of super seeder | November-2023 | 20 | 6750.00 |
| Awareness | Swacchtaprogrrane | December-2023 | 40 | 6000.00 |
| | PF fasalbimayojana | February 2024 | 50 | 7500.00 |
| KisanGosthi | Up scale the knowledge about | October- 2023 | 30 | 20000.00 |
| | new climate resilient | November-2023 | 25 | |
| | technologies and variety of | December-2023 | 35 | |
| | different crops | January-2024 | 30 | |
| Sub-total 12.2. | | | | 123750.00 |

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

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 |

<u>Sub-total 13.1.</u> 13.2 Video Films

| 15.2 VIGCO I IIIIIS | | | |
|----------------------------|---------------------------|---------------------------|------------|
| 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.)

| SI. 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. Detund ubout the childing 110101 (huged | | | | | | | |
|--|----------------------------------|-----------|-----------|---------------------|--|--|--|
| 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 | | | |

1. Details about the existing NICRA villages

2. Divide the NICRA villages into predominant farming system typologies

| S. | Farming System Typologies | Mahopar | | | Tighara | | |
|-----|--|--------------|-----------------------------|--|--------------|--------------------------------|--|
| No. | | 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 | No. of farmers (approx) | % coverage of the typology | | |
| | | (ha) No. of farmers (approx.) | | (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 | | |
| | S.No. | S.No. Farming System Typologies 1 Flood Irrigated without Animal- (Ag.+Hort) 2 Flood Irrigated with Animal (Ag.+Live Stock) 3 Flood Irrigated with Animal- (Ag.+Hort.+Live Stock) | S.No. Farming System Typologies Area 1 Flood Irrigated without Animal- (Ag.+Hort) 65 2 Flood Irrigated with Animal (Ag.+Live Stock) 61 3 Flood Irrigated with Animal- (Ag.+Hort,+Live Stock) 78 | S.No. Farming System Typologies Mallhig Area Area No. of farmers (approx.) 1 Flood Irrigated without Animal- (Ag.+Hort) 65 28 2 Flood Irrigated with Animal (Ag.+Live Stock) 61 21 3 Flood Irrigated with Animal- (Ag.+Hort.+Live Stock) 78 47 | | |

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

| | Vinages | | | | | | |
|-------|--|--|--|--|--|---|---|
| S.No. | Farming System | | Mahopar | | | Tighara | |
| | Typologies | Climate | Resource /Crop/Animal | Other | Climate | Resource | Other |
| | | constraints | constraints | constraints | constraints | /Crop/Animal | constraints |
| | | | | | | 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. | Farming S | ystem | | Mallhipur | | | | | |
|---------|--|--|---------------------------------------|--|--|--|---|---|--|
| Ν | Typologies | | Climate | e constraints | Resource /Crop/Anima | l constraints | Other constr | aints | |
| 1 | Flood Irrigated withou Animal- (Ag.+Hort) | ed without Fl +Hort) | | ater logging, wate tion, Heat stress | No use of Submergenc tolerant varieties, No u sown early/late varietie | e and flood se of RCT, Not es | Poor soil fer diversification resource of h | Poor soil fertility, Lack of diversification, poor resource of house hold | |
| 2 | Flood Irrigated with Animal (Ag.+Live Sto | ck) | Flood, water s stress | water logging, tagnation, Heat | FST-1+Lack of balance fodder, disease and par- poor management of liv | e feeding and gr asitic infestation ve stock | een Poor soil fer h, diversification resource of h | tility, Lack of on , poor nouse hold | |
| 3 | Flood Irrigated with Animal(Ag.+Hort.+Liv Stock) | e | Flood, water s stress | water logging, tagnation, Heat | t FST-1+FST-2 + No use of improved diversified resource | | Poor soil fer diversification resource of h | rtility, Lack of ion , poor house hold | |
| | 4. Identify Promisi | ing resi | ilient teo | chnologies for add | ressing the constraints | | | | |
| S. | FST | ~ | | Mahopar | | | Tighara | | |
| N 0. | | const | ate raints | Resource /Crop/Animal constraints | Other constraints | constraints | Resource /Crop/Animal constraints | Other constraints | |
| 1 | Flood Irrigated without Animal- (Ag.+Hort) | use Submer and f toler varie | of rgence lood rant eties | 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 Subm e and tolerat variet | ergenc flood nt ies | FST- 1+supplementati on 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 Submergenc e and flood tolerant varieties | FST- 1+supplementati on 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 Subm e and tolerat variet | ergenc flood nt ies | 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 Submergenc e 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. | FST | | Mallhipur | |
|----|--|---|---|---|
| N | | 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 | green fodder production, improved breeds | diversification, support of Govt. |
|---|----------------------|------------------------|--|------------------------------------|
| | | wheat varieties | of live stock | schemes with line departments |
| 2 | Flood Irrigated with | use of Submergence | | Green manuring, composting, crops |
| 3 | Animal(Ag Hort | and flood tolerant | FST-1+FST-2 + use of improved | and veg. based diversification, |
| | Alimai(Ag.+11011.+ | varietiesHeat tolerant | varieties, IPM and INM | support of Govt. schemes with line |
| | Live Stock) | wheat varieties | | 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 | Сгор | Livestock | Total | | |
| 1 | | 1.In situ Residue | 1.Submergence tolerant rice variety 2.Heat tolerant wheat variety | | 8 | | |
| | Flood Irrigated without Animal- (Ag.+Hort) | anagement 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 | | | | |
| 2 | Flood Irrigated with Animal (Ag.+Live Stock) | 1.InsituResiduemanagement2.RCT3.Greenmanuring | Submergence tolerant rice variety Heat tolerant wheat variety Early sowing of wheat. Increases in no of irrigation Use of LCC & nano fertilizer with soluble NPK Crop diversification Short duration crops 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.InsituResiduemanagement2.RCT3.Greenmanuring | Submergence tolerant rice variety Heat tolerant wheat variety Early sowing of wheat. Increases in no of irrigation Use of LCC & nano fertilizer with soluble NPK Crop diversification Short duration crops 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) | | Submergence tolerant rice variety Heat tolerant wheat variety Early sowing of wheat. Increases in no of irrigation Use of LCC & nano fertilizer with soluble NPK Crop diversification Short duration crops | | 8 |
| | | | 8/.Off season vegetables | | |
| 2 | Flood Irrigated with Animal (Ag.+Live Stock) | 1.In situ Residue management 2.RCT 3.Green manuring | Submergence tolerant rice variety Heat tolerant wheat variety Early sowing of wheat. Increases in no of irrigation Use of LCC & nano fertilizer with soluble NPK Crop diversification Short duration crops 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 | 1.Submergence tolerant rice variety 2 Heat tolerant wheat variety | 1Supplementation of mineral mixture after | 12 |
| | migated | management | 2.11eut toterant wheat variety | mineral mixture after | |

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

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 | Сгор | Livestock | Total |
| 1 | Flood Irrigated without Animal- (Ag.+Hort) | 1.In situ Residue management2.RCT3.Green manuring | Submergence tolerant rice variety Heat tolerant wheat variety Early sowing of wheat. Increases in no of irrigation Use of LCC & nano fertilizer with soluble NPK Crop diversification Short duration crops Off season vegetables | | 8 |
| 2 | Flood Irrigated with Animal (Ag.+Live Stock) | 1.In situ Residue management 2.RCT 3.Green manuring | Submergence tolerant rice variety Heat tolerant wheat variety Early sowing of wheat. Increases in no of irrigation Use of LCC & nano fertilizer with soluble NPK Crop diversification Short duration crops 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) | I.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- | 1. 40 2. 30 3. 80 | $ \begin{array}{cccccccccccccccccccccccccccccccccccc$ | | 330 | 1. 20 2. 20 3. 50 | 1. 20 2. 209 3. 20 4. 20 5. 20 | | 250 |
| (A) | (Ag.+Hort) | | $ \begin{array}{cccccccccccccccccccccccccccccccccccc$ | | | | 5. 20 6. 20 7. 20 8. 20 | | |
| | Flood Irrigated with Animal (Ag.+Live Stock) | 1. 30 2. 25 3. 60 | $ \begin{array}{cccccccccccccccccccccccccccccccccccc$ | 1. 10 2. 10 3. 10 4. 10 | 305 | 1. 20 2. 20 3. 50 | $\begin{array}{cccccccccccccccccccccccccccccccccccc$ | 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- | 2. 25 | 2. 20 | 0 | 2. 20 | 2. 20 | 2. 5 |
|---------------------------------------|-------|-------|------|-------|-------|------|
| (Ag.+Hort.+Liv | 3. 60 | 3. 30 | 2. 1 | 3. 50 | 3. 20 | 3. 5 |
| e Stock) | | 4. 30 | 0 | | 4. 20 | 4. 5 |
| , , , , , , , , , , , , , , , , , , , | | 5. 30 | 3. 1 | | 5. 20 | |
| | | 6. 30 | 0 | | 6. 20 | |
| | | 7. 30 | 4. 1 | | 7. 20 | |
| | | 8. 30 | 0 | | 8. 20 | |

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

| S.N | Farming System | Mallipur | | | | | | |
|-----|--|-------------------------|---|------------------------------|-------|--|--|--|
| | Typologies | NRM | Crop | Livestock | Total | | | |
| 1 | Flood Irrigated without Animal- (Ag.+Hort) | 1. 20 2. 20 3. 40 | $ \begin{array}{rrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrr$ | | 240 | | | |
| 2 | Flood Irrigated with Animal (Ag.+Live Stock) | 1. 30 2. 20 3. 20 | $ \begin{array}{rrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrr$ | 1. 5 2. 5 3. 5 4. 5 | 230 | | | |
| 3 | Flood Irrigated with Animal- (Ag.+Hort.+Live Stock) | 1. 20 2. 20 3. 30 | $ \begin{array}{cccccccccccccccccccccccccccccccccccc$ | 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 | $ \begin{array}{rrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrr$ | 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 | | | | |

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 | Convergence with Scheme | No. of farmers | Area to be | | | |
| | | Technology | | proposed | covered | | | |
| 1 | Flood Imigated without | 1.Green manuring | RKVY (Ag. Deptt.) | 1. 50 | 1. 20 | | | |
| | Animal (A.g. Hart) | 2.Flood tolerant varieties | IRRI- ISARC Varanasi | 2. 4 | 2. 2 | | | |
| | Ammai- (Ag.+Hort) | 3.RCT | CSISA | 3. 20 | 3. 10 | | | |
| 2 | | Green menuring | RKVY (Ag. Deptt.) | 1. 40 | 1. 18 | | | |
| | Flood Irrigated with Animal | Vaccination | ASCAD & FMDEP (AH & | 2. 25 | 2. 25 | | | |
| | (Ag.+Live Stock) | Vaccination | Dairy Deptt.) | 3. 25 | 3. 25 | | | |
| | _ | Breed improvement | RGM (AH & Dairy Deptt.) | | | | | |
| 3 | Elood Imigated with | Croop monuting | RKVY (Ag. Deptt.) | 1. 40 | 1. 16 | | | |
| | Animal (A g Hort Live | Vaccination | ASCAD & FMDEP (AH & | 2. 25 | 2. 25 | | | |
| | Allinai- (Ag.+Hort.+Live | Vaccination Dread improvement | Dairy Deptt.) | 3. 25 | 3. 25 | | | |
| | Slock) | breed improvement | RGM (AH & Dairy Deptt.) | | | | | |

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

| S.N. | Farming System | | Mallipur | | | | | |
|--------------------|---|----------------------------|-------------------------|---------------|------------|--|--|--|
| | Typologies | Climate Resilient | Convergence with Scheme | No. of farmer | Area to be | | | |
| | | Technology | | proposed | covered | | | |
| 1 | Flood Irrighted without | 1.Green manuring | RKVY (Ag. Deptt.) | 1. 50 | 1. 20 | | | |
| | A minute (A minute A | 2.Flood tolerant varieties | IRRI- ISARC Varanasi | 2. 4 | 2. 2 | | | |
| Allillai- (Ag.+Hol | 3.RCT | CSISA | 3. 20 | 3. 10 | | | | |
| 2 | Flood Irrigated with | Green menuring | RKVY (Ag. Deptt.) | 1. 50 | 1. 20 | | | |
| | A nimel (A g + L ive | Vaccination | ASCAD & FMDEP (AH & | 2. 25 | 2. 25 | | | |
| | Stools) | Prood improvement | Dairy Deptt.) | 3. 25 | 3. 25 | | | |
| | Stock) | Breed improvement | RGM (AH & Dairy Deptt.) | | | | | |
| 3 | Eload Imigated with | Crean manuring | RKVY (Ag. Deptt.) | 1. 50 | 1. 20 | | | |
| | A nimel(A a + Hent + H | Vaccination | ASCAD & FMDEP (AH & | 2. 25 | 2. 25 | | | |
| | Ammai(Ag.+non.+L vaccination | | Dairy Deptt.) | 3. 25 | 3. 25 | | | |
| | ive Stock) | breed improvement | RGM (AH & Dairy Deptt.) | | | | | |

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 | No. of farm | Convergence | Value of | Cost to |
|--------|-------------|--------------|------------|--------|---------------------|---------------|------------|---------|
| | _ | | | units | households proposed | value, if any | farmers | project |
| | | | | | to be involved | (Rs) | share (Rs) | (Rs) |
| 1. | Mahopar | - | - | - | - | - | - | - |
| 2. | Tighra | - | - | - | - | - | - | - |
| 3 | Mallhipur | - | - | - | - | - | - | - |
| | Sub Total 8 | 3.1 | | | | | | |

8. NRM Interventions;

Activities and Cost

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

| 0.2.1 | | | | | | | | | |
|-------|---------|---------------------------|-----------|-------|-------------------------|----------|--|--|--|
| S.N. | Village | Intervention | Unit Cost | Cover | age proposed | Total | | | |
| | | | (Rs/ha) | Area | No. of farm households | Amount | | | |
| | | | | (ha) | proposed to be involved | (Rs.)AXB | | | |
| | | | А | В | С | | | | |
| 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 | 7500 | 10 | 40 | 75000 |
|---|----------|---------------------------|--------|----|----|--------|
| | | Green Manuring | 4000 | 20 | 50 | 80000 |
| 3 | Mallipur | 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 |
| | | 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 | | Total Amount |
|------|----------|----------------------|----------------|---------------|-------------|----------|----|--------------|
| | | | | | | Proposed | | (Rs.)AXB |
| | | | Crop | Variety | А | В | С | |
| 1 | Mahopar | Submergence | Rice | Sambha sub- | 1600 | 20 | 50 | 32000 |
| | _ | tolerant varieties | | 1/Swarna S-1 | | | | |
| | | Heat stress tolerant | Wheat | DBW 187/ | 4000 | 30 | 50 | 120000 |
| | | varieties | | DBW 327 | | | | |
| | | Short duration | Cowpea/Redish | Kashi kanchan | 4000 | 2 | 20 | 8000 |
| | | crops | Lentil/P.pea. | IPL315 | 5000 | 6 | 25 | 30000 |
| | | Legume crops | Barseem/napier | VL-10 | 4000 | 2 | 20 | 8000 |
| | | Green fodder | | | | | | |
| 2 | Tighara | Submergence | Rice | Sambha sub- | 1600 | 20 | 50 | 32000 |
| | | tolerant varieties | | 1/Swarna S-1 | | | | |
| | | Heat stress tolerant | Wheat | DBW 187/ | 4000 | 30 | 50 | 120000 |
| | | varieties | | DBW 327 | | | | |
| | | Short duration | Cowpea/Redish | Kashi kanchan | 4000 | 2 | 20 | 8000 |
| | | crops | Lentil/P.pea. | IPL315 | 5000 | 6 | 25 | 30000 |
| | | Legume crops | Barseem/napier | VL-10 | 4000 | 2 | 20 | 8000 |
| | | Green fodder | | | | | | |
| 3 | Mallipur | Submergence | Rice | Sambha sub- | 1600 | 20 | 50 | 32000 |
| | | tolerant varieties | | 1/Swarna S-1 | | | | |
| | | Heat stress tolerant | Wheat | DBW 187/ | 4000 | 30 | 50 | 120000 |
| | | varieties | | DBW 327 | | | | |
| | | Short duration | Cowpea/Redish | Kashi kanchan | 4000 | 2 | 20 | 8000 |
| | | crops | Lentil/P.pea. | IPL315 | 5000 | 6 | 25 | 30000 |
| | | Legume crops | Barseem/napier | VL-10 | 4000 | 2 | 20 | 8000 |
| | | Green fodder | | | | | | |
| | | Sub Total 9.1 | | | | | | 594000 |

Activities and Cost

9.Crop Interventions;

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

| S. | Village | Intervention | Description | | Cost | Coverage | | Total Amount |
|----|---------|--|--------------|---------------|--------|----------|----|--------------|
| N. | | | | | | Proposed | | (Rs.)AXB |
| | | | Crop | Variety | А | В | С | |
| 1 | Mahopar | 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 + | Mustard | RH725 | 2000 | 5 | 13 | 10000 |
| | | Thinning | 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 | | | | | | |
| | | Raised bed sowing | r igeon pea | NA-2 | | | | |

| 2 | Tighara | Sub mergence tolerant | Rice | Shambha sub-1 | 1600 | 10 | 25 | 16000 |
|---|----------|-----------------------|--------------|---------------|--------|-----|----|--------|
| - | 1.8 | rice variety DSR LCC | 1 | | 1000 | 10 | | 10000 |
| | | Early sowig wheat | Wheat | DBW-187 | 4000 | 10 | 25 | 160000 |
| | | Line sowing + | Mustard | RH725 | 2000 | 5 | 13 | 10000 |
| | | Thinning | 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 | Shambha sub-1 | 1600 | 10 | 25 | 16000 |
| | | rice variety DSR LCC | | | | | | |
| | | Early sowig wheat | Wheat | DBW-187 | 4000 | 10 | 25 | 160000 |
| | | Line sowing + | Mustard | RH725 | 2000 | 5 | 13 | 10000 |
| | | Thinning | 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 |

10. Livestock and Fisheries

Activities and Cost

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..

| 100110 | | Sums i 2 Suddi Sums, et | | | | |
|--------|--------------------------|--|---------------------------------------|--------------------|------------------------|----------------|
| | Seed bank/Fodder Bank | Seed of crop and variety/ Fodder crop/ | Quantity of seed/ fodder produced/ | Unit cost (Rs.) | No.of farmers involved | Amount (Rs. |
| | | variety | storage (t) | | | |
| | - | - | - | - | - | - |
| | 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 | | June | 30 | 5000 |
| | under flood affected area | | | |
| 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 | | October | 30 | 5000 |
| | technique of wheat | | | |

| Weed control | Weed control in cereals and pulses of rabi | December | 30 | 5000 |
|-----------------------|--|-----------|-----|-------|
| | season. | | | |
| Crop mananagement | Production technique of late sown rabi crops | November | 30 | 5000 |
| Live stock | Live stock management for milk production | June | 30 | 5000 |
| management | | | | |
| Fodder and feed | Fodder and feed management for milch | July | 30 | 5000 |
| management | animals in flood prone village | | | |
| Disease Management | Vaccination in Livestock after rainy season | August | 30 | 5000 |
| in Livestock | | _ | | |
| Employment | Employment sources for villagers | January | 30 | 5000 |
| generation | | | | |
| 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 | October | 30 | 5000 |
| | Gladiolus | | | |
| Seed Production | Seed production Tech. of Cow pea, & green | January | 30 | 5000 |
| | gram | | | |
| Sub-total 12.1. | | | 510 | 85000 |

12. Capacity Building & Other extension activities12.2. 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/ | March | 50 | 10000 |
| | Zero Till Technique | | | |
| Varietal | Use of Shambha sub-1 in flood affected | November | 50 | 10000 |
| | areas | | | |
| Short duration | Onion leaf production | August | 50 | 10000 |
| Crop | Production techniques of mustard, lentil | October | 50 | 10000 |
| Diversification | and C.pea | | | |
| | Production of Improved variety (Kashi | March | 50 | 10000 |
| | Kanchan) of Cowpea | | | |
| Nutrition | Use and importance area specific mineral | October | 50 | 10000 |
| Management | mixture after deworming in live stock | | | |
| Feed and Fodder | Green fodder production around the year | December | 50 | 10000 |
| management | | | | |
| 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 | Proposed during | No. of | Cost |
|---|--------------------------------|-----------------|--------|----------------|
| | (Book/Bulletin/ Brochure etc.) | the month | Copies | (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.,)

| SI. | Proven technology/ | Department involved | Strategy | Input arrangement | Amount |
|-----|--------------------------------|------------------------|-------------------------------|-------------------|-----------|
| INO | Capacity building | | | the department | In Lakhs) |
| 1 | Green manuring | Deptt of Ag. | Demo, training & print media | Seed | 250000 |
| 2 | DSR | CSISA & Deptt. Of | Demo, training & print | Seed, Herbicide & | 100000 |
| | | Ag. Private company | media, Field day, Field visit | machine | |
| 3 | Residue incorporation | CSISA & Deptt. Of Ag. | Demo, training & print media | Seed, Herbicide & | 487000 |
| | | | | machine | |
| 4 | Submergence tolerant | IRRI-ISARC Varanasi, | Demo, training & print | Seed, | 50000 |
| | Varieties | CSISA & Deptt. Of Ag. | media, Field day &FV | | |
| 5 | Early sowing of wheat with | CSISA & Deptt. Of | Demo, training & print | Seed, Herbicide & | 50000 |
| | heat stress tolerant varieties | Ag. | media | machine | |
| 6 | Irrigation management in | CSISA & Deptt. Of Ag. | Demo, training & print | Seed, Herbicide & | |
| | wheat | | media | machine | |
| 7 | Crop diversification | Deptt. Of Ag. & Deptt. | Demo, training & print | Seed | 300000 |
| | Kharif onion for veg. | Of Hort. | media | | |
| | Radish, Cowpea, Okra | | | | |
| 8 | Mineral mixture for milch | Deptt of animal | Demo, training & print | Vaccination | 30000 |
| | animal Vaccination | Husbandry & SHG | media | | |
| 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

| C Ma | I | Additional villages selected in the programme* | | | | |
|-----------------------|-----------------------------|--|-----------|--|--|--|
| 5. <i>NO</i> . | Item | 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 | Im | plement | Amount (Rs.) | | | |
| | Tractor mour | nted Power Sprayer | 79000 | | | |
| 3.0 Any other contingencies | (TA etc) | | | | | |
| Item description | | | Amount (Rs.) | | | |
| | | | 60000 | | | |

4.0 NRM + Crop Production + Livestock + Institutional/ Others

| Module | | | Farmi | ng System ' | Гуроlоду | | | | |
|----------|---|-------------|-----------------------------------|-------------|--------------------------|------------|-----------|-------------|-------------|
| | FST-1 Irrig | gated | FST-2 Irrig | ated | FST-3Rai | nfed | FST | ſ -4 | |
| | (Agriculture+Ho | orticulture | (Agriculture+Hor | ticulture+ | (Agriculture+L | livestock) | Landless+ | livestock | |
| |) | 1 | Livestoc | k) | | 1 | | 1 | |
| 4.1 NRM | Activity | Area | Activity | Area(ha | Activity | Area(h | Activity | Area(ha | Amount (PS) |
| | | (nac/unit) | Summer deen | 0.5 hac | Deen | 0.5 hac | | C/umt) | (100) |
| | | | ploughing | 0.5 nac | ploughing | 0.5 nac | | | +000 |
| | Sprinkler and Raingun | 0.2hac | prougning | | 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 | Demonstration | | Demonstration | | Demonstration | | | | |
| Producti | in kharif season | | in kharif season | | in kharif | | | | |
| on | stress tolerant | | stress tolerant | | season stress | | | | |
| | and short | | and short | | tolerant and | | | | |
| | duration | | duration | | short duration | | | | |
| | variety. | | variety. | | 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(Kashishre ya&KashiDivya) | 0.2 hac | Sponge Gourd | 0.2 hac | | | | | 1250 |
| | Okra(Kashilalim a&KashiChaman | 0.5 hac | Okra(Kashilalima& KashiChaman) | 0.5 hac | | | | | 3000 |
| |) | | | | | | | | |
|-----------|----------------------|-----------|-------------------------|-----------|-----------------------|----------|---------------|---------|--------|
| | Tomato(Kashich | 0.4 hac | Tomato(Kashich | 0.4 hac | | | | | 5000 |
| | ayan&kashiAma | | ayan&kashiAma | | | | | | |
| | n) | | n) | | | | | | |
| | Dolycaus bear | 0.4 hac | Dolycaus bean | 0.4 hac | | | | | 5000 |
| | (Sem-3, Sem-18) | | (Sem-3, Sem-18) | | | | | | |
| | Kitchen garden | 10 unit | Kitchen garden | 10 unit | Kitchen garden | 5 unit | | | 2500 |
| | Demonstratio | Demonstr | | Demonst | | | | | |
| | n in rabi | ation in | | ration in | | | | | |
| | season stress | rabi | | rabi | | | | | |
| | tolerant and | season | | season | | | | | |
| | snort duration | stress | | stress | | | | | |
| | variety | ond short | | ond short | | | | | |
| | | duration | | duration | | | | | |
| | | variety | | variety | | | | | |
| | Field pea | 3hac | Field nea | 4hac | | | | | 51420 |
| | (IPFD12-2) | Shue | (IPFD12-2) | inue | | | | | 01120 |
| | 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 | | | Animal health | 1 no. | Animal health | 1 no. | Animal | 1 no. | 10000 |
| Livestock | | | camp Stress tolerent | | camp | | health camp | | |
| | | | fodder variety | | fodder variety | | | | |
| | | | Nanier | 0.25hac | Napier | 0.25 hac | | | 5000 |
| | | | Chari | 0.25 hac | Chari | 0.25 hac | | | 4000 |
| | | | Therapeutic | 10 unit | Therapeutic | 10 unit | Therapeuti | 10 unit | 10000 |
| | | | drugs for various | | drugs for | | c drugs for | | |
| | | | aliments | | various | | various | | |
| | | | | | aliments | | aliments | | |
| | | | Berseem | 0.5 | Berseem | 0.5 | | | 5000 |
| | | | feed storage bag | 03 | feed storage | 02 | | | 5000 |
| | | | (silage) | | bag (silage) | | | | |
| | | | | | | | Improved | 1 | 12000 |
| | | | | | | | shelters for | | |
| | | | | | | | reducing | | |
| | | | | | | | heat | | |
| | | | | | | | stress/cold | | |
| | | | F 1' | 2 | | 4 | stress | 2 | 10000 |
| | | | Feeding | 3 | Feeding | 4 | Feeding | 3 | 10000 |
| | | | (TMP Mineral | | (TMP | | management | | |
| | | | Block | | Mineral Block | | Mineral | | |
| | | | Medicines & | | Medicines & | | Block. | | |
| | | | disinfectant) | | disinfectant) | | Medicines | | |
| | | | | | , | | disinfectant) | | |
| | | | | 5 | Cattle Breed | 5 | Cattle | 5 | 10000 |
| | | | Cattle Breed | | Improvement : | | Breed | | |
| | | | Improvement : | | Assorted | | Improveme | | |
| | | | Assorted Sexed | | Sexed Semen | | nt : | | |
| | | | Semen A.I. | | A.I. | | Assorted | | |
| | | | | | | | Sexed | | |

| | | | | | | | 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 | Establishment | 1 unit | Establishment of | 1 unit | Establishment | of 1 | | | - |
| Institutio | of seed bank | | seed bank of | | seed bank of p | ulses, uni | t | | |
| nal/ | of pulses and | | pulses, oil seed and | | oil seed and n | nillets | | | |
| Others | oil seed crop | | and fodder | | and fodder | | | | |
| | 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 (appoint the interventions) and village | Unit cost | No. of | Co | verage | Total amount |
|---|-----------|--------|--------------|----------------|---------------------|
| item (specify the interventions) and vinage | Rs/acre | demos | Area (acres) | No. of farmers | (R s) |
| | Α | В | С | 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 | Description | | Cost | No of | Cove | erage | Total |
|---------------------------------------|---------------|--|-----------|-------|--------------|-------------------|----------------|
| village | Сгор | Variety (s) | (Rs/acre) | demos | Area (ac) | No. of farmers | amount (Rs) |
| | | | A | B | С | D | A x C |
| | Chickpea | JG-36 | 3512 | 10 | 10 | 10 | 35120 |
| Irrigated / | Field pea | IPFD 12-2 | 3428 | 15 | 15 | 15 | 51420 |
| Drought | 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 |
| Stragg | Lentil | IPL-316 | 2375 | 4 | 4 | 4 | 9500 |
| Stress | 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

| | Cost (Da/ | No of | Co | verage | Amount | Domonica (Durmono of |
|--|-----------|-------|--------------|-------------------|--------|---|
| Intervention | acre) | demos | Area (ac) | No. of farmers | (Rs) | intervention) |
| | Α | В | 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 Area No. of (ac) farmers | | Amount (Rs) | |
|---|--------------------|-----------------|---|---|----------------|--|
| | Α | В | С | 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 |
| Dahi | Berseem | Bundel Berseem 2 | 1 | 5000 | 25 | 5000 |
| καυι | 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 | Unit cost of | Cost to | Farmer's | No. of | Total | No. of farmers | Remarks (purpose |
|------------------|---------------|--------------|--------------|------------|--------|-------------|----------------|---------------------|
| improvement* | | demo (Rs) | project (Rs) | share (Rs) | demos | amount (Rs) | covered | of intervention) |
| Setting Mattress | | 2000 | 12000 | 0 | 02 | 12000 | 02 | Protect the animals |
| | | | | | | | | from stress due to |
| Improved shelte | r- Fogger for | | | | | | | Protect the animals |
| Dairy animal she | ed | | | | | | | from heat stress |
| Sub-total of 4.3 | | | | | | 12000 | 02 | |

4.3 d Livestock / Fisheries units

| Α | В | B C | | Ε | 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 | t of Seed banks | | | | | | | |
| Name of the SHG | Crop and variety | | Quantity of stora | nge (t) | Unit cost (| Rs.) | No. of units | Amount (Rs.) |
| | Chickpea JG-36 | | 0.2 | 0.2 | | | | |
| | Field pea IPFD 12-2 | | 0.5 | | | | | |
| | Mustard RH-0 | 725 | 0.5 | | | | | |
| | Wheat DBW-1 | 187 | 1.0 | | | | | |
| | Sesame GT-06 | | 0.5 | | | | | |
| | Green gram Sh | nikha | 0.5 | | | | | |
| Sub-total | | | 3.2 | | | | | |

5.0 Capacity Building & Training Programmes

5.1 Trainings

| Theme | Title of training course | Proposed | No. of | Cost to |
|-------------------------|---|----------|--------------|---------------|
| | | month | participants | 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 |
| | | Proposed | No. of | Cost to |
| Ineme | The of training course | month | participants | 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 | 79000 |
| | Proposal for procurement of farm machinery/implements for Custom Hiring Centre | |
| 3 | Travel Allowances | 60000 |
| 4 | NRM+Crop Production + Livestock+Institutional/ Others | 377340 |
| 5 | Capacity Building and Training Programme | 22000 |
| | Training courses proposed from April 2023- March 2024 | |
| 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 | | | Fa | rming Syste | m Typology | | | | |
|--------|------------------|---------------|----------------|---------------|---------------|------------|----------|--------------|---------------|
| | Irri | gated | Irrig | ated | Unirr | igated | Landless | s+ livestock | |
| | (Agriculture | e+Horticultur | griculture+He | orticulture+1 | (Agrica | ulture + | | | |
| | | e) | vesto | ock) | Lives | stock) | | | |
| | Activity | Area | Activ | Area | Activity | Area | Activity | Area | Amount |
| | | (hac/unit) | ity | (ha/unit) | | (hac/unit) | | (hac/unit) | (RS) |
| | Sprinkler | 0.5hac | Sprinkler | 0.5hac | Sprinkler | 1.0hac | | | 300000 |
| | and micro | | and micro | | and micro | | | | |
| | sprinkler, | | sprinkler, | | sprinkler, | | | | |
| | drip | | drip | | drip | | | | |
| | irrigation | | irrigation | | irrigation | | | | |
| | Soil testing | 50 unit | Soil testing | 50unit | Soil testing | 50unit | | | 22500 |
| | and soil | | and soil | | and soil | | | | |
| | health card | | health card | | health card | | | | |
| | issued | | issued | | issued | | | | |
| | mulching in | 0.2hac | mulching | 0.2hac | - | - | | | 25000 |
| | vegetable | | 1n | | | | | | |
| | crops | | vegetables | | | | | | |
| | (organic/pla | | cops | | | | | | |
| | stic) | | (organic/pl | | | | | | |
| | C | 11 | astic) | 11 | Cara | 11 | | | 15000 |
| | Crop | Inac | Crop | Inac | Crop | Inac | | | 15000 |
| | incornorati | | residue | | incornerati | | | | |
| | incorporati | | incorporati | | incorporati | | | | |
| | of hurning | | of hurning | | of hurning | | | | |
| | in our ning | | in of building | | vegetables | | | | |
| | nn vegetables | | wegetables | | nea | | | | |
| | pea | | nea | | pea | | | | |
| | pea | | Vermicom | 2unit | Vermicom | 2unit | Vermico | 5 unit | 50000 |
| N2 | | | post | Zuint | post | Zumt | mpost | 5 unit | 20000 |
| Z | Sub-Total | | F | | F | | | | 412500 |
| | Demonstra | | Demonstrat | | Demonstrati | | | | |
| | tion in | | ion in | | on in kharif | | | | |
| | kharif | | kharif | | season | | | | |
| | season | | season | | stress | | | | |
| | stress | | stress | | tolerant and | | | | |
| | tolerant | | tolerant | | short | | | | |
| | and short | | and short | | duration | | | | |
| | duration | | duration | | variety. | | | | |
| | variety. | | variety. | | | | | | |
| | Sesame | 4hac | Sesame | 3hac | Sesame | 3hac | | | 12500 |
| | Moong | 10hac | Moong | 5hac | Moong | 5hac | | | 39000 |
| | Summer | 5 hac | Summer | 5 hac | | | | | 26000 |
| | moong | | moong | | | | | | |
| uo | Orchard | 0.4hac | | | | | | | 14400 |
| Icti | establishmen | 25 | G 1' î | 05 | a 1: a | 7 0 | | | |
| npc | Sapling for | 25 unit | Sampling for | 25unit | Sampling fo | 50 unit | | | 20000 |
| Pr(| farmers | 05 | farmers | 50 | tarmers | 07 | | | 10000 |
| do | Seedling for | 25unit | Sampling f | 50 unit | Sampling | 25 unit | | | 10000 |
| Cr | Tarmers | 1hog | narmers | 1ho- | larmers | | | | 10000 |
| | sponge | inac | sponge | Inac | | | | | 10000 |

| | Gourd | | Gourd | | | | | | |
|-----------|--------------------|---------|--|--|---|---|---|--|---|
| | Okra | 1hac | Okra | 1hac | | | | | 30000 |
| | Tomato | 1hac | Tomato | 1hac | | | | | 10000 |
| | Bottle | 1hac | Bottle | 1hac | | | | | 5000 |
| | gourd | | Gourd. | | | | | | |
| | Kitchen | 10 unit | Kitchen | 10 unit | Kitchen | 5 unit | | | 3750 |
| | garden | | garden | | garden | | | | |
| | Field pea | 10hac | Field pea | 10hac | Field pea | 10hac | | | 270000 |
| | Vegetable | 2hac | Vegetable | 2hac | | | | | |
| | pea | | pea | | | | | | 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 |
| | Cauliflowe r | 1 hac | Cauliflowe r | 1 hac | | | | | 3000 |
| | Cabbage | 1 hac | Cabbage | 1 hac | | | | | 3000 |
| | Knolkhol | 0.25 | Knolkhol | 0.25 | | | | | 15000 |
| | Brocoli | 0.25 | Brocoli | 0.25 | | | | | 5000 |
| | Kitchen | 25 unit | Kitchen | 25unit | Kitchen | 25 unit | | | 11250 |
| | garden | 25 unit | Garden | 250111 | Garden | 25 unit | | | 11250 |
| | Weed | 5hac | Weed | 3 hac | Weed | 2 hac | | | 12500 |
| | control | | control | | control | | | | |
| | IPM | 2 unit | IPM | 2 unit | IPM | 1unit | | | 25000 |
| | module in | | module in | | module in | | | | |
| | vegetables | | vegetables | | chickpea | | | | |
| | _ | | - | | - | | | | |
| | crops | | crops | | | | | | |
| | crops Sub-Total | | crops | | | | | | 943400 |
| | crops Sub-Total | | crops Animal heal | 1 unit | Animal | 1 unit | Animal | 1 unit | 943400 15000 |
| | crops Sub-Total | | crops Animal heal camp | 1 unit | Animal health camp | 1 unit | Animal health camp | 1 unit | 943400 15000 |
| | crops Sub-Total | | Crops Animal heal camp Napier | 1 unit 0.25hac | Animal health camp Napier | 1 unit 0.25hac | Animal health camp | 1 unit | 943400 15000 24000 |
| | crops Sub-Total | | crops Animal heal camp Napier grass | 1 unit 0.25hac | Animal health camp Napier grass | 1 unit 0.25hac | Animal health camp | 1 unit | 943400 15000 24000 |
| | crops Sub-Total | | crops Animal heal camp Napier grass Chari | 1 unit 0.25hac 2.5hac | Animal health camp Napier grass Chari | 1 unit 0.25hac 2.5hac | Animal health camp | 1 unit | 943400 15000 24000 27000 |
| | crops Sub-Total | | crops Animal heal camp Napier grass Chari | 1 unit 0.25hac 2.5hac | Animal health camp Napier grass Chari Strip cup | 1 unit 0.25hac 2.5hac 5unit | Animal health camp Strip cup | 1 unit | 943400 15000 24000 27000 5000 |
| | crops Sub-Total | | crops Animal heal camp Napier grass Chari Therapeuti | 1 unit 0.25hac 2.5hac 10 unit | Animal health camp Napier grass Chari Strip cup Therapeutic | 1 unit 0.25hac 2.5hac 5unit 10 unit | Animal health camp Strip cup Therapeutic | 1 unit 5 unit 10 unit | 943400 15000 24000 27000 5000 15000 |
| | crops Sub-Total | | crops Animal heal camp Napier grass Chari Therapeuti c drugs for | 1 unit 0.25hac 2.5hac 10 unit | Animal health camp Napier grass Chari Strip cup Therapeutic drugs for | 1 unit 0.25hac 2.5hac 5unit 10 unit | Animal health camp Strip cup Therapeutic drugs for | 1 unit 5 unit 10 unit | 943400 15000 24000 27000 5000 15000 |
| | crops Sub-Total | | crops Animal heal camp Napier grass Chari Chari Therapeuti c drugs for various alimenta | 1 unit 0.25hac 2.5hac 10 unit | Animal health camp Napier grass Chari Strip cup Therapeutic drugs for various aliments | 1 unit 0.25hac 2.5hac 5unit 10 unit | Animal health camp Strip cup Therapeutic drugs for various aliments | 1 unit 5 unit 10 unit | 943400 15000 24000 27000 5000 15000 |
| | crops Sub-Total | | crops Animal heal camp Napier grass Chari Therapeuti c drugs for various aliments Barroom | 1 unit 0.25hac 2.5hac 10 unit | Animal health camp Napier grass Chari Strip cup Therapeutic drugs for various aliments | 1 unit 0.25hac 2.5hac 5unit 10 unit | Animal health camp Strip cup Therapeutic drugs for various aliments | 1 unit 5 unit 10 unit | 943400 15000 24000 27000 5000 15000 |
| | crops Sub-Total | | crops Animal heal camp Napier grass Chari Therapeuti c drugs for various aliments Barseem | 1 unit 0.25hac 2.5hac 10 unit | Animal health camp Napier grass Chari Strip cup Therapeutic drugs for various aliments Barseem | 1 unit 0.25hac 2.5hac 5unit 10 unit 1hac 300unit | Animal health camp Strip cup Therapeutic drugs for various aliments | 1 unit 5 unit 10 unit | 943400 15000 24000 27000 5000 15000 12600 10000 |
| | crops Sub-Total | | crops Animal heal camp Napier grass Chari Chari Therapeuti c drugs for various aliments Barseem preventive vaccination | 1 unit 0.25hac 2.5hac 10 unit 1hac 100unit | Animal health camp Napier grass Chari Strip cup Therapeutic drugs for various aliments Barseem preventive vaccinatio | 1 unit 0.25hac 2.5hac 5unit 10 unit 1hac 300unit | Animal health camp Strip cup Therapeutic drugs for various aliments preventiv | 1 unit 1 unit 5 unit 10 unit 100unit | 943400 15000 24000 27000 5000 15000 12600 10000 |
| tock | crops Sub-Total | | crops Animal heal camp Napier grass Chari Therapeuti c drugs for various aliments Barseem preventive vaccination | 1 unit 0.25hac 2.5hac 10 unit 1hac 100unit | Animal health camp Napier grass Chari Strip cup Therapeutic drugs for various aliments Barseem preventive vaccinatio n | 1 unit 0.25hac 2.5hac 5unit 10 unit 1hac 300unit | Animal health camp Strip cup Therapeutic drugs for various aliments preventiv e vaccinati | 1 unit 1 unit 5 unit 10 unit 100unit | 943400 15000 24000 27000 5000 15000 12600 10000 |
| vestock | crops Sub-Total | | crops Animal heal camp Napier grass Chari Chari Chari Chari Chari Chari Chari Chari Barseem preventive vaccination | 1 unit 0.25hac 2.5hac 10 unit 1hac 100unit | Animal health camp Napier grass Chari Strip cup Therapeutic drugs for various aliments Barseem preventive vaccinatio n | 1 unit 0.25hac 2.5hac 5unit 10 unit 10 unit 1hac 300unit | Animal health camp Strip cup Therapeutic drugs for various aliments preventiv e vaccinati on | 1 unit 1 unit 5 unit 10 unit 100unit | 943400 15000 24000 27000 5000 15000 12600 10000 |
| Livestock | crops Sub-Total | | crops Animal heal camp Napier grass Chari Chari Therapeuti c drugs for various aliments Barseem preventive vaccination | 1 unit 0.25hac 2.5hac 10 unit 1hac 100unit 25 unit | Animal health camp Napier grass Chari Strip cup Therapeutic drugs for various aliments Barseem preventive vaccinatio n | 1 unit 0.25hac 2.5hac 5unit 10 unit 1hac 300unit 50unit | Animal health camp Strip cup Therapeutic drugs for various aliments preventiv e vaccinati on AI(sex | 1 unit 1 unit 5 unit 10 unit 100unit 25unit | 943400 15000 24000 27000 5000 15000 12600 10000 |
| Livestock | crops Sub-Total | | crops Animal heal camp Napier grass Chari Therapeuti c drugs for various aliments Barseem preventive vaccination AI(sex sorted | 1 unit 0.25hac 2.5hac 10 unit 1hac 100unit 25 unit | Animal health camp Napier grass Chari Strip cup Therapeutic drugs for various aliments Barseem preventive vaccinatio n AI(sex sorted | 1 unit 0.25hac 2.5hac 5unit 10 unit 1hac 300unit 50unit | Animal health camp Strip cup Therapeutic drugs for various aliments preventiv e vaccinati on AI(sex sorted | 1 unit 1 unit 5 unit 10 unit 100unit 25unit | 943400 15000 24000 27000 5000 15000 12600 10000 15000 |
| Livestock | crops Sub-Total | | crops Animal heal camp Napier grass Chari Chari Therapeuti c drugs for various aliments Barseem preventive vaccination AI(sex sorted seaman) | 1 unit 0.25hac 2.5hac 10 unit 10 unit 1hac 100unit 25 unit | Animal health camp Napier grass Chari Strip cup Therapeutic drugs for various aliments Barseem preventive vaccinatio n AI(sex sorted seaman) | 1 unit 0.25hac 2.5hac 5unit 10 unit 10 unit 1hac 300unit 50unit | Animal health camp Strip cup Therapeutic drugs for various aliments preventiv e vaccinati on AI(sex sorted seaman) | 1 unit 1 unit 5 unit 10 unit 100unit 25unit | 943400 15000 24000 27000 5000 15000 12600 10000 |
| Livestock | crops Sub-Total | | crops Animal heal camp Napier grass Chari Chari Therapeuti c drugs for various aliments Barseem preventive vaccination AI(sex sorted seaman) | 1 unit 0.25hac 2.5hac 10 unit 10 unit 1hac 100unit 25 unit | Animal health camp Napier grass Chari Strip cup Therapeutic drugs for various aliments Barseem preventive vaccinatio n AI(sex sorted seaman) | 1 unit 0.25hac 2.5hac 5unit 10 unit 1hac 300unit 50unit | Animal health camp Strip cup Therapeutic drugs for various aliments preventiv e vaccinati on AI(sex sorted seaman) Income | 1 unit 1 unit 5 unit 10 unit 100unit 25unit 5 unit | 943400 15000 24000 27000 5000 15000 12600 10000 15000 40000 |
| Livestock | crops Sub-Total | | crops Animal heal camp Napier grass Chari Chari Therapeuti c drugs for various aliments Barseem preventive vaccination AI(sex sorted seaman) | 1 unit 0.25hac 2.5hac 10 unit 10 unit 1hac 100unit 25 unit | Animal health camp Napier grass Chari Strip cup Therapeutic drugs for various aliments Barseem preventive vaccinatio n AI(sex sorted seaman) | 1 unit 0.25hac 2.5hac 5unit 10 unit 1hac 300unit 50unit | Animal health camp Strip cup Therapeutic drugs for various aliments preventiv e vaccinati on AI(sex sorted seaman) Income generation | 1 unit 1 unit 5 unit 10 unit 100unit 25unit 5 unit | 943400 15000 24000 27000 5000 15000 15000 15000 15000 15000 15000 12600 10000 40000 |
| Livestock | crops Sub-Total | | crops Animal heal camp Napier grass Chari Therapeuti c drugs for various aliments Barseem preventive vaccination AI(sex sorted seaman) | 1 unit 0.25hac 2.5hac 10 unit 10 unit 1hac 100unit 25 unit | Animal health camp Napier grass Chari Strip cup Therapeutic drugs for various aliments Barseem preventive vaccinatio n AI(sex sorted seaman) | 1 unit 0.25hac 2.5hac 5unit 10 unit 1hac 300unit 50unit | Animal health camp Strip cup Therapeutic drugs for various aliments preventiv e vaccinati on AI(sex sorted seaman) Income generation through | 1 unit 1 unit 5 unit 10 unit 100unit 25unit 5 unit | 943400 15000 24000 27000 5000 15000 12600 10000 15000 40000 |
| Livestock | crops Sub-Total | | crops Animal heal camp Napier grass Chari Therapeuti c drugs for various aliments Barseem preventive vaccination AI(sex sorted seaman) | 1 unit 0.25hac 2.5hac 10 unit 1hac 100unit 25 unit | Animal health camp Napier grass Chari Strip cup Therapeutic drugs for various aliments Barseem preventive vaccinatio n AI(sex sorted seaman) | 1 unit 0.25hac 2.5hac 5unit 10 unit 1hac 300unit 50unit | Animal health camp Strip cup Therapeutic drugs for various aliments preventiv e vaccinati on AI(sex sorted seaman) Income generation through mushroom | 1 unit 1 unit 5 unit 10 unit 100unit 25unit 5 unit | 943400 15000 24000 27000 5000 15000 12600 10000 15000 40000 |
| Livestock | crops Sub-Total | | crops Animal heal camp Napier grass Chari Therapeuti c drugs for various aliments Barseem preventive vaccination AI(sex sorted seaman) | 1 unit 0.25hac 2.5hac 10 unit 1hac 100unit 25 unit | Animal health camp Napier grass Chari Strip cup Therapeutic drugs for various aliments Barseem preventive vaccinatio n AI(sex sorted seaman) | 1 unit 0.25hac 2.5hac 5unit 10 unit 1hac 300unit 50unit | Animal health camp Strip cup Therapeutic drugs for various aliments preventiv e vaccinati on AI(sex sorted seaman) Income generation through mushroom production | 1 unit 1 unit 5 unit 10 unit 100unit 25unit 5 unit | 943400 15000 24000 27000 5000 15000 12600 10000 15000 40000 |
| Livestock | crops Sub-Total | | crops Animal heal camp Napier grass Chari Therapeuti c drugs for various aliments Barseem preventive vaccination AI(sex sorted seaman) | 1 unit 0.25hac 2.5hac 10 unit 1hac 100unit 25 unit | Animal health camp Napier grass Chari Strip cup Therapeutic drugs for various aliments Barseem preventive vaccinatio n AI(sex sorted seaman) | 1 unit 0.25hac 2.5hac 5unit 10 unit 1hac 300unit 50unit 3 unit | Animal health camp Strip cup Therapeutic drugs for various aliments preventiv e vaccinati on AI(sex sorted seaman) Income generation through mushroom production | 1 unit 1 unit 5 unit 10 unit 100unit 25unit 5 unit 2 unit | 943400 15000 24000 27000 5000 15000 12600 10000 40000 40000 |
| Livestock | crops Sub-Total | | crops Animal heal camp Napier grass Chari Therapeuti c drugs for various aliments Barseem preventive vaccination AI(sex sorted seaman) | 1 unit 0.25hac 2.5hac 10 unit 1hac 100unit 25 unit | Animal health camp Napier grass Chari Strip cup Therapeutic drugs for various aliments Barseem preventive vaccinatio n AI(sex sorted seaman) AI(sex sorted seaman) | 1 unit 0.25hac 2.5hac 5unit 10 unit 1hac 300unit 50unit 3 unit | Animal health camp Strip cup Therapeutic drugs for various aliments preventiv e vaccinati on AI(sex sorted seaman) Income generation through mushroom production Goatery unit(2+1) | 1 unit 1 unit 5 unit 10 unit 100unit 25unit 5unit 2 unit | 943400 15000 24000 27000 5000 15000 12600 10000 15000 40000 150000 |
| Livestock | crops Sub-Total | | crops Animal heal camp Napier grass Chari Therapeuti c drugs for various aliments Barseem preventive vaccination AI(sex sorted seaman) | 1 unit 0.25hac 2.5hac 10 unit 1hac 100unit 25 unit | Animal health camp Napier grass Chari Strip cup Therapeutic drugs for various aliments Barseem preventive vaccinatio n AI(sex sorted seaman) AI(sex sorted seaman) | 1 unit 0.25hac 2.5hac 5unit 10 unit 10 unit 1hac 300unit 50unit 3 unit 5 unit | Animal health camp Strip cup Therapeutic drugs for various aliments preventiv e vaccinati on AI(sex sorted seaman) Income generation through mushroom production Goatery unit(2+1) | 1 unit 1 unit 5 unit 10 unit 100unit 25unit 5 unit 2 unit 5 unit | 943400 15000 24000 27000 5000 15000 12600 10000 15000 40000 150000 24000 |
| Livestock | crops Sub-Total | | crops Animal heal camp Napier grass Chari Therapeuti c drugs for various aliments Barseem preventive vaccination AI(sex sorted seaman) | 1 unit 0.25hac 2.5hac 10 unit 1hac 100unit 25 unit | Animal health camp Napier grass Chari Strip cup Therapeutic drugs for various aliments Barseem preventive vaccinatio n AI(sex sorted seaman) Goatery unit(2+1) Poultry unit | 1 unit 0.25hac 2.5hac 5unit 10 unit 1hac 300unit 50unit 3 unit 5 unit | Animal health camp Strip cup Therapeutic drugs for various aliments preventiv e vaccinati on AI(sex sorted seaman) Income generation through mushroom production Goatery unit(2+1) Poultry unit | 1 unit 1 unit 5 unit 10 unit 25 unit 5 unit 2 unit 5 unit 5 unit | 943400 15000 24000 27000 5000 15000 12600 10000 15000 40000 40000 24000 |

| | Establishm | 1 unit | Establishm | 1 unit | Establishme | 1 unit | | - |
|------|-------------|---------|-------------|---------|-------------|---------|--|---------|
| | ent` of | | ent of seed | | nt of seed | | | |
| | seed bank | | bank of | | bank of | | | |
| ers | of pulses, | | pulses, oil | | pulses, oil | | | |
| the | oil seed | | seed and | | seed and | | | |
| 0 | and millets | | millets and | | millets and | | | |
| lal | | | fodder | | fodder | | | |
| ioi | Serrated | 50 unit | Serrated | 50 unit | Serrated | 50 unit | | |
| tut | sickle | | sickle | | sickle | | | 60000 |
| nsti | Sub-Total | | | | | | | 60000 |
| IJ | Total | | | | | | | 1753500 |

B-NON RECURRING CONTINGENCY EQUPMENT

| roposal 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 | No. of | Budget |
|-------|----------------------------------|--|-----------|---------------|--------|
| | | | month | beneficiaries | |
| 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 | September | 25 | 3000 |
| | | kitchen garden | | | |
| 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 vinages involved in the program | | | | |
|---------|---|-------------|-----------|------------|--|
| 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 | |

Details about the villages involved in the programme

Predominant Farming systems typologies of the NICRA villages (area)

| FST (Farming system Typologies | Villag | e - Ghand | linagar | Villag | Village- Birgua | | | Village- Bawaltanda | | |
|-------------------------------------|--|-----------|----------|--------|-----------------|----------|------|---------------------|----------|--|
| identified | Area | No of | % | Area | No of | % | Area | No of | % | |
| | (ha) | farmers | coverage | (ha) | farmers | coverage | (ha) | 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+ | 64 | 25 | 35 | 245 | 150 | 46 | 70 | 85 | 27 | |
| horti+Livestock's) | | | | | | | | | | |
| Total | 185 | 175 | 100% | 535 | 370 | 100% | 374 | 170 | 100% | |
| Predominant climatic, crop, anim | Predominant climatic, crop, animal and resource constraints of the major identified farming system | | | | | | | | | |

<u>Predominant climatic, crop, animal and resource constraints of the major identified farming syste</u> <u>typologies of NICRA villages</u>

| S No | FarmingSystemVillage 1Village 2 | | | | | Village -3 | | |
|------|---|--|---|--|---|---|---|--|
| | Typologies | Climate constraints | Resource /Crop/Animal constraints | Climate constraints | Resource /Crop/Animal constraints | Climate constrai nts | 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, | |

| S No | Farming System | All villages: Technologies identified t | All villages: Technologies identified to minimise the impact of constraints shortlisted | | | | | | | |
|------|---|---|--|--|--|--|--|--|--|--|
| | Typologies* | 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) | | | | | | | |

Identify Promising resilient technologies for addressing the constraints

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

| S | Farming System Typologies | All villages | | | | | | | | |
|-------|---|--------------|------|-----------|-------|--|--|--|--|--|
| No | | 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 | | | | | |
| Activ | Activities and Cost | | | | | | | | | |

NRM Intervention

| S | Intervention | Dimensions | No. of | No. of farm households | Cost to project | | | | | |
|----|-----------------------------|------------|--------|-------------------------|-----------------|--|--|--|--|--|
| No | | | units | proposed to be involved | (R s) | | | | | |
| 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/ba A | Coverage Proposed | | Total amount |
|----------|-----------------------|--|----------------------|-------------------|--|--------------|
| 110. | | | NS/Ha A | Area (ha) | No. of farm households proposed to be involved B | (Rs) A x 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 | se tc. | Intervention | Description | 1 | Cost | Cover | Coverage Proposed | |
|----|-------------|--------------------------|-------------|----------------|---------|-------|------------------------|--------|
| No | llag 3 e | | Crop | Variety (s) | (Rs/ha) | Area | No. of farm households | amount |
| | Vil ,2, | | | | | (ha) | to be involved | (Rs) |
| 1 | 4 | Lack of suitable Drought | Green | Shikha | 9000 | 5 | 15 | 45000 |
| | SR/ | Tolerant variety | Gram | | | | | |
| 2 | | Lack of suitable Drought | Groundnut | Raj Moongfali- | 10000 | 10 | 25 | 100000 |
| | Vi Vi | Tolerant variety | | 2 TG-37A | | | | |
| 3 | \neg | Lack of suitable heat | Chick pea | RVG-202 | 9000 | 10 | 25 | 90000 |

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

FST Wise:- livestock & Fisheries interventions

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

Livestock & Fisheries interventions

| Season | Name of | Variety | Area | Unit cost of | No. of | Total amount | Remarks (purpose of intervention & |
|-----------|---------|---------|------|--------------|--------|--------------|------------------------------------|
| | fodder | | (ha) | demo Rs/ha)* | demos | (Rs/ha)* | No. of farmers covered) |
| Kharif | Jwar | PC-6 | 1.0 | 500 | 10 | 5000 | Year round availability of green |
| | Maize | J-1006 | 0.5 | 500 | 05 | 2500 | fodder 50 farmers |
| 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 | Unit cost of | No. of demos | Total amount | Remarks (purpose of intervention & No. of | | |
|--------------------|--------------|--------------|--------------|--|--|--|
| demonstrations | demo (Rs) | | (Rs/ha) | 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 | Unit cost of | Cost to | Farmer's | No. of | Total amount | No. of farmers | Remarks (purpose of |
|---|--------------|--------------|------------|--------|---------------|----------------|---|
| improvement* | demo (Rs) | project (Rs) | share (Rs) | demos | (R s) | covered | 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 | 15000 | 5000 | 10000 | 02 | 20000 | To increase heat tolerant |
| (Bundelkhandi) | | | | | | 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 No. of Cost to month participants project (Rs.) NRM How to collect soil for nutrient analysis 30 3000 April NRM 30 Reclamation of Sodic soil April 3000 NRM Deep summer ploughing with chisel plough 30 May 3000 NRM Burning effect of crop residue on climate 30 3000 May LPM Shelter & Feed management for milch animals 30 3000 June CP Seed treatment in Kharif Pulse crops (Urd/Moong) 30 June 3000 NRM Technology of NADEP compost preparation under NICRA village 30 3000 July ICM Integrated crop management in pulse crops July 30 3000 CP Production technology in Pearlmillet 30 3000 August IPM Important disease of Groundnut & their management August 30 3000 IPM Control of virus transmission in Pulse crops 30 3000 September IPM 30 Role of Trichoderma & PGPRs in plant disease management & yield production September 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 December Environmental safe insecticides for the management of pulse insect-pests 30 3000 IPM Mustard aphid & their management with systemic & contact insecticides January 30 3000 30 NRM Preparation of CPP-500(Cow pet pest) January 3000 NRM Preparation of Jeeva-amrit 30 February 3000 IPM Management of fruit borer of vegetable crops February 30 3000 CP Post-harvest management of Rabi crops 30 March 3000 CP Commercial seed production of Wheat March 30 3000 720 72000/-

Sub-total

Activities and Costs Non-recurring contingencies_– Equipment

| Ttoh 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 | F | arming Syste | m Typology | |
| | Irrigated (Agriculture+ Live Stock | () | Irrigated (Agriculture +Livestock+ Horti | iculture) |
| 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 |
| | Demonstration | | Demonstration | |
| | Paddy | 2 | Paddy | 2 |
| n n | Perennial fodder crop | | Orchard establishment | 0.2 |
| ctic | Millets | 1 | Millets | 1 |
| du | | | 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 |
| | | | Urd | 1 |
| | Animal health camp | 1 | Animal health camp | 1 |
| | Napier | 0.25 | Napier | 0.25 |
| ck | Chari | 2.5 | Chari | 2.5 |
| sto | Animal health camp | 1 | Animal health camp | 1 |
| ive | Stress tolerant fodder variety of Cluster bean | | Stress tolerant fodder variety of cluster bean | |
| Ē | 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. | Theme | Title of training course F | | No. of |
|-----|----------------------------------|--|-----------|---------------|
| No. | | | month | 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 | September | 30 |
| | | kitchen garden | | |
| | 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 | December | 30 |
| | | platforms | | |
| | 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 run | JKA vinage | |
|------|---------------------------------------|------------|------------------|
| 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% |

Details about the existing NICRA village

2. Divide the NICRA villages into predominant farming system typologies

| G | | Amwakhas | | | Nandpur Dashahwa | | |
|-------------|--|---------------|-------------------------------|--|------------------|----------------------------------|--|
| 5 N 0 | Farming System Typologies* | Area (ha) | (No. of farme rs (approx.) | % coverage of the typo logy (area in the villag e) | Area (ha) | No. of farm ers (approx .) | % coverage of the typ ology (area in the vill age) |
| 1 | FST- 1 Flood Prone wit hout animal (Agriculture+Hor ticulture) | 321 .57 | 552 | 55.5 | 46.0 | 278 | 60.7 |
| 2 | FST- 2 Flood Prone wit h animal. (Agriculture+Liv estock) | 257 .5 | 564 | 44.5 | 29.9 | 215 | 39.3 |
| 3 | FST- 3 Irrigated witho ut animal (Agriculture+Hor ticulture) | 583 .00 | 401 | 48.9 | 82.0 | 235 | 58.7 |
| 4 | FST- 4 Irrigated with a nimal. (Agriculture+Hor ticulture+Livesto ck) | 607 .00 | 632 | 51.00 | 57.9 | 170 | 41.3 |

| S N | Farming System | Technolog mpact of c | Amwakhas gies identified to min constraints shortliste | imize the i d | Nandpur Dashahwa Technologies identified to minimize the i mpact of constraints shortlisted | | | |
|--------|---|---|--|---|---|---|---|--|
| 0 | Typologies* | Climate co nstraints | Resource /Crop/ Animal constrai nts | Other co nstraints | Climate co nstraints | Resource /Crop/A nimal constraints | Other co nstraints | |
| 1 | FST-1 Flood Prone witho ut animal (Agriculture+Hort iculture) | Low Producti on of Paddy Due to Submer ged conditio n Low soil fertility due to flood Due to flood paddy crop damage Freq uently prone of flash flood. | Introducing flood tolerant varieties Green manuring to enhance the soil fertility Growing toria as catch crop to increase productivity in frequently flood Crop diversification with high value vegetables after the withdrawal of flood water. | Use of Paddy (MTU- 7029) against Submerge d condition In-situ growing Dhaincha Short duration variety toria Incom e generation activities(Vegetable s) | Low Producti on of Paddy Due to Submer ged conditio n Low soil fertility due to flood Due to flood Due to flood paddy crop damage Frequent ly prone of flash flood. | Introducing flood tolerant varieties Green manuring to enhance the soil fertility Growing toria as catch crop to increase productivity in frequently flood Crop diversification with high value vegetables after the withdrawal of flood water. | Use of Paddy (MTU- 7029) against Submerge d condition In-situ growing Dhaincha Short duration variety toria Income generation activities(Vegetable s) | |
| 2 | FST-2 Flood Prone with animal. (Agriculture+Live stock) | Due to flood Paddy crop damage Milk producti on is vary low due to rainfall variabili ty and poor health of milch animal Ani mal owners face problem | Demonstratio n of paddy cum fish culture with flood tolerant varieties. To increase the profitability per unit area. Introduction of Berseem as fodder crop. Feeding management & disease control programme in livestock (Total Mixed ration, Mineral block, medicines & disinfectant solution). | Integr ated paddy cum fish culture is a system of producing fish in combinati on with paddy cultivatio n using the same resources in the same unit area. Introd uction of Berseem) as fodder | Due to flood Paddy crop damage Milk producti on is vary low due to rainfall variabili ty and poor health of milch Anima l owners face problem regardin g | Demonstratio n of paddy cum fish culture with flood tolerant varieties.To increase the profitability per unit area. Dintroduction of Berseem as fodder crop. Feeding management & disease control programme in livestock (Total Mixed ration, Mineral block, medicines & disinfectant solution) | 1)Integrat ed paddy cum fish culture is a system of producing fish in combinati on with paddy cultivatio n using the same resources in the same unit area.2)Intr oduction of Berseem as fodder crop.Feedi | |

| | | regardin g unavaila bility of feed and fodder during flood period. | | crop. 3) Feedi ng managem ent & disease control programm e in livestock (Total Mixed ration, Mineral block,med icines & disinfecta nt solution) | unavaila bility of feed and fodder durian flood period. | | ng managem ent & disease control programm e in livestock (Total Mixed ration, Mineral block,med icines & disinfecta nt solution) |
|---|---|--|---|--|--|---|--|
| 3 | FST-3 Irrigated without a nimal (Agriculture+Hort iculture) | Dela yed sowing of wheat due to let harvesti ng of sugarca ne and paddy. Eco nomic loss due to crop damage by flood | Sowing wheat by Zero tillage. Sugarcane planting by trench method to conserve moisture and to minimize the impact of flood. | Sowin g of wheat by zero tillage machine to reduce the cast of cultivatio n.Sowing of wheat 10 to 15 days earlier. Intercr opping to compensa te yield loss sugarcane | Dela yed sowing of wheat due to let harvesti ng of sugarcan e and paddy Eco nomic loss due to crop damage by flood Freq uently prone of flash flood. | Sowing wheat by Zero tillage Sugarcane planting by trench method to conserve moisture and to minimize the impact of flood. Crop diversification with high value vegetables after the withdrawal of flood water. | Sowin g of wheat by zero tillage machine to reduce the cast of cultivatio n.Sowing of wheat 10 to 15 days earlier. Intercr opping to compensa te yield loss Incom e generation activities(V egetables) |
| 4 | FST-4 Irrigated with ani mal. (Agriculture+Hort iculture+Livestoc k) | 1) Inad equate nutrition is one of the factors that frequent ly limit the full utilizati on of the producti ve and reprodu | Use of mineral and vitamins mixture after deworming Improve the fertility and productivity of soil Crop diversification with high value vegetables after the withdrawal of flood water. | Use of mineral and vitamins blend liquid mixture@ 100 ml/day for period of two months after dewormin g Use | 1) Inad equate nutrition is one of the factors that frequent ly limit the full utilizatio n of the producti ve and reproduc tive | Use of mineral and vitamins mixture after deworming Improve the fertility and productivity of soil Crop diversification with high value vegetables after the withdrawal of flood water. | Use of mineral and vitamins blend liquid mixture@ 100 ml/day for period of two months after dewormin g Use |

| | | 1 | | 1 |
|---|-----------|--------------|-----------|--------------|
| | ctive | Bio- | potential | Bio- |
| | potential | Dicompos | of | Dicompos |
| | of | er to | livestoc | er to |
| | livestoc | Improve | k in this | Improve |
| | k in this | the | region | the |
| | region | fertility | 2) Due | fertility |
| | 2) Due | and | to flood | and |
| | to flood | productivi | low soil | productivi |
| | low soil | ty of soil | fertility | ty |
| | fertility | 3) Income | 3) Freq | 3) I |
| | 3) Freq | generation | uently | ncome |
| | uently | activities(V | prone of | generation |
| | prone of | egetables | flash | activities(V |
| | flash | U U | flood | egetables |
| | flood | | | - |
| 1 | | | | 1 |

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 | | Village 1-Amwakhash | | | | Village 2-Nandpur Dashawa | | | | |
|---------|--|--|--|---|-----------|--|---|--|-----------|--|
| S No | FST | NRM | Сгор | Livestoc k | Tot al | NRM | Сгор | Livestock | Tot al | |
| 1 | FST-1 Flood Prone without animal (Agriculture+Hortic ulture) | 1) RCT on Pddy 2)Green manuring | Introdu cing flood tolerant varieties Short duration variety (specify) Toria Income generation n activities (Vegetabl es etc.) | - | 5 | 1) RCT on Pddy 2) Green manuring | Intro ducing flood tolerant varieties Short duration variety (specify Toria Incom e generati on activitie s (Vegeta bles etc.) | _ | 5 | |
| 2 | FST-2 Flood Prone with ani mal. (Agriculture+Livest ock) | 1)Paddy cum fish culture(i ncluding Bund and trench digging and net) 2)Compo site fish culture in | 1)Introd uction of Bersee m as fodder crop. | Year round fodder productio n strategies (Napier grass,Ber seem grass,Sud an grass) 2)Feedin | 5 | 1)Paddy cum fish culture(i ncluding Bund and trench digging and net) 2)Compo site fish culture in | 1)Introd uction of Berseem as fodder crop. | Year round fodder production strategies (Napier grass,Berseem grass,Sudan grass) 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 | Intercr opping of potato in autumn sugarca ne. Intercr opping of cowpea in spring sugarca ne Intercr opping of onion in autumn sugarca ne. Intercr opping of onion 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. | (Vegeta | |
|--|------|--|------|---------|--|
| | | | | bles | |
| | | | | etc.) | |

| SI. | Farming System Typologies | | Village | 1-Amwakha | ish | Village 2-Nandpur Dashawa | | | |
|-----|--|-------------------|----------------------|---------------|-------|---------------------------|----------------------------------|--------------|-------|
| No. | Farming System Typologies | NRM | Crop | Livestock | Total | NRM | Crop | Livestock | Total |
| 1 | FST- 1 Flood Prone without ani mal (Agriculture+Horticulture) | 1)50 2)12 | 1)40 2)30 3)25 | - | 157 | 1)25 2)8 | 1)1 0 2)1 0 3)2 5 | - | 78 |
| 2 | FST- 2 Flood Prone with animal. (Agriculture+Livestock) | 1) 1 0 2) 4 | 1) 2 0 | 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) 5 0 | 1) 6 0 | - | 110 | 1)30 | 1)2 0 | - | 50 |
| 4 | FST- 4 Irrigated with animal. (Agriculture+Horticulture+ Livestock) | 1)15 2)15 | 1)90 | 1)15 | 135 | 1) 10 2) 5 | 1)6 0 | 1)5 | 80 |

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

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

| G | Forming Sys | | Village 1-A | Amwakhash | | Village 2-Nandpur Dashawa | | | | |
|-------------|---|--|--|---|--------------------------------|---|--|---|--------------------------------|--|
| 5 N 0 | tem Typolog ies | Climate R esilient Te chnology | Converge nce with Scheme | No. of farmer s proposed to be involved | Area to be cover ed (ha) | Climate R esilient Te chnology | Converge nce with Scheme | No. of farmer s proposed to be involved | Area to be cover ed (ha) | |
| 1 | FST-1 Flood Pron e without a nimal (Agricultur e+Horticult ure) | 1) Introd ucing flood tolerant varieties 2)Demo nstration HVY of Toria- Uttara compens ate losse during | Use of Paddy (MTU- 7029) against Submerged condition 2) Crop diversificati on by introducing HVY of Toria Uttara to | 1)53 2)15 | 1)12 2)3.5 | 1)Introd ucing flood tolerant varieties 2)Demo nstration HVY of Toria - Uttara compens ate losse during kharif | 1)Use of Paddy (MTU- 7029) against Submerge d condition 2)Crop diversifica tion by introducin g HVY of Toria- | 1)12 2)10 | 1)6.6 2)2 | |

| | | kharif crop | compensate losse during <i>kharif</i> crop | | | crop | Uttara compensa te losse during kharif crop | | |
|---|---|---|--|--------------|--------------|---|--|-------------|----------------|
| 2 | FST-2 Flood Pron e with anim al. (Agricultur e+Livestoc k) | 1)Use of green fodder (Bersee m) | 1)Low milk producti on in Dairy animals | 1)30 | 1)1 | 1)Use of green fodder (Bersee m) | 1)Low milk producti on in Dairy animals | 1)10 | 1)0.5 |
| | FST-3 Irrigated wi thout anim al (Agricultur e+Horticult ure) | Whe at sowing by Zero tillage & line sowing Dem onstratio n of intercrop ping Potato with sugarcan e via trench method | Del ayed sowing of wheat due to let harvesti ng of sugarca ne and paddy inter croppin g to compen sate yield loss of sugarca ne | 1)67 2)16 | 1)9.4 2)2 | Whe at sowing by Zero tillage & line sowing Dem onstratio n of intercrop ping Potato with sugarcan e via trench method | Del ayed sowing of wheat due to let harvesti ng of sugarca ne and paddy inter croppin g to compen sate yield loss of sugarca ne | 1)20 2)6 | 1)2.6 2)0.5 |
| 4 | FST-4 Irrigated wi th animal. (Agricultur e+Horticult ure+Livest ock) | 1)Miner al Mixture and Deworm er | 1)Low milk producti on in Dairy animals | 1)15 | 1)15 | 1)Miner al Mixture and Deworm er | 1)Low milk producti on in Dairy animals | 1)5 | 1)5 |

Activities and Cost

7. NRM Interventions;

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

| SI | | | Unit cost | | Coverage Proposed | Total amount | |
|-----|-------------------|----------------|-----------|---------------|---|--------------|--|
| No. | Village 1, 2 | Intervention | Rs/ha A | Area (ha)B | No. of farm households proposed to be involving C | (Rs)A x 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 | |

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

8.Crop Interventions;

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

| Sl | 1 | Intervention | Descripti | ion | Cost | Coverag | e Proposed | Total amo |
|-----|-----------------------|---|-----------|---|---------------|---------|------------------------|-----------|
| No. | ills e 1 | | Crop | Variety (s) | (R s/ | Area | No. of farm households | unt (Rs) |
| | 2 3 7 | | | | ha)A | (ha) B | to be involved C | A x C |
| 1. | vakhas | Introducing flood tolerant varieties | Paddy | MTU7029,Rajshree, S warna sub1, Sudha, Vai dhehi, | 5000 | 8 | 40 | 40000 |
| | Amv | 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 | Villa | Intervention | Description | | Cost | Covera | age Proposed | Total amou |
|----|-------|----------------------------|-------------|----------|---------|--------|------------------------|------------|
| No | ge 1, | | Crop | Variety | (Rs/ha) | Area | No. of farm households | nt |
| • | 2 | | - | (s) | Α | (ha)B | to be involved C | (Rs)A x C |
| | | Intercropping of Potato in | Sugarcane w | Kufari | 3250 | 2 | 20 | 65000 |
| | | Autumn sugarcane. | ith Potato | Sindhuri | 0 | | | |
| | | Intercropping of Cow pea | Sugarcane w | Kashi Ka | 1500 | 1 | 10 | 15000 |
| | | in Spring sugarcane. | ith Cow pea | nchan | 0 | | | |
| | | Intercropping of Onion in | Sugarcane w | NHRDF | 3000 | 1 | 10 | 30000 |
| | | Spring sugarcane. | ith Onion | RED-3&4 | 0 | | | |
| | | Intercropping of Green gr | Sugarcane | Virat | 3750 | 1.5 | 20 | 5625 |
| | | am in Spring sugarcane. | with | | | | | |
| | | | Green gram | | | | | |
| | | Sub Total 9.1. | | | 8125 | 5.5 | 60 | 115625.00 |
| | | | | | 0 | | | |

| Sl | | Intervention | Description | | Cost | Covera | Total amou | |
|----|-----|----------------------------|---------------|-----------|----------|--------|----------------------|--------------|
| | | | Crop | Variety | (Rs/ha)A | Area | No. of farm househol | nt (Rs)A x C |
| Ν | | | | (s) | | (ha)B | ds to be involved C | |
| 0. | | Intercropping of Potato in | Sugarcane wit | Kufari Si | 32500 | 0.5 | 5 | 16250 |
| | 1,2 | Autumn sugarcane. | h Potato | ndhuri | | | | |
| | ee. | Intercropping of Cow pea | Sugarcane wit | Kashi | 15000 | 0.5 | 5 | 7500 |
| | lla | in Spring sugarcane. | h Cow pea | Kanchan | | | | |
| | Vi | Intercropping of Onionin | Sugarcane | NHRD | 30000 | 0.5 | 5 | 15000 |
| | | Spring sugarcane. | with Onion | F RED- | | | | |
| | | | | 3&4 | | | | |
| | | Intercropping of Green gr | Sugarcane wit | Virat | 3750 | 0.5 | 5 | 1875 |
| | | am in Spring sugarcane. | hGreen gram | | | | | |
| | | Sub Total 9.1. | | | 81250 | 2 | 20 | 40625.00 |

9.Crop Interventions;

| Sl | village | Intervention | Descripti | on | Cost | Coverag | e Proposed | Total amount |
|-----|----------|-------------------------|-----------|---------|-------|---------|----------------------|--------------|
| No. | | | Crop | Variety | (Rs/h | Area | No. of farm househol | (Rs)A x C |
| | | | | (s) | a) A | (ha)B | ds to be involved C | |
| | Amwakhas | Direct seeding rice | Paddy | - | 7500 | 8 | 40 | 60000 |
| | | (DSR) Drum seeder | | | | | | |
| | | Income generation activ | vermin | - | 4000 | 10 | 10 | 40000 |
| | | ities (vermin compost) | compost | | | | | |
| | | Income generation activ | Vegeta | - | 200 | 1 | 200 | 20000 |
| | | ities (Vegetables etc.) | bles | | | | | |
| | Nanadpur | Direct seeding rice | Paddy | - | 7500 | 2 | 25 | 15000 |
| | Dashahwa | (DSR) Drum seeder | | | | | | |
| | | Income generation activ | vermin | - | 4000 | 5 | 5 | 20000 |
| | | ities (vermin compost) | compost | | | | | |
| | | Income generation activ | Vegeta | - | 200 | 1 | 200 | 20000 |
| | | ities (Vegetables etc.) | bles | | | | | |
| | | 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 i ntervention (Rs.) | No. of farm h ouseholds to be involved | Total am ount (Rs/ha) | Remar ks |
|--------|--|--|--|-----------------------------|-------------|
| 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 livesto ck (Total Mixed Ration, Mineral block, medicines & disinfect ant 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 Ban k | Seed of crop and variety/ Fod der crop/ variety | Quantity of seed/ fodder produced/ storage (t) | Unit cost (Rs.) | No. of farmers involved | Amou nt (Rs.) | Rem arks |
|----------|--------------------------------------|--|--|-----------------------|-------------------------------|---------------------|-------------|
| 1 | Community seeds product ion of paddy | Paddy MTU 7029, BPT 5204, | 5 | 2000 | 5 | 10000 | 10 |
| 2 | Community seeds producti on of wheat | Wheat-HD-2967,DBW-252 | 10 | 2000 | 5 | 10000 | 10 |
| 3 | Community fodder bank | Wheat straw, Berseem Green fo dder | 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 | 30000.00 |

12. Capacity Building & Other extension activities **12.1.** Training programmes proposed for the year

| Theme | Title of training programme | Proposed m onth | No. of partici pants | 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- | Preparation of vermi-compost | July | 40 | 4000 |
| compost | | | | |
| 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 | 16000.00 |

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 | Field Day on Sugarcane | November | 100 | 10000 |
| cane | | | | |
| Field Day on Potat | Field Day on Potato with sugarca | March | 50 | 7500 |
| 0 | ne inter cropping | | | |
| Sub-total 12.2. | | | 250 | 32500.00 |

13.1 Publications

| Publication | Nature of Publication (Book/Bulletin/ | Proposed during | No. of | Cost (Rs.) |
|-----------------|---------------------------------------|-----------------|--------|------------|
| | Brochure etc.) | the month | Copies | |
| 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

| | Farming System Typologies* | | Karuata u | rf Nebuiya | Ledwa | | | |
|---------|---|----|--------------------------------|--|--------------|--------------------------------|--|--|
| S No | | | 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

| G | | Laxmipur Mahant | | | | | |
|----|---|-----------------|-----------------------------|---|--|--|--|
| No | Farming System Typologies* | 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

| | Forming | Karuata urf N | lebuiya | | Ledwa | | | |
|---------|---|---|---|---|---|--|--|--|
| S No | System Typologies* | 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 arieties, 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 | Forming System | Laxmipur Mahant | | | | | |
|----|---|---|---|--|--|--|--|
| No | Typologies* | 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

| | Farmina | | Karuata urf Nebui | ya | Ledwa | | | |
|---------|--|---|---|---|---|---|---|--|
| S No | Farming System Typologies* | Climate constraints | Climate constraints Resource /Crop/Animal constraints | | Climate constraints | Resource /Crop/Animal constraints | Other constraints | |
| 1 | Flood Irrigated without Animal- (Ag.+Hort) | use of Submerg ence 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 Submergen ce 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 Submerg ence 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 | varieties | diversification, support of Govt. schemes with |
|--|-----------------------|--|-----------|--|
| | | line departments | | line departments |

| I | Identify Promising resilient technologies for addressing the constraints | | | | | | | | | |
|---------|--|---|---|--|--|--|--|--|--|--|
| G | | Laxmipur Mahant | | | | | | | | |
| S No | Farming System Typologies* | 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 | Farming System | Karuata urf Nebuiya | | | | | | | |
|----|--|---|---|---|-------|--|--|--|--|
| No | Typologies | NRM | Сгор | Livestock | Total | | | | |
| 1 | Flood Irrigated without Animal- (Ag.+Hort) | 1.InsituResiduemanagement2.RCT3.Greenmanuring | Submergence tolerant rice variety Heat tolerant wheat variety Early sowing of wheat. Increases in no of irrigation Crop diversification Short duration crops | - | 6 | | | | |
| 2 | Flood Irrigated with Animal (Ag.+Live Stock) | Same as above | Same as above | Supplementation of mineral mixture after deworming Green fodder production Breed improvement Vaccination | 10 | | | | |
| 3 | Flood Irrigated with Animal- (Ag.+Hort.+Live Stock) | Same as above | Same as above | Supplementation of mineral mixture after deworming Green fodder production Breed improvement Vaccination | 10 | | | | |

Categorization of the identified technologies in to NRM, Crops and Livestock in each of the village for taking up

| S | Farming System | Ledwa | | | |
|----|--|---|---|---|-------|
| No | Typologies | NRM | Crop | Livestock | Total |
| 1 | Flood Irrigated without Animal- (Ag.+Hort) | 1.InsituResiduemanagement2.RCT3.Greenmanuring | Submergence tolerant rice variety Heat tolerant wheat variety Early sowing of wheat. Increases in no of irrigation Crop diversification Short duration crops | _ | 6 |
| 2 | Flood Irrigated with Animal (Ag.+Live Stock) | Same as above | Same as above | Supplementation of mineral mixture after deworming Green fodder production Breed improvement Vaccination | 10 |
| 3 | Flood Irrigated with Animal- (Ag.+Hort. +Live Stock) | Same as above | Same as above | Supplementation of mineral mixture after deworming Green fodder production Breed improvement Vaccination | 10 |

demonstrations during 2023-24

Categorization of the identified technologies in to NRM, Crops and Livestock in each of the village for taking

up demonstrations during 2023-24

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

| S No | Farming System Typologies | Karuata urf Nebuiya | | | | Ledwa | | | |
|---------|--|----------------------|--|------------------------------|-------|----------------------|--|------------------------------|-------|
| No | rarning System Typologies | 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 |

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

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

| S No | Forming System Typologies | Laxmipur Mahant | | | | | |
|-------|--|----------------------|--|--------------------------|-------|--|--|
| 5 110 | Farming System Typologies | 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)

Г

| S Farming Typologi 1 Flood I Anim Flood | | Karuata urf Nebuiya | | | |
|---|--|--|---|--|-------------------------|
| S No | Farming System Typologies | 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) | Green manuring Flood tolerant varieties RCT | Agriculture Department CSISA | 1. 100 2. 40 | 1. 40 2. 16 |
| 2 | Flood Irrigated with Animal (Ag.+Live Stock) | Green manuring Vaccination 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- | 2.Vaccination | ASCAD & FMDEP (AH & | 2. | 30 | 2. | 30 |
|------------------------|---------------------|-------------------------|----|----|----|----|
| (Ag.+Hort.+Live Stock) | 3.Breed improvement | Dairy Deptt.) | 3. | 35 | 3. | 35 |
| - | _ | RGM (AH & Dairy Deptt.) | | | | |

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

| | | | Ledwa | | |
|---------|---|--|--|--|--|
| S No | FST | 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) | Green manuring Flood tolerant varieties RCT | Agriculture Department CSISA | 1. 50 2. 20 | $ \begin{array}{cccc} 1. & 2 \\ & 0 \\ 2. & 1 \\ & 0 \end{array} $ |
| 2 | Flood Irrigated with Animal (Ag.+Live Stock) | Green manuring Vaccination Breed improvement | Agriculture Department ASCAD & FMDEP (AH & Dairy Deptt.) RGM (AH & Dairy Deptt.) | 1. 60 2. 20 3. 20 | $ \begin{array}{cccccccccccccccccccccccccccccccccccc$ |
| 3 | Flood Irrigated with Animal(Ag.+Hort.+Live Stock) | 1.Green manuring 2.Vaccination 3.Breed improvement | Agriculture Department ASCAD & FMDEP (AH & Dairy Deptt.) RGM (AH & Dairy Deptt.) | 1. 50 2. 25 3. 25 | $ \begin{array}{cccccccccccccccccccccccccccccccccccc$ |

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

| | FST | Laxmipur Mahant | Laxmipur Mahant | | | | | | | | | |
|---------|---|--|--|--|------------------------------|--|--|--|--|--|--|--|
| S No | | 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 | Agriculture Department 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 | Agriculture Department 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) | 1.Green manuring 2.Vaccination 3.Breed improvement | Agriculture Department 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 1, 2, 3, etc. | Interventi on | Dimensio ns | 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 | Village 1, | Intervention | Unit cost | Coverag | e Proposed | Total amount |
|-----|-------------|------------------------------|-----------|---------|---------------------------|--------------|
| No. | 2, 3, etc. | | Rs/ha A | Area | No. of farm households | (Rs) A x C |
| | | | | (ha) B | proposed to be involved C | |
| 1 | | 1. Sowing with supper seeder | 7500 | 10 | 30 | 75000 |
| | Karuata urf | 2.Ridge bed sowing | 8000 | 5 | 30 | 40000 |
| | Nebuiya | 3.DSR | 7500 | 10 | 30 | 75000 |
| | | 4.Green Manuring | 4000 | 10 | 20 | 40000 |
| 2 | Ledwa | 1. Sowing with supper seeder | 7500 | 10 | 30 | 75000 |
| | | 2.Ridge bed sowing | 8000 | 5 | 30 | 40000 |
| | | 3.DSR | 7500 | 10 | 30 | 75000 |
| | | 4.Green Manuring | 4000 | 10 | 20 | 40000 |
| 3 | | 1. Sowing with supper seeder | 7500 | 10 | 30 | 75000 |
| | Laxmipur | 2.Ridge bed sowing | 8000 | 5 | 30 | 40000 |
| | Mahant | 3.DSR | 7500 | 10 | 30 | 75000 |
| | | 4.Green Manuring | 4000 | 10 | 20 | 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 | Village | Intervention | Descripti | on | | Cost | Cover | age Proposed | | Total |
|-----|------------|----------------------|-----------|---------------|------|---------|-------|--------------|-------|---------------|
| No. | 1,2,3 etc. | | Crop | Variety (s) | | (Rs/ha) | Area | No. of | farm | amount |
| | | | | | | Α | (ha)B | households | to be | (R s) |
| | | | | | | | | involved C | | A x C |
| 1 | | Submergence tolerant | Rice | Sambha | sub- | 3500 | 30 | 60 | | 105000 |
| | | varieties | Wheat | 1/Swarna S-1 | | 3500 | 25 | 60 | | 87500 |
| | Karuata | Heat stress tolerant | Cowpea | DBW 187 | | 4000 | 2 | 25 | | 8000 |
| | urf | varieties | Lentil | Kashi kanchan | | 5000 | 2 | 25 | | 10000 |
| | Nebuiya | Short duration crops | Barseem | IPL315 | | 4000 | 2 | 20 | | 8000 |
| | | Legume crops | | VL-10 | | | | | | |
| | | Green fodder | | | | | | | | |
| 2 | Ledwa | Submergence | Rice | Sambha | sub- | 3500 | 30 | 60 | | 105000 |
| | | tolerant varieties | Wheat | 1/Swarna S-1 | | 3500 | 25 | 60 | | 87500 |
| | | Heat stress tolerant | Cowpea | DBW 187 | | 4000 | 2 | 25 | | 8000 |
| | | varieties | Lentil | Kashi kanchan | | 5000 | 2 | 25 | | 10000 |
| | | Short duration crops | Barseem | IPL315 | | 4000 | 2 | 20 | | 8000 |
| | | Legume crops | | VL-10 | | | | | | |
| | | Green fodder | | | | | | | | |
| 3 | Lorminur | Submergence | Rice | Sambha | sub- | 3500 | 30 | 60 | | 105000 |
| | Mahant | tolerant varieties | Wheat | 1/Swarna S-1 | | 3500 | 25 | 60 | | 87500 |
| | Manant | Heat stress tolerant | Cowpea | DBW 187 | | 4000 | 2 | 25 | | 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 | | Intervention | Descripti | ion | Cost | Covera | Coverage Proposed | | |
|-----|------------|------------------------------------|-----------|-------------|---------|--------|-------------------|------------|--|
| No. | ge | | Crop | Variety's | (Rs/ha) | Area | No. of farm | amount | |
| | illa | | - | - | Α | (ha) B | households to be | (Rs) A x C | |
| | įv | | | | | | involved C | | |
| | £ | Sub mergence tolerant rice variety | Rice | Sambha sub- | 3500 | 10 | 25 | 35000 | |
| | n | DSR | Wheat | 1 | | | | | |
| | | Early sowing wheat | Mustard | DBW-187 | 3500 | 10 | 30 | 35000 | |
| | a | Line sowing + Thinning | Lentil | RH-725 | | | 10 | | |
| | uiy | Line sowing + Seed treatment | Cowpea | IPL-315 | 5000 | 5 | 10 | 25000 | |
| | eb | Sowing on bunds | | Kashi | 6000 | 5 | 5 | 30000 | |
| - | ЧZ | Line sowing + PSB | | Kanchan | 8000 | 2 | | 16000 | |
| 2 | | Sub mergence tolerant rice variety | Rice | Sambha sub- | 3500 | 10 | 25 | 35000 | |
| | | DSR | Wheat | 1 | | | | | |
| | | Early sowing wheat | Mustard | DBW-187 | 3500 | 10 | 30 | 35000 | |
| | | Line sowing + Thinning | Lentil | RH-725 | | | | | |
| | wa | Line sowing + Seed treatment | Cowpea | IPL-315 | 5000 | 5 | 10 | 25000 | |
| | ed | Sowing on bunds | | Kashi | 6000 | 5 | 10 | 30000 | |
| | Γ | Line sowing + PSB | | Kanchan | 8000 | 2 | 5 | 16000 | |
| 3 | | Sub mergence tolerant rice variety | Rice | Sambha sub- | 3500 | 10 | 25 | 35000 | |
| | | DSR | Wheat | 1 | | | | | |
| | | Early sowing wheat | Mustard | DBW-187 | 3500 | 10 | 30 | 35000 | |
| | t our | Line sowing + Thinning | Lentil | RH-725 | | | | | |
| | nif | Line sowing + Seed treatment | Cowpea | IPL-315 | 5000 | 5 | 10 | 25000 | |
| | axı 1ah | Sowing on bunds | | Kashi | 6000 | 5 | 10 | 30000 | |
| | Ч N | Line sowing + PSB | | Kanchan | 8000 | 2 | 5 | 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..

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

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

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

| Theme | Title of training programme | Proposed | No. of | Cost | |
|-----------------------|--|----------|--------|-------|--|
| | | | | | |
| 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 | June | 30 | 5000 | |
| | affected area | | | | |
| 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 | Fodder and feed management for milch animals in flood | July | 30 | 5000 | |
| management | prone village | | | | |
| Disease Management in | Vaccination in Livestock after rainy season | August | 30 | 5000 | |
| Livestock | | | | | |
| 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 | |

12.1. Training programmes proposed for the year

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

| Theme | Title of Programme | Proposed | No. of | Cost |
|----------------------------|--|-----------|--------------|----------------|
| | | month | participants | (Rs.) |
| DSR | Cultivation of Paddy through DSR | September | 50 | 10000 |
| RCT | Cultivation of wheat through Super seeder/ Zero | March | 50 | 10000 |
| | Till Technique | | | |
| 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 | March | 50 | 10000 |
| | Cowpea | | | |
| Nutrition Management | Use and importance area specific mineral mixture | October | 50 | 10000 |
| | after deworming in live stock | | | |
| 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 | Proposed during | No. of | ost |
|---|--------------------------------|-----------------|--------|----------------|
| | (Book/Bulletin/ Brochure etc.) | the month | Copies | (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.,)

| SI. 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 animal Vaccination | 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

| Villa ge Nam e | Farming System typology | Constraints | Modules | Solution |
|---------------------------------------|-------------------------------|--|-------------------------------|--|
| ∕ illage – I nhachhama u | | | NRM | Laser land leveling and bunding Green manuring Plantation under social forestry +including MP trees (Subabool) |
| Village – II Ainthu Cl | 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 | 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) |
| illage – III Kandai | | natural content uptake Limited cropping options of agricultural crops Poor production potential per unit area | 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 |
| Ň | | | 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 | | High ph 8.5-9.2 Traditional practice of crop cultivation. No use of salt | NRM | Laser land leveling and bunding Green manuring Rice-residue management Plantation under social forestry |
| Village – II Ainthu | Agriculture + Horticulture | tolerant specific crop varieties. Lack of diversification Limited cropping options of agricultural & Horticultural crops Unaware about resource conservation technology | 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 |

| | \blacktriangleright | Poor productivity | | | crop (Soil test Based) |
|--------------------------------|-----------------------|-------------------|------------------------------------|-----|---|
| | | | Livesto ck and fisherie s | | - |
| Village – III Kandai | | | Institutional | AAA | 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 |
|-----------------------------------|----------------------------|--|-------------------------|---|
| | | | NRM | Laser land leveling and bunding Green manuring Rice-residue manageme Plantation under social forestry +including MP trees (Subabool) |
| Village – I Chhachhamau | tock | High 8.5-9.2 Traditional practices of crop cultivation. No use of salt tolerant specific crop varieties. Limited cropping options Unavailability of proper | p 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, |
| | re + Horticulture + Livest | 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 | Cro | 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 | Agricultu | | 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) | | | | | | | | |
|---|---|-----|--|--|--|--|--|--|
| Interven | 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 (M | ustard – 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 | Paddy | 10 | For enhancement in yield BCR and improvement of sodic land | | | | | |
| (Soil Test Basis) | 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 | | | | | |
| Tota | 1 | 375 | | | | | | |

| LIVESTOCK / FISHERIES UNITS | | | | | | | |
|---|--------------|--|--|--|--|--|--|
| Intervention | Area in Acre | Remarks | | | | | |
| | (Target) | | | | | | |
| 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 | 5/60) | 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-58/6 | 0) | 100 | Production dynamics of Salt tolerant/Stress tolerant varieties | | | |
| Salt tolerant variety (Chick Pea - Karna 1) | al Chana- | 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 | | | | | | |
| Fenugreek | 10 | For other of the additional income in form for its | | | | | |
| Beetroot | 10 | | | | | | |
| Chrysanthemum | 10 | & Nutritional security | | | | | |
| Marry gold | 10 | Nutritional security | | | | | |
| Calendula | 10 | | | | | | |
| Total | 60 | | | | | | |

| (Agriculture + Horticulture + Livestock) | | | | | | | |
|--|---------------------|-----------------------|--|--|--|--|--|
| | CROP PRODUCTION | | | | | | |
| Interven | tion | Area in Acre (Target) | Remarks | | | | |
| Salt tolerant variety (Padd | y – CSR-36/43/60) | 100 | Production dynamics of Salt tolerant/Stress | | | | |
| | | | tolerant varieties | | | | |
| Salt tolerant variety (Wheat | t – KRL-283) | 70 | Production dynamics of Salt tolerant/Stress | | | | |
| - | | | tolerant varieties | | | | |
| Salt tolerant variety (Musta | rd – CS-58/60) | 100 | Production dynamics of Salt tolerant/Stress | | | | |
| - | | | tolerant varieties | | | | |
| Salt tolerant variety (Chick | Pea - Karnal Chana- | 10 | Production dynamics of Salt tolerant/Stress | | | | |
| 1) | | | tolerant varieties | | | | |
| Nutrient Management | Paddy | 10 | For enhancement in yield BCR and improvement | | | | |
| (Soil Test Basis) | | | 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 | | | | | |

AES – III

| LIVESTOCK / FISHERIES UNITS | | | | | | |
|----------------------------------|-----|--------------|--|--|--|--|
| Intervention | | Area in Acre | Remarks | | | |
| | | (Target) | | | | |
| Composite fish culture | | 10 | For enhance the additional income in farm family | | | |
| Fodder Production For Milch Anin | mal | 20 | To provide the green fodder to animals round the year for health | | | |
| Cooper based Mineral mixture der | nos | 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 | | | | |
| HORTI | | | ICULTURE UNITS | | | |
| Intervention | | No. of units | Remarks | | | |
| Spinach | | 10 | | | | |
| Fenugreek | | 10 | | | | |
| Beetroot | | 10 | For onhance the additional income in form family | | | |
| 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 a | Details about the vinages 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 | | | | | |

Details about the villages involved in the programme

Predominant Farming systems typologies of the NICRA villages (area)

| | Villa | ge – Bari M | Iahewa | Village- Semari | | |
|--|-------|-------------|----------|-----------------|---------|----------|
| FST (Farming system Typologies identified | Area | No of | % | Area | No of | % |
| | (ha) | farmers | coverage | (ha) | 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

| SI | 50 | Village 1 | | | Village 2 | Village -3 | | |
|----|---------------------------------|--------------------|--|--|--|--|--|---|
| No | Farmin oN | | 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 | Farming System All villages: Technologies identified to minimise the impact of constraints shortlisted | | | | | | | | |
|----|--|--|---|--|--|--|--|--|--|
| No | Typologies* | Climate constraints | Resource /Crop/Animal constraints | | | | | | |
| 1 | Rainfed+Animal | Deep Summer ploughing, | Application of drought tolerant cultivars pulses and oilseeds | | | | | | |

| | | Bunding | Application mineral supplement for animals |
|---|--------------------|-----------------------------|--|
| | | • Establishment of farmpond | |
| | | NADEP & Vermi compost | |
| | Irrigated with | Panavation of dug open | • Application Heat tolerant cultivars of cereals and pulses |
| 2 | animal | | Application mineral supplement for animals |
| | (Agri+Animal) | wens | • Round the year fodder production (Napiar grass, M.P. Chari, barseem etc) |
| | Invigoted with | | • Application Heat tolerant cultivars of cereals and pulses |
| 2 | animal (A grid | Renovation of dug open | Application mineral supplement for animals |
| 3 | horti+Livestock's) | wells | • 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. | Intervention | Dimensions | No. of | No. of farm households | Cost to |
|------------|-----------------------------|------------|--------|-------------------------|--------------|
| No | | | units | proposed to be involved | 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 | | | • | |

| Activities and Cost-1(NVI intervention | | | | | | | | | |
|--|-----------------------|--|-----------|--------|---------------------------|------------|--|--|--|
| SI. | Village 1, 2, 3, etc. | Intervention | Unit cost | Covera | Coverage Proposed | | | | |
| No. | | | Rs/ha | Area | No. of farm households | amount | | | |
| | | | Α | (ha) | proposed to be involved B | (Rs) A x 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

| S1. | 3 a | Intervention | Description | 1 | Cost | Covera | ge Proposed | Total |
|-----|------------|--------------------------|-------------|-------------|---------|--------|------------------------|--------|
| No. | /ill ge | | Crop | Variety (s) | (Rs/ha) | Area | No. of farm households | amount |
| | 1 | | | | | (ha) | to be involved | (Rs) |
| 1 | | Lack of suitable Drought | Green | Virat | 9000 | 5 | 15 | 45000 |
| | | Tolerant variety | Gram | | | | | |
| 2 | | Lack of suitable Drought | Paddy | Shusk | 5000 | 30 | 60 | 150000 |
| | | Tolerant variety | | Samrat | | | | |
| 3 | | Lack of suitable heat | Chick | RVG-202 | 9000 | 20 | 50 | 18000 |
| | | Tolerant variety | pea | | | | | |
| 4 | | Lack of suitable heat | Field pea | IPFD10- | 9000 | 20 | 50 | 18000 |
| | | Tolerant variety | | 12/4-9 | | | | |
| 5 | age | Lack of suitable heat | Mustard | RH- | 6000 | 20 | 50 | 12000 |
| | 71117 | Tolerant variety | | 749/406 | | | | |
| 6 | | Lack of suitable heat | Wheat | Raj-HD- | 5000 | 100 | 250 | 500000 |
| | 'R' | Tolerant variety | | 2888 | | | | |
| 7 | Ĭ | high value vegetables | Broccoli | Titanic | 20000 | 2 | 20 | 40000 |
| 8 | II I | Lack of suitable heat | Lentil | IPL-316 | 9000 | 20 | 50 | 180000 |
| | A | Tolerant variety | | | | | | |

FST Wise:- livestock & Fisheries interventions

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

Livestock & Fisheries interventions

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

FST Wise:- Livestock & Fisheries interventions

| Feed demonstrations for c | rop residue | management / | / stress | management: | silage | / feed | blocks/ | mineral | mixture | (MM) |
|---------------------------|-------------|--------------|----------|-------------|--------|--------|---------|---------|---------|------|
| blocks / feed enrichment | _ | _ | | - | _ | | | | | |

| Details of feed | Unit cost of | No. of | Total amount | Remarks (purpose of intervention & No. of |
|--------------------|--------------|-----------------|--------------|--|
| demonstrations | demo (Rs) | demos | (Rs/ha) | farmers covered) |
| Silage demos | 1500/- | 20 | 30000/- | To improve the productivity of milking animals |
| ed 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 | Unit cost of | Cost to | Farmer's | No. of | Total amount | No. of farmers | Remarks (purpose of |
|-------------------------------|--------------|--------------|------------|--------|---------------|----------------|------------------------------|
| improvement* | demo (Rs) | project (Rs) | share (Rs) | demos | (R s) | covered | intervention) |
| Poultry Shelter for | 10000 | 5000 | 5000 | 05 | 25000 | 05 | To improve the productivity |
| 50 layer birds @ | | | | | | | of poultry system and income |
| $25 \text{ ft}^2/\text{bird}$ | | | | | | | generation of farmers |
| 2.5 R / 6hd | | | | | | | 05 farmers |
| Sub-total | | | | 05 | 25000/- | 05 | |
| | | | | | | | |

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

Capacity Building & Training Programmes

| Theme | Title of training course | Proposed | No. of | Cost to |
|----------|--|-----------|--------------|---------------|
| | | month | participants | 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 |
| СР | 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 |
| СР | 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 |
| СР | 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 |
| СР | Post-harvest management of Rabi crops | March | 30 | 3000 |
| СР | Commercial seed production of Wheat | March | 30 | 3000 |
| Sub-tota | d | | 570 | 57000/- |

Activities and Costs

Non-recurring contingencies- Equipment

| <i>S. No.</i> | 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 | |

| 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. | Grand total (Rs.) | | | | | |

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

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

| S | Farming System | Village 1 | | | Village 2 | | | |
|----|---|--------------|----------------|----------------------------------|-----------|----------------|-------------------------------|--|
| No | Typologies* | Area (ha) | No. of farmers | o. of % coverage of the typology | | No. of farmers | % coverage of the typology | |
| | | | (approx.) | (area in the village) | | (approx.) | (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 | Cha | ndo | Majha | | |
|------|---|------------------------|--|--------------------------------------|--|--|
| | Typologies* | 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) | ated with animal Drought, Heat Crop+animal) wave | | 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 |

| G | Farming | | CHANDO | | | | MAJHA | | |
|-----------|--|--|---|-----------|-------|--|---|-----------|-------|
| SI. No | System Typologie S | NRM | Сгор | Livestock | Total | NRM | Сгор | Livestock | Total |
| 1 | Irrigated without animal (Crop+ horti) | 1)Residue management 2)RCT(So wing of wheat by super seeder and sowing of paddy by DSR) 3)Gree n Manuri ng | Short duration Rice Varities Aromatic Rice Varieties Aromatic Rice Varieties(Pusa NarendrKala Namak-1) High Yielding Varieties (DBW303, DBW 187) 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 Seed treatment in cerealsand pulses. | - | 8 | 1)Residue management 2)RCT (Sow ing of wheat by super seeder and sowing of paddy byDSR) 3)Green Manuri ng | Short duration Rice Varities Aromatic Rice Aromatic Rice Varieties (PusaNarendr Kala Namak-1) High Yielding Varieties (DBW303, DBW 187) 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 . Seed treatment in cereals andpulses. | _ | 8 |

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

| 3 | Irri gat ed with animal (Crop+ animal) | 1)Residue managem ent 2)RCT(So wing of wheat by super seeder and sowing of paddy by DSR) 3)Green Manuring | Short duration Rice Varities Aromatic Rice Varieties(Pu sa Narendr Kala Namak-1) High Yielding Varieties (DBW303, DBW 187) 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 . Seed treatment in cerealcand | . 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 | Irrigat ed with animal (Crop+ animal) | 1)Residue managem ent 2)RCT(So wing 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 yea (Barseem, ,Oat and HybridNapier Grass Mineral mixture 8. Vaccination 9. Deworming Awareness on Alfor breed improvemen 1. Up gradation of Desi goat breed . Back yard poultry |
|---|---|---|--|--|-----|---|--|--|--|
| | | | in cerealsand pulses. | | | | | | |

| 4 Irrig at ed with ou t ani mal (Cro p) | 1)Residue managem ent 2)RCT(So wing of wheat by super seeder and sowing of paddy by DSR) 3)Green Manuring | Short duration RiceVarities Aromatic Rice Varieties(Pusa NarendrKala Namak-1) High Yielding Varieties(DBW303, DBW 187) 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 . Seed treatment in cerealsand pulses | - | 5 | Irrigate d with animal (Crop+ animal) | 1)Residue management 2)RCT (Sowi ng of wheatby super seeder and sowing of paddy by DSR) 3)Green Mannuring | Short duration Rice Varities Aromatic Rice Varieties(PusaNarendr Kala Namak-1) High Yielding Varieties (DBW303,DBW 187) 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. Seed treatment in cereals andpulses. | Green fodder throughout the year of Barseem, ,Oat and HybridNapier Grass Mineral mixture Vaccination Deworming Awareness on Abreed improvem Up gradation of I goat breed Back yard poultr |
|---|---|--|---|---|---|--|---|---|
|---|---|--|---|---|---|--|---|---|

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

| S. | Farming System | | Villag | e 1 | | | Vil | lage 1 | |
|-----|---|-------------------------|----------------------------|----------------|------------|---------------------------|-------------|----------------|------------|
| No. | Typologies | Climate | Conver gence | No. of farmers | Area to be | Climate | Convergence | No. of farmers | Area to be |
| | | Resilient | With Scheme | proposed to be | covered | Resilient | with Scheme | proposed to be | covered |
| | | Technology | | involved | (ha) | Technology | | involved | (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 | Vaccinat ion of | Animal | 150 | - | Vaccination | husbandry | 150 | - |
| | (Crop+animal) | animals | husbandry deptt. | | | of animals | deptt. | | |
| 4 | Irrigated without | - | - | - | - | - | - | - | - |
| | animal(Crop) | | | | | | | | |

be involved (in convergence with development departments)

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 househol 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 | Coverage | Total amount |
|--------|--------------------|---------------------------------|-------------|-----------|----------|--------------|
| | | | | (Rs/ha) A | Proposed | (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 8.23 | 24500 | 22.2 | 60 | 196000 |

Activities and Cost

9.Crop Interventions-

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

| SI No. | Village | Intervention | De | escription | Cost | Cove | rage Proposed | Total |
|--------|------------------|-----------------------|--------------|-------------------------------|--------------|----------------|---|-------------------------|
| | 1,2,3 etc. | | Сгор | Variety (s) | (Rs/ha) A | Area (ha) B | No. of farm households to be involved (C) | amount (Rs) A x 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 | | Okra | Kashi Lalima | 1000 | 5 | 40 | 5000 |
| | Chando Chando | Short duration crop | Cowpea | Kashi Kanchan | 1000 | 5 | 40 | 5000 |
| | | | Onion | Agrifound Dark Red | 1000 | 5 | 40 | 5000 |
| 6. | Chando | | Mango | Amrapali | 96000 | 1 | 80 | 96000 |
| 7. | Chando | Fruit Plantation | 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, | - | 10000 | 1 | 40 | 10000 |
| | | | Mahogani, | | | | | |
| | | | Bamboo etc. | | | | | |
| - | - | Sub Total 9.1. | | - | - | 130 | - | 433500 |

Activities and Cost-

9.Crop Interventions-

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

| S. | village | Intervention | Desci | ription | Cost | Cov | verage Proposed | Total | Remarks |
|-----------|---------|---|-------|-------------|------------|-----------|------------------------|------------|---------|
| No. | | | Crop | Variety (s) | (Rs/ha)A | Area (ha) | No. of farm households | amount | |
| | | | | | | В | to be involved C | (Rs) A x 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) | - | - | 17500 0 | 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 | village | Intervention | Descri | ption | Cost | Coverage | e Proposed | Total | Remarks |
|-----|---------|---|--------|-------------|--------------|----------------|--|-------------------------|---------|
| No. | | | Crop | Variety (s) | (Rs/ha) A | Area (ha) B | No. of farm househol ds to be involved C | amount (Rs) A x 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.

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

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

| SI No. | Seed bank/Fodder | Seed of crop and variety/ | Quantity of seed/ fodder | Unit cost | No.of farmers | Amount | Remarks |
|--------|------------------|---------------------------|--------------------------|----------------|---------------|----------------|---------------------|
| | Bank | Fodder crop/ variety | produced/ storage (t) | (Rs.) | involved | (Rs.) | |
| 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 | 315000 |
| | enrichments | |
| 12.1 | Training courses | 270000 |

| | Field days | | | | 375000 | | | | | | |
|-------------|-----------------------------|--|--|--|----------|--|--|--|--|--|--|
| | Exposure Visits | | | | 300000 | | | | | | |
| 12.2 | Up scaling of successf | Up scaling of successful interventions | | | | | | | | | |
| 13.1 | Contractual man powe | Contractual man power (SRFs) | | | | | | | | | |
| 13.2 | Media Products to be | Developed | | | 180000 | | | | | | |
| | Grand total (Rs.) | | | | 19375000 | | | | | | |
| 15. Plan fo | or the spread of the proven | spread of the proven practices (Convergence with departments, linkages with development organizations, etc.) | | | | | | | | | |
| Sl. No. | Proven Technology | Proven Technology Deptt. Involved Strategy Input Arrangement/Contribution An | | | | | | | | | |
| | | | | | | | | | | | |

| SI. INU. | Froven Technology | Depti. Involved | Strategy | Input Arrangement/Contribution | Amount Wrobinseu |
|----------|---------------------------|------------------|---------------------|--------------------------------|------------------|
| | | | | from the depatt. | 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

| 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% |

1.Details about the existing NICRA villages

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

| | | Vi | llage-1(Rası | ılpurGircha) | Vi | llage-2(Parsa | ra) | 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 | |

| 1 | Rainfed sodi | icity | Limited cropping | Low level of | sodicity | Limited | Low level of | sodicity | Limited | Low level of |
|---|---------------|--------|-----------------------|--------------------------|----------|-------------------------|-----------------|----------|---------------------|--------------------------|
| | with animal | | options of | technology | | cropping | technology | | cropping | technology |
| | (Crop+Live | | agricultural crops | adoption. | | options of | adoption. | | options of | adoption. |
| | stock) | | Lack of | Lack of | | agricultural | Lack of | | agricultural | Lack of |
| | , | | diversification | plantation in | | crops | plantation in | | crops | plantation in |
| | | | Poor soil fertility | respect of | | Lack of | respect of | | Lack of | respect of |
| | | | Poor management | rainfed | | diversification | rainfed | | diversification | rainfed |
| | | | of animal. | agriculture. | | Poor soil | agriculture. | | Poor soil | agriculture. |
| | | | Unavailability of | Lack of | | fertility | Lack of | | fertility | Lack of |
| | | | proper feed and | institutional | | Mineral | institutional | | Poor | institutional |
| | | | fodder for animal | support for | | Deficiency of | support for | | management of | support for |
| | | | Poor resources of | establishment | | lactating | establishment | | animal. | establishment |
| | | | household. | of fodder bank | | animal. | of fodder bank. | | Unavailability | of fodder |
| | | | | | | Green fodder | | | of proper feed | bank. |
| | | | | | | unavailability | | | and fodder for | |
| | | | | | | throughout the | | | animal | |
| | | | | | | year for dairy | | | Poor resources | |
| | | | | | | animal | | | of household. | |
| | | | | | | Poor resources | | | | |
| | | | | | | of household. | | | | |
| 2 | Rainfedwi sod | licity | Unavailabilityofsoila | Lack of | sodicity | Unavailability | Scaricityof | sodicity | Unavailability | Lack of |
| | thanimal(| | ndwater | plantation | | ofsoil | plantationin | | ofsoil and | plantationinres |
| | Crop+Hor | | conservation | in | | and water | respect of | | water | pectof rainfed |
| | ticulture+ | | technology.Lack of | respectofrainfed | | conservation | rainfed | | conservation | agriculture. |
| | Livestock) | | diversification. Poor | agriculture. | | technology. Lack | agriculture. | | technology. Lack | Lackof |
| | | | soll fertility. | Rainfed of | | 0I diversification n | Rainfed of | | OI | institutional |
| | | | Lackolproper | institutional | | Poor soil | institutional | | Door soil fortility | supportior |
| | | | of rain | support | | fertility Lack | support for | | I oor son rerunty. | investock sector |
| | | | water Limited | 101 livesteelseeterin | | of proper | in rainfad | | proper 01 | in rainieu |
| | | | croppingoptions of | rainfed | | management of | agriculture | | management of | (Shelter |
| | | | agricultural | agriculture | | rain water | Shelter | | rain water. | (Sheher) Fodderbank & |
| | | | andhorticultural | (Shelter Fodder | | Limited cropping | Fodderbank & | | Limited cropping | Animal Health |
| | | | crops. | hank | | options of | Animal | | options of | camp) |
| | | | Lack of plantations. | &Anim | | agricultural and | Healthcamp.) | | agricultural and | P.) |
| | | | Unavailabilityof | al Health camp.) | | horticultural | P.) | | horticultural | |
| | | | proper feed | | | crops. Lack | | | crops. Lack | |

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

| | | | andfaddan C | | | af also to the | | | af allowed in | |
|---|------------|----------|----------------------|--------------------|----------|-------------------|--------------------|----------|--------------------|---------------|
| | | | androdder for | | | of plantations. | | | oi plantations. | |
| | | | animal. | | | Unavailability | | | Unavailabilityofp | |
| | | | Low level | | | of properfeed | | | roper feed | |
| | | | of input | | | and fodder | | | and fodder for | |
| | | | and technology | | | for animal. | | | animal. Low | |
| | | | adoption. | | | Lowlevel | | | level of input and | |
| | | | adoption | | | ofinputand | | | technology | |
| | | | | | | technology | | | adoption | |
| | | | | | | adoption | | | adoption | |
| | | | | | | adoption | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| 3 | Irrigatedw | sodicity | Traditional | Resource poor | sodicity | Traditional | Resource poor | sodicity | Traditional | Resource poor |
| | ithoutani | | practice of crop | and inadequate | | practice of crop | and inadequate | | practice of | and |
| | malCrop+ | | cultivation.No | credit facilities. | | cultivation.No | credit facilities. | | crop | inadequate |
| | Horticultu | | use of salt | Unavailableofse | | use of salt | Unavailableofs | | cultivation.N | credit |
| | re | | tolerant specific | ed bank. | | tolerant specific | eed bank. | | o use of salt | facilities. |
| | 10 | | crop varieties. | ee cuille | | crop varieties. | | | tolerant | Unavailableof |
| | | | Lack of | | | Lack of | | | specific crop | sood bank |
| | | | diversification | | | diversification | | | varieties | seeu balik. |
| | | | Limited | | | Limited | | | Look of | |
| | | | Linned | | | Linned | | | | |
| | | | cropping options of | | | croppingoptions | | | diversificatio | |
| | | | agricultural& | | | of agricultural& | | | n Limited | |
| | | | Horticultural crops. | | | Horticultural | | | cropping | |
| | | | Unavailability of | | | crops. | | | options of | |
| | | | soil conservation | | | Unavailability | | | agricultural& | |
| | | | technology. | | | of soil | | | Horticultural | |
| | | | | | | conservation | | | crops. | |
| | | | | | | technology. | | | Unavailability | |
| | | | | | | 0.5 | | | of soil | |
| | | | | | | | | | conservation | |
| | | | | | | | | | technology | |
| 4 | Irrigatedw | sodicity | Traditional | Resource poor | sodicity | Traditional | Resource poor | sodicity | Traditional | Resource poor |
| - | ithanimal | 5 | practice of crop | and | 5 | practice of | and | 2 | practice of | and |
| | Crop+Hort | | cultivation.No | | | crop | inadequate | | crop | inadequate |
| | iculture+I | | use of salt | | | cultivation. | credit facilities. | | cultivation.No | credit |
| | ivestock | | tolerant specific | | | No use of | Unavailable | | use of salt | facilities. |
| | 1. Obtook | | crop varieties. | | | salt tolerant | ofseed | | tolerant | Unavailable |
| | | | Lack of | | | specific | bank Lack | | specific crop | ofseed bank |
| | | | diversification | | | cron | of knowledge | | varieties Lack | Lock of |
| | | | uiversification | | | crop | of knowledge | | varieties. Lack | Lack OI |

| ſ | Limited | varieties. | of income | of | knowledgeof | |
|---|----------------------|------------------|------------------|------------------|--------------|----|
| | cropping. | Lack of | generation | diversification | income | |
| | Unavailability of | diversificati | activity through | . Limited | generation | |
| | proper feed and | on. Limited | livestock& | cropping. | activity | |
| | fodderfor animal. | cropping. | horticulture | Unavailability | through | |
| | Poor resources of | Unavailability | sector. | of proper feed | livestock & | |
| | household. Lack | of proper feed | | and fodderfor | horticulture | |
| | of diversification | and fodderfor | | animal. | sector. | |
| | Poor soil fertility. | animal. | | Poor resources | | |
| | Lack of proper | Poor resources | 5 | of household. | | |
| | management of | of household. | | Lack of | | 4. |
| | rain water. | Lack of | | diversification. | | |
| | Limited Cropping | diversification. | | Poor soil | | |
| | options of | Poor soil | | fertility. | | |
| | agricultural and | fertility. Lack | | Lack of proper | | |
| | horticultural crops. | of proper | | management of | | |
| | Lack of | management of | | rain water. | | |
| | plantations. Low | rain water. | | Limited | | |
| | level of input and | Limitedcroppin | | cropping | | |
| | technology | g optionsof | | options of | | |
| | adoption. | agricultural and | | agricultural and | | |
| | Poor Nutritional | horticultural | | horticultural | | |
| | security. | crops. Lack of | | crops. Lack of | | |
| | Unavailability of | plantations.Lo | | plantations. | | |
| | soil conservation | w level of input | | Low level of | | |
| | technology. | and technology | | input and | | |
| | | adoption. | | technology | | |
| | | Poor | | adoption. | | |
| | | notional | | Poor notional | | |
| | | security. | | security. | | |
| | | Unavailabili | | Unavailability | | |
| | | ty of soil | | OI SOIL | | |
| | | conservation | | conservation | | |
| | | technology. | | technology | | 1 |

| | Village | -1 | | | Village- | 2 | | | Village-3 | 8 | | |
|------------|---------|-----------------------|-----------|----------|----------|---------------------|------------|--------|-----------|----------------|------------------|------------|
| Farming | NRM | CropProductionIn | Livestoc | Institut | NRMI | CropProduction | LivestockI | | NRMI | CropProducti | Livesto | Institutio |
| SystemT | Inter | tervention | kInterve | ionalint | nterve | Intervention | nterventio | Instit | nterve | onInterventio | ckInter | nalinterve |
| ypology | venti | | ntions | erventi | ntions | | ns | utiona | ntions | n | vention | ntions |
| | ons | | | ons | | | | linter | | | s | |
| | | | | | | | | ventio | | | | |
| | | | | | | | | ns | | | | |
| Rainfed | *Maint | Use of Nutri Bajra. | Use of | Fodder | *Mainta | Use of Nutri Bajra. | Use of | - | *Maintai | Use of Nutri | Use of Napier | Fodder |
| with | ain of | Use of Kitchen | Napier | Bank/S | in of | Use of Kitchen | Napier | Fodder | n of | Bajra. | grass for fodder | Bank/SHG |
| animal | comm | Garden kit for | grass for | HG | commu | Garden kit for | grass for | Bank/S | commun | Use of Kitchen | production | |
| (Crop+Live | unity | nutritional security. | fodder | | nity | nutritional | fodder | HG | ity pond. | Garden kit for | use of mineral | |
| stock) | pond. | Impact of High | productio | | pond. | security. | production | | | nutritional | mixture | |
| | | Yielding Mustard | n | | | Impact of High | use of | | | security. | according | |
| | | variety (CS-60). | use of | Ē | | Yielding Mustard | mineral | | | Impact of High | ASMM | |
| | | | mineral | | | variety (CS-60). | mixture | | | Yielding | Income | |
| | | | mixture | | | | according | | | Mustard | generation | |
| | | | according | | | | ASMM | | | variety | through Back | |
| | | | ASMM | | | | Income | | | (CS-60). | Yard Poultry | r |
| | | | Income | | | | generation | | | | farming | |
| | | | generatio | | | | through | | | | | |
| | | | n through | 1 | | | Back Yard | | | | | |
| | | | Back | | | | Poultry | | | | | |
| | | | Yard | | | | farming | | | | | |
| | | | Poultry | | | | | | | | | |
| | | | farming | | | | | | | | | |

Identify Promising resilient technologies for addressing the constraints

| Irrigated Green | Demonstration of | Seed | Green | Demonstration | - | | Irrigat ed | Green | Demonstratio | Seed Bank |
|-------------------|-----------------------------------|------|---------|------------------|---|------|------------|----------|---------------------|-----------|
| withoutani manuri | specific varieties | Bank | manu | of specific | | Seed | without | manuring | n of specific | |
| mal Crop + ng | of Paddy (CSP | | ring | variation of | | Bank | animal | through | n or specific | |
| Hortic throug | $\frac{16}{16}$ CSR 56 | | through | Paddy (CSR | | | Crop | Dhaincha | Paddy (CSP | |
| ulture h | $\frac{40}{100}, \frac{100}{100}$ | | Dhain | 16 CSR - 56 | | | - · I | | AG CSP 56) | |
| Dhainc | intercropping in | | cha | +0, CSR-50). | | | + | | 40, CSR-30). | |
| ha | vagatablas Usa | | | Use of inter- | | | Horticul | | intercronnin | |
| iiu | of CSR-Bio | | | cropping in | | | ture | | a | |
| | haloazo and halo | | | vegetables. | | | ture | | g III vegetables | |
| | PSB culturein | | | Use of CSR- | | | | | Use of CSR- | |
| | Paddyand wheat | | | Bio, haloazo | | | | | Bio halo azo | |
| | crop | | | and halo PSB | | | | | and halo PSB | |
| | Use of specific | | | culturein Paddy | | | | | culture in | |
| | vegetables | | | and wheat crop. | | | | | Paddy and | |
| | crops | | | Use of specific | | | | | wheat crop. | |
| | varieties. Use | | | vegetables | | | | | Use of | |
| | of specific | | | crops varieties. | | | | | specific | |
| | variety of | | | Use of specific | | | | | vegetables | |
| | oilseeds | | | variety of | | | | | crops | |
| | crop.Use of | | | oilseedscrop. | | | | | varieties. | |
| | specific | | | Use of specific | | | | | Use of | |
| | variety of | | | variety of Wheat | | | | | specific | |
| | Wheat crop- | | | crop. | | | | | variety of | |
| | Establishment of | | | Establishment of | | | | | oilseeds | |
| | seed bank for Paddy | | | seed bank for | | | | | crop. Use of | |
| | and Wheat | | | Paddy and Wheat | | | | | specific | |
| | | | | | | | | | variety of | |
| | | | | | | | | | Wheat crop- | |
| | | | | | | | | | Establishmentof | |
| | | | | | | | | | seed bank for | - |
| | | | | | | | | | Paddy and | l |
| | | | | | | | | | Wheat | |

| Irrigateduvit | Llooof | | | Soud | Useof | | | | [| | | 01 |
|---------------|---------|--------------------|-----------|--------------|--------------------|------------------|------------|--------|---------|-----------------|----------------|--------|
| h animal | lavalia | Demonstration of | Feed | Deeu Deel | Useoi lavalin - | Demonstration | Feed | C 1 | Use | Demonstrat | Feed | Seed |
| n animai | levenn | specific varieties | Manag | Bank. | levening | of specific | Manage | Seed | of | ion of | Management | Bank. |
| Crop | g & | ofPaddy (CSR- | ement | Fodder | & | varieties of | ment & | Bank. | leveli | specific | & disease | Fodder |
| +Horticultu | bundın | 46, CSR-56). | & | Bank | bunding | Paddy (CSR- | disease | Fodder | ng& | varieties of | control. Use | Bank |
| re+ | g.Gree | Use of | diseas | | .Green | 46, CSR-56). | control. | Bank | bundi | Paddy | of Shelter for | |
| Livestock | n | intercropping in | e | | manurin | Use of | Use of | | ng. | (CSR-46, | lactating | |
| | manuri | vegetables4 ha. | contro | | g | intercropping | Shelter | | Green | CSR-56). | animal for | |
| | ng | Use of CSR-Bio, | 1. | | through | in vegetables- | for | | manurin | Use of | reducing heat | |
| | throug | halo azo and halo | Useof | | Dhainch | 4ha. | lactating | | g | intercroppin | stress | |
| | h | PSB culture in | Shelte | | a- | Use of CSR- | animal | | through | g in | condition. | |
| | Dhainc | Paddy and wheat | r for | | | Bio, halo | for | | Dhainch | vegetables | Income | |
| | ha- | crop. | lactati | | | azoand halo | reducing | | a- | 4 ha. Use of | generation | |
| | | Use of specific | ngani | | | PSB culture in | heat | | | CSR-Bio, | activity. | |
| | | vegetables crops | mal | | | Paddy and | stress | | | halo azo | (Goat | |
| | | varieties. | for | | | wheat crop. | conditio | | | and halo | farming). | |
| | | Use of specific | reduci | | | Use of specific | n- | | | PSB culture | Income | |
| | | variety of | ng | | | vegetables | Inco me | | | in Paddy | generation | |
| | | oilseeds crop. | heat | | | crops varieties. | generation | | | and wheat | through | |
| | | Use of specific | stress | | | Use of specific | activity. | | | crop. | BackYard | |
| | | variety of Wheat | conditi | | | variety of | (Goat | | | Use of | Poultry | |
| | | crop Year round | on- | | | oilseeds crop | farming). | | | specific | farming. | |
| | | fodder | Incom | | | Use of specific | Income | | | vegetables | - | |
| | | production | e | | | variety of | generation | | | crops | | |
| | | demonstration. | genera | | | Wheat cron | through | | | varieties. | | |
| | | Income | tion | | | Year round | BackYard | | | Use of | 1 | |
| | | generating | activit | | | fodder | Poultry | | | specific | 1 | |
| | | through | у. | | | production | farming | | | variety of | | |
| | | Mushroom | (Goat | | | demonstration | 8 | | | oilseeds | | |
| | | cultivation | farmin | | | Income | | | | crop. | | |
| | | Establishment of | g). | | | generating | | | | Use of specific | ; | |
| | | seed bank for | Income | | | through | | | | variety of | - | |
| | | Paddy and Wheat | generatio | | | Mushroom | | | | Wheat crop. | | |

| Irrigated | Use of | Demonstrat | tion of | Feed | Seed | Use of | Demonstratio | on of | Feed | Seed | Use of | Demonstration | Feed | Seed Bank |
|-------------|---------|--------------|-------------|--------------|--------|----------|---------------|---------|-------------|--------|----------|------------------|-------------------|-----------|
| with 1 | levelin | specific va | arieties of | Managem | Bank | leveling | specific va | rieties | Manageme | Bank | leveling | of specific | Management & | Fodder |
| animal | g & | Paddy | (CSR-46 | ent & | Fodder | & | of Paddy (CS | SR-46, | nt & | | & | varieties of | disease control | Bank |
| Crop + | bundin | CSR-56). | | disease | Bank | bunding | CSR-56) | | disease | Fodder | bunding. | Paddy (CSR- | Use of Shelter | • |
| Horticultur | g. | Use of inte | ercropping | control | | • | Use | of | control | Bank | - | 46, CSR-56) | for lactating | - • |
| e + | Green | in vegetable | es. | Use of | Ē | Green | intercropping | ; in | Use of | | Green | Use of | animal for | • |
| Livestock 1 | manuri | Use of | CSR-Bio | ,Shelter | | manurin | vegetables4 | ha. | Shelter for | • | manuri | intercropping in | reducing heat | - |
| 1 | ng | halo azo | and halo | for | | g | Use of CSF | R-Bio, | lactating | | ngthro | vegetables. | stress condition- | |
| t | throug | PSB cul | lture ir | lactating | | through | halo azo and | i halo | animal for | • | ugh | Use of CSR- | Income | |
| | h | Paddy an | d wheat | tanimal | | Dhainch | PSB cultur | e in | reducing | | Dhainc | Bio, halo azo | generation | |
| | Dhainc | crop. | | for | | a- | Paddy and | wheat | heat stress | 5 | ha- | and halo PSB | activity. (Goat | - |
| 1 | ha- | Use of | specific | reducing | | | crop. | | condition- | | | culture in | farming) | |
| | | vegetables | crops | sheat stress | 3 | | Use of sp | pecific | Income | | | Paddy and | Income | |
| | | varieties. | | condition- | | | vegetables | crops | generation | | | wheat crop. | generation | |
| | | Use of | specific | Income | | | varieties. | | activity. | | | Use of specific | through Back | |
| | | variety of | oilseeds | generatio | | | Use of sp | pecific | (Goat | | | vegetables | Yard Poultry | |
| | | crop. | | n activity | | | variety of oi | lseeds | farming) | | | crops varieties. | farming | |
| | | Use of | specific | (Goat | | | crop. | | Income | | | Use of specific | Ż | |
| | | variety of | f Wheat | farming) | | | Use of sp | pecific | generation | | | variety of | Ĩ | |
| | | crop iYea | ar round | Income | | | variety of V | Wheat | through | | | oilseeds crop. | | |
| | | fodder p | production | generati | | | crop Year | round | Back Yard | | | Use of specific | ; | |
| | | demonstrat | ion | on | | | fodder prod | uction | Poultry | | | variety of | Ĩ | |
| | | Income g | generating | through | | | demonstration | n | farming | | | Wheat crop |) | |
| | | through N | Aushroom | Back | | | Income gene | erating | - | | | Year round | 1 | |
| | | cultivation | | Yard | | | through | | | | | fodder | | |
| | | Establishm | ent of | Poultry | | | Mushroom | | | | | production | | |
| | | seed bar | ik for | farming | | | cultivation | | | | | demonstration | | |
| | | Paddy and | Wheat | U | | | Establishmen | t of | | | | Income | | |
| | | | | | | | seed bank | for | | | | generating | | |
| | | | | | | | Paddy | and | | | | through | | |
| | | | | | | | Wheat | una | | | | Mushroom | | |
| | | | | | | | | | | | | cultivation | | |
| | | | | | | | | | | | | Establishmen | | |
| | | | | | | | | | | | | t of seed bank | | |
| | | | | | | | | | | | | for Paddy and | | |
| | | | | | | | | | | | | Wheat | | |

| SNo | FST | Technologie | Village1- esidentifiedtominimizetl hortlisted | neimpactofconstraintss | 2Technologiesi | Village- nnologiesidentifiedtominimizetheimpactofcons traintsshortlisted | | | |
|-----|-----------------------|---|--|---|--|---|---|--|--|
| | | Climate constrai nts | Resource/Crop/ Animalconstrai nts | Otherconstraints | Climateco nstraints | Resource/Cr op/Animalco nstraints | Otherc onstrai nts | | |
| 1 | Rainfedwit hanimal | 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. Establishme nt offodderban k. | | |

4.Identify Promising resilient technologies for addressing the constraints

| 2. | Rainfed with animal(Cro p+ Horticultur e+Livestoc k) | 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 + Horticultur e | Levelling & Bunding Green Manuring through Dhaincha | & G th D SF P 50 U U U U U U U U U U U U U U U D D D D | Green hrough D Demonstripecific Paddy (C 6). Jse of in egetable Jse of C zo and ulture in wheat cro Jse of S egetable rarieties. Jse of s of oilseed Jse of s of Wheat Establishment for Wheat | manu Dhaincha ration varieties CSR-46, C tercroppins CSR-Bio, halo n Paddy p. S cop pecific va s crop. pecific va crop- ment of r Paddy | uring of CSR- ng in halo PSB and ecific crops ariety ariety seed and | Improved the adoption of through capaci programme. Establishment bank. | of | 1 & blogy lding seed | Levelling Bunding Green Mar through Dhaincha | & nuring | Green through D Demonstra specific Paddy CSR-56). Use of in in vegetab Use of CS azo and culture in wheat crop Use of vegetables varieties. Use of variety of crop. Use of variety crop. Establishm bank for Wheat | manur haincha. ation varieties (CSR- ntercropp bles SR-Bio, h halo P Paddy a p. spec s cro spec of oilse spec of Wh nent of so Paddy a | ing of of 46, ing alo 2SB and ific ops ific eds ific eat | Improved Skill adoption technology through capacity building programme Establishm of seed bar | the & of v e. nent nk. |
|----|--|--|--|---|---|--|---|----|-------------------------------|--|-------------|---|--|---|--|--|
|----|--|--|--|---|---|--|---|----|-------------------------------|--|-------------|---|--|---|--|--|

| Sl. No | FST | Technologie | Village1- sidentifiedtominimizetheimpact hortlisted | tofconstraintss | Village- 2Technologiesidentifiedtominimizetheimpactofconstrains shortlisted | | | | |
|-----------|---|--|---|---|---|--|---|--|--|
| | | Climateconstr aints | Resource/Crop/A nimalconstraints | Otherconstr aints | Climatecons traints | Resource/Crop/An imalconstraints | Otherconstrai nts | | |
| 4. | Irrigated with an imal Crop+Horticulture+Live stock | Levelling & Bunding Green Manuring through Dhaincha | Use of leveling Greenmanuring t hrough 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. Useofspecific variety of oilseeds crop. Useofschelterforlactating 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 th rough 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 | | |

| SN 0 | FST | | $\label{eq:Village3-Technologies} Village 3-Technologies identified to minimize the impact of constraints short and the second $ | listed |
|---------|--|---|--|---|
| | | Climateconstra ints | 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. | Irrigatedwithoutani malCrop+Horticult ure | Levelli ng & Bundin g 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 | Levelli | Use of leveling &bunding. | Improved the Skill & |
|----|---------------------|-------------|--|---------------------------|
| | Crop+Horticulture+ | ng & | Greenmanuringthrough | adoption of technology |
| | Livestock | Bundin | Dhaincha. | through capacity building |
| | | g | Demonstrationof specific varieties of Paddy (CSR-46, | programme. |
| | | Green | CSR-56). Use of intercropping in vegetables. | Establishment of seed |
| | | through | Use of CSR-Bio, halo azo and halo PSB culture in Paddy and wheat | bank |
| | | Dhaincha | crop. Use of specific vegetables crops varieties. | |
| | | Ditalitetta | 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. | |
| | | | | |

| S N o | FST | | Villa | age 1 | Village 2TotalNRMCropLivestock10*Maintain of communit y pond.UseUseof Napiergrass fodder Of Nutri Bajra. Isecurity.on communit on communit ryof Nutri Bajra. Useof Kitchen Garden security.Income generating activity Income generation Mustard variety through BackYard Poultry farming.for for ion community ure ootMaintain of ommunity vondUse of Nutri Use of Sitchen grass for fodder use of mineral mixture according ASMM – Impact of High Yielding Mustard variety farming)Use of mineral grass for fodder use of mineral mixture according activity.for ion oat(CS-60).Use of further grass for fodder use of mineral mixture according activity.for ion oat(CS-60).Income generation mixture according activity.for ion oat(CS-60).Income generation mixture according activity.for ion oat(CS-60).Income generation activity.for ion oatIncome generation mixture according activity.for ion oatIncome generation through Mushroom Production | | | | |
|-------|--|--|--|---|---|--|--|---|-------|
| | | NRM | Сгор | Livestock | Total | NRM | Сгор | Livestock | Total |
| 1 | Rainfed with animal (Crop+Li vestock) | *Maintai n of commun itypond. | Use of UseofKitchen Garden kit ImpactofHigh Yielding M ustard variety (CS-60). | UseofNapier grassforfodder production. Useofmineral mixture accordingASMM. Income generation through Back Yard Poultry farming. | 10 | *Maintain of communit y 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 commun ity 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 cond | 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 |

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

| 3 | Irrigate d | Green | Demonstration | - | 8 | Gree | Demonstration | - | 8 |
|---|-------------|---------|-----------------|---|---|-------------|-----------------|---|---|
| - | without | manuri | of specific | | - | n | of specific | | - |
| | animal Cron | no | varieties of | | | man | varieties of | | |
| | + Horticu | through | Paddy (CSR-46 | | | uring | Paddy (CSR- | | |
| | lturo | Dhaine | CSP 56 | | | throu | 16 CSP 56 | | |
| | ituic | ba | Uso of | | | ab | 40, CSR - 50) | | |
| | | IIa | USE 01 | | | gii Dhai | interanon | | |
| | | | intercroppin | | | Dilai | Intercrop | | |
| | | | g in | | | ncna | ping in | | |
| | | | vegetables- | | | | vegetable | | |
| | | | Use of CSR- | | | | S- | | |
| | | | Bio, halo azo | | | | Use of | | |
| | | | and halo PSB | | | | CSR-B10, | | |
| | | | culture in | | | | halo azo | | |
| | | | Paddy and | | | | and halo | | |
| | | | wheat crop. | | | | PSB | | |
| | | | Use of | | | | culture in | | |
| | | | specific | | | | Paddy and | | |
| | | | vegetables | | | | wheat crop. | | |
| | | | crops | | | | Use of | | |
| | | | varieties. | | | | specific | | |
| | | | Use of specific | | | | vegetable | | |
| | | | variety of | | | | s crops | | |
| | | | oilseeds crop. | | | | varieties. | | |
| | | | Use of | | | | Use of | | |
| | | | specific | | | | specific | | |
| | | | variety of | | | | variety of | | |
| | | | Wheat crop- | | | | oilseeds | | |
| | | | Establishment | | | | crop. | | |
| | | | of seed bankfor | | | | Use of | | |
| | | | Paddy and | | | | specific | | |
| | | | Wheat | | | | variety of | | |
| | | | | | | | Wheat | | |
| | | | | | | | crop- | | |
| | | | | | | | Establishment | | |
| | | | | | | | of seed bankfor | | |
| | | | | | | | Paddy and | | |
| | | | | | | | Wheat | | |
| | | | | | | | ,, nout | | |

| 4 | Irrigate d | Useof | Demonstration | Feed Management & | 14 | Use | Demonstration | Feed | 14 |
|---|---------------|----------|-------------------|-------------------------|----|-----|------------------|-------------------|----|
| | with animal | leveling | of | disease control. | | | of | Management | |
| | Crop + | & | specificvarieties | Use of | | | specificvarietie | & | |
| | Horticu lture | bunding. | of Paddy (CSR- | Shelter for | | | s of Paddy | disease control. | |
| | + Livesto ck | - | 46, CSR-56). | lactating animal | | | (CSR-46, CSR- | UseofShelter for | |
| | | Green | Use of | for reducingheat stress | | | 56). Use of | lactating animal | |
| | | manurin | intercropping in | condition. Income | | | intercropping in | for reducing | |
| | | gthrough | vegetables. | generation | | | vegetables. Use | heat | |
| | | Dhainch | Use of CSR-Bio, | activity(Goatfarming). | | | of CSR-Bio, | stress condition. | |
| | | a - | halo azo and | Income generation | | | halo azo and | Income | |
| | | | halo PSB culture | throughBack | | | halo PSB | generation | |
| | | | in Paddy and | YardPoultry farming | | | culture in | activity. (Goat | |
| | | | wheat crop. | | | | Paddy and | farming). | |
| | | | Use of | | | | wheat crop. | Income | |
| | | | specific | | | | Use of | generation | |
| | | | vegetables | | | | specific | through Back | |
| | | | crops | | | | vegetables | Yard Poultry | |
| | | | varieties. | | | | crops | farming | |
| | | | Use of specific | | | | varieties. | | |
| | | | variety of | | | | Use of specific | | |
| | | | oilseeds crop. | | | | variety of | | |
| | | | Useofspecific | | | | oilseeds crop. | | |
| | | | varietyofWheat | | | | Useofspecific | | |
| | | | crop. | | | | varietyofWheat | | |
| | | | Year round | | | | crop. Year- | | |
| | | | fodderproduction. | | | | round | | |
| | | | Demonstration. | | | | fodderproductio | | |
| | | | Income | | | | n | | |
| | | | generationthroug | | | | demonstration. | | |
| | | | hMushroom | | | | Income | | |
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 | Сгор | Livestock | Total |
| 1 | Rainfedwith animal (Crop+Livesto ck) | *Maintain of community pond . | Use ofNutri Bajra. UseofKitchenGardenkit for nutritional security. ImpactofHighYielding Mustardvariety (CS-60). | Useof Napiergrass for fodder production useofmineralmixture according ASMM. Income gnaten through Back Yard Poultry farming. | 10 |
| 2 | Rainfedwith animal(Crop+ Horticulture+Li ve 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 genein activity (Goat farming). | 10 |
| 3 | Irrigatedwithout animal Cr op + 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 | Useof leveling | Demonstrationof specific varieties of Paddy | Feed Management | 14 |
|---|-----------|-------------------|---|--------------------------------|----|
| | Crop | & bunding. | (CSR-46, CSR-56). | UseofShelterforlactating | |
| | | Green manuring | Use of intercropping invegetables. | animalforreducingheat stress | |
| | | through Dhaincha. | Use of CSR-Bio, halo azo and halo PSB | condition. | |
| | | | culture in Paddy and wheat crop. | Incomegenerationactivity (Goat | |
| | | | Use of specific vegetables crops varieties. | farming). | |
| | | | Use of specific variety of oilseeds crop. | Incomegenerationthrough | |
| | | | UseofspecificvarietyofWheatcrop KRL-283. | BackYard Poultry farming. | |
| | | | Year round fodder | | |
| | | | production demonstration | | |
| | | | Income generation | | |
| | | | through Mushroom | | |
| | | | cultivation | | |
| | | | EstablishmentofseedbankforPaddy and Wheat | | |
| | | | | | |

| S No | FST | | Villa | age 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 Rainfed with animal(Cr op+ Horticultu | 11 | 132 10 33 132 10 3 3415 5 | 15 21 35 40 15 20 35 41 | 28 | - | 162 10 3-3 132 10 3 3415 5 | 15 21 35 40 15 20 35 41 | 30 | - | 162 10 3-3 132 10 3 34 155 | 15 21 35 40 15 20 35 41 | 30 |
| 3 | re+Livest o ck Irrigated without animal Crop + Horticult ure | 8 | 17 22 33 43 53 68 | | 34 | 8 | 17 20 33 43 53 68 | | 32 | 6 | 17 21 33 43 53 68 | | 31 |
| 4 | Irrigate d wit h animal Crop+ Horticult ure + Livestock | 8 | 17 20 33 43 53 6-8. 71 | 11 2- 0 30 45 | 39 | 8 | 17 20 33 43 53 68 71 | 11 2-1 31 45 | 41 | 6 | 17 20 33 43 5-3. 68 70 | 11 2- 1 31 45 | 38 |

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

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

| | | | Village 1 | | | | Village 2 | | | | Village 3 | | | |
|------------|------|--|--|---------------------------------------|--|-------------------------------|---|---------------------------------------|--|----------------------------------|---|---------------------------------------|--|-----------------------------------|
| 4 1 | S No | Farming System Typologies | Climate Resilient Technolo gy | Convergen ce with Scheme | No. of farmers proposed to be involved | Area to be covered (ha) | Climate Resilient Technolog y | Convergen ce with Scheme | No. of farmers proposed to be involved | Area to be covered (ha) | Climate Resilient Technolog y | Convergence with Scheme | No. of farmers proposed to be involved | Area to be covere d (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+Liv estock | Income generatio n through Mushroo m Productio n | Dept. of Horticulture | 2 | 2 | Income generation through Mushroom Production | Horticulture | 2 | 2 | Income generation through Mushroom Production | Horticulture | 2 | 2 |

| 3 | Irrigated without De animal Crop + atio Horticulture spe var of (CC csr Us spe var Wi cro KR | emonstr Harit Kranti on of ecific rieties Paddy SR-46, r-56) se of ecific riety of heat op- RL-283 | 45 | 15 | Demonstrat H ion of specific varieties of Paddy (CSR-46, csr-56) Use of specific variety of Wheat crop- KRL- 283 | Iarit Kranti | 45 | 15 | Demonstrat ion 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 De animal atio Crop +spe Horticulture +var Livestock of (Ct csr Us spe var Wi crc KF | emonstr Harit Kranti on of ecific rieties Paddy SR-46, r-56) se of ecific riety of heat pp- RL-283 | 45 | 15 | Demonstrat H ion of specific varieties of Paddy (CSR-46, csr-56) Use of specific variety of Wheat crop- KRL- 283 283 | Iarit Kranti | 45 | 15 | Demonstrat ion 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.:

| SINo. | Village1,2,3, | Intervention | Dimensions | No.of | No.offarmhouseholdspr | Convergenceva | Valueoffarme | Cost to |
|-------|---------------|-----------------------|-------------|-------|-----------------------|---------------|--------------|-------------|
| | etc. | | | units | oposedtobeinvolved | lue,ifany(Rs) | rsshare(Rs) | project(Rs) |
| 1. | Village2, 3 | Maintenanceof check | 50x20square | 2 | 6 | 30000 | 0 | 180000.0 |
| | | dam & community pond. | meter | | | | | |
| 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.

| SINo. | Village1,2,3,etc. | Intervention | UnitcostRs | Cover | rageProposed | Totalamo | Remarks |
|-------|-------------------|---------------------------------|------------|-------------------|---|----------------|---------|
| | | | /ha A | Area (ha) B | No. of farm households proposedto be involvedC | unt(Rs) AxC | |
| | 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..

| SINo. | Village1,2,3 etc. | Intervention | Description | | Cost (Da/ba) | Coverage Pro | posed | Total | Remarks |
|-------|-------------------|--|------------------------|------------------------------------|-------------------|----------------|---|-------------------------------|---------|
| | | | Crop | Variety (s) | (Ks/na) A | Area (ha) B | No. of farm househol ds to be involvedC | AxC | |
| | 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 | 88 | 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 | |

| SINo. | village | Intervention | Description | | Cost CoverageProposed | | | Totalamount | Remarks |
|-------|---------------|-------------------------|-------------|----------------------------------|-----------------------|-------------------------|--|-------------|---------|
| 1. | | | Crop | Variety (s)/Specie s | (Rs/ha) A | Area (ha)B | No. of farm househol ds to be involved C | (Rs) AxC | |
| | 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 | |

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

Activities and Cost 10. Livestock and Fisheries

10.1. Feed demonstrations for cropresidue management/stress management: silage/feedblocks/mineralmixture(MM) blocks/feedenrichment, etc.

| SINo. | Detailsoffeedintervention | Unitcostofinte | No.of farm house | Totalamount | Remarks |
|-------|---|----------------|----------------------|-------------|--|
| | | rvention(Rs.) | holds to be involved | (Rs/ha) | |
| | 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.

| SINo. | 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.) |
|------------------------|---|-------------------|-----------------------|--------------------------|
| | | month | purticipunts | 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 | nanagement Disease management practices for sheath blight and false smut in paddy | | | 3000 |
|--|---|-----------|-----|----------|
| Poultry farming | Poultry broiler farming | August | 25 | 3000 |
| Pestmanagement | stmanagement IPM practices for stem borer in paddy | | 25 | 3000 |
| Moistureconservation | In situ moisture conservation technique | September | 25 | 3000 |
| Resource Conservation TechnologyBenefits 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 Public (Book/Bulletin/ Broc | ation hureetc.) | Proposed during the month | No.of Copies | Cost (Rs.) |
|--------|-----------|---|--|--------------------|---------------------------|-----------------|---------------|
| | Fold | er | Folder | | Oct | 1000 | 10000.0 |
| | Prod | luction of Training Material | Manual | | March | 500 | 45000.0 |
| | Sub-t | total13.1. | | | | 1500 | 55000.0 |
| | 13.2 Vide | eo Films | | I | | | |
| | Video | Film to be prepared | Duration(Minutes) | Propo | sed duringthe month | Cost(I | Rs.) |
| | CD-Vi | deo | 20 minutes | Decer | mber | 20000 | 0.0 |
| | Sub-tot | al13.2. | | | | 20000 | .0 |
| 14.Sum | mary of c | cost Estimates for 2023-24 | | | | | |
| Item 1 | umber | | Title of the It | tem | | | Amount (Rs.) |
| 0.1 | | Repair / Renovation of existing | g water harvesting structures, d | rainage channels | s etc.: | | 200000.0 |
| 8.2 | | In situ conservation – Resource | e 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 croppin | g season 2023-2 | 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.,)

| SI. No | Proven technology/Capacity building | Departmentinvol ved | Strategy | Inputarrangement/cont ributionfromthedepart ment | Amountmo bilized(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 | | |