



# CLIMATE SMART GRAM PANCHAYAT

## SUMMARY OF RECOMMENDATIONS



Siddharth Nagar

### Kodara Grant Gram Panchayat

Department of Environment, Forest and Climate Change  
Government of Uttar Pradesh





## Sustainable Agriculture

- Micro-irrigation
- Construction of bunds
- Farm ponds
- Need-based nutrient management in crops
- Transition to natural farming
- Sustainable livestock management

### Short Term

Introduction of micro-irrigation on 20 ha | Ensure bunds on 305 ha agricultural land | Construction of farm ponds as required | Transitioning 92 ha (15%) of agricultural land to natural farming

### Medium Term

Expanding micro-irrigation on 120 ha | Expanding bunds on another 305 ha agricultural land | Transitioning 244 ha (40%) to natural farming

### Long Term

Maintenance of bunds and farm ponds | 100% transition to natural farming

### Key Departments

Department of Agriculture | Centre for Integrated Pest Management (CIMP) | Department of Horticulture and Food Processing | Department of Land Resources | Jal Shakti Department | Animal Husbandry Department | Uttar Pradesh New and Renewable Energy Development Agency (UPNEDA) | Regional Centres for Organic Farming | Krishi Vigyan Kendra, Siddharth Nagar

### Estimated Cost

Over ₹15 crores across three phases (Short term: ~₹2.5 crores |Medium term: ~₹6 crores |Long term: ~₹7 crores)

## Management and Rejuvenation of Water Bodies

- Rejuvenation of ponds
- Tree plantations
- Retention ponds
- Enhancing drainage infrastructure
- Rainwater harvesting
- Recharge pits
- Capacity building

### Short Term

Rejuvenation of 2 ponds | ~1,000 trees planted around water bodies | Reboring of 15 handpumps | Construction of 5 retention ponds | Cleaning and deepening of drains at strategic locations | Installing siphons at specific locations | Installation of RWH structures in all PRI buildings (4) | Construction of 15 recharge pits | Village Water Security Plan preparation

### Medium Term

Maintenance of ponds, siphons and drains | Additional trees planted around water bodies | Construction of 10 retention ponds | Installation of RWH structures in 560 pucca households

### Long Term

Continued maintenance of water resources | Installation of RWH structures in 800 pucca households

### Departments

Rural Development Department | Irrigation and Water Resources Department | Uttar Pradesh Department of Land Resources

### Estimated Cost

Over ₹6 crores across three phases (Short Term: ~₹1 crore | Medium Term: ~₹2 crores | Long Term: ~₹3 crores)

## Enhancing Green Spaces and Biodiversity

- Plantation of trees
- Agroforestry
- Arogya Van
- People's Biodiversity Register

### Short Term

Plantation of 1,000 tree saplings | Sequestration potential (in 15-20 years): up to 10,000 tCO<sub>2</sub> | Establishing Arogya Van on 0.1 ha allocated land | Establishing one nursery

### Medium Term

Plantation of 1,000 to 1,500 tree saplings | Adoption of Agroforestry in ~63 ha land | Sequestration potential (in 15-20 years): up to 75,500 tCO<sub>2</sub>

### Long Term

Additional Plantation of 1,000 to 1,500 tree saplings | Adoption of Agroforestry in ~95 ha land | Sequestration potential (in 15-20 years): up to 1,01,500 tCO<sub>2</sub>

### Departments

Department of Environment, Forests and Climate Change | State Biodiversity Board | Panchayati Raj Department | Rural Development Department | Central Institute of Medicinal and Aromatic Plants, Lucknow

### Estimated Cost

Over ₹1 crores across three phases (Short term: ~₹18 lakhs | Medium term: ~₹41 lakhs | Long term: ~₹54 lakhs)

## Sustainable Solid Waste Management

- Enhanced waste management infrastructure
- Compost pits
- Sanitation management through construction of toilets
- Ban on single-use plastics

### Short Term

Setting up segregation and storage facility | Procurement of 1 electric garbage van | Installation of 125 waste bins | Setting up of 80 vermicompost and 40 Nadep compost pits | Enhancing household toilet coverage and maintenance of existing community toilets | Ban on single use plastics | Engagement of 100 women for manufacturing plastic-alternative products (SHG alignment)

### Medium Term

Installation of additional 55 waste bins and maintenance of existing facilities | Expanding household toilet coverage | Scaling up partnerships | Regular awareness, training and capacity-building programs

### Long Term

Maintenance of existing facilities | Scaling up partnerships | Regular awareness, training and capacity-building programs

### Departments

Panchayati Raj Department | Department of Health and Family Welfare | Department of Rural Development | Department of Agriculture | Uttar Pradesh Khadi and Village Industries Board

### Estimated Cost

Over ₹2.3 crores across three phases (Short term: ~₹1 crore | Medium term: ~₹87 lakhs)

## Sustainable and Enhanced Mobility

- Road infrastructure
- Enhancing public transport
- E-vehicles and E-tractors

### Short Term

RCC construction of 1.15 km stretch Repairing and maintenance of road infrastructure | Replacing 15 diesel autorickshaws with e-autorickshaws | Establishing hiring facility with 5 e-tractors and 5 e-goods carriers

### Medium and Long Term

Maintenance of existing road infrastructure | Expanding public transport (as required)

### Departments

Infrastructure and Industrial Development Department | Transport Department | Panchayati Raj Department | Department of Rural Development | Uttar Pradesh New & Renewable Energy Development Agency (UPNEDA)

### Estimated Cost

Over ₹1.4 crores across three phases

## Access to Clean, Sustainable, Affordable and Reliable Energy

- Solar rooftops
- Solar-powered pumps
- Agro-photovoltaics
- Clean cooking solutions- Household biogas, Solar induction cookstoves, improved chulhas, LPG
- Energy efficient (EE) fixtures
- Solar street lights

### Short Term

Solar rooftop installation on all (6) government buildings | 64 diesel pumps replaced with solar pumps | Suitable households to adopt clean cooking interventions like household biogas, solar induction cookstoves and improved chulhas | Replacing existing fixtures in all government buildings with energy efficient fixtures (LED lights, EE fans) | Installation of 22 solar street lights and 10 high mast solar LED street lights at key locations in GP | Solar potential: ~402 kWp | Mitigation potential: ~122 tCO<sub>2</sub>e per year

### Medium Term

Solar rooftop installation on 40% of pucca houses (763) | Agro-photovoltaic installed on 2 ha | 95 diesel pumps replaced with solar pumps  
Solar potential: ~3,310 kWp | Mitigation potential: ~3,160 tCO<sub>2</sub>e per year

### Long Term

Solar rooftop installation on 100% of pucca houses (1,144) | Agro-photovoltaic installed on 2 ha | 159 diesel pumps replaced with solar pumps | Replacing all CFL light fixtures with LED tube lights/ bulbs; installation of energy efficient fans across households  
Solar potential: ~4,807 kWp | Mitigation potential: ~4,484 tCO<sub>2</sub>e per year

### Departments

MNRE | Uttar Pradesh New and Renewable Energy Development Agency (UPNEDA) | Uttar Pradesh Power Corporation Limited (UPPCL) | Purvanchal Vidyut Vitran Nigam Limited | Panchayati Raj Department | Rural Development Department | Department of Agriculture | Education Department

### Estimated Cost

Over ₹37 crores across three phases (Short term: ₹2 crores | Medium term: ~₹16 crores | Long term: ₹19 crores)

## Enhancing Livelihoods and Green Entrepreneurship

- Engaging SHGs to manufacture sustainable products
- Organic fertilizer production
- E-tractor and E-goods carrier rental services
- Solar powered cold storage facility
- Production and sale of natural medicines and supplements
- O&M of RE installations

### Short Term

Capacity building, training and support for 100 women and other entrepreneurs to establish enterprises across the GP | Establishing partnerships between Panchayat, community members, FPOs for marketing and selling of compost | Training of community members

### Medium Term

Expanding capacity building programmes to cover 200 more women and other groups as per need and enhancing marketing of products and services | Setting up of cold storage (5-10 MT capacity)

### Long Term

Continue scaling entrepreneurship opportunities and strengthening market linkages

### Departments

Panchayati Raj Department | Department of Rural Development | Department of Horticulture and Food processing | Uttar Pradesh Skill Development Mission | UP State Council for Vocational Training

\* Expansion of suggested climate smart activities and regular maintenance of any installations and infrastructure throughout the plan implementation and beyond.

Please refer to action plan for detailed recommendations