



Hamirpur

# CLIMATE SMART GRAM PANCHAYAT

## SUMMARY OF RECOMMENDATIONS

### Jarakhar Gram Panchayat

Department of Environment,  
Forest and Climate Change

Government of Uttar Pradesh





## Management and Rejuvenation of Water Bodies

- Rainwater harvesting
- Rejuvenation of ponds
- Construction of bunds along ponds
- Reboring of handpumps
- Tree plantations
- Enhancing drainage infrastructure
- Wastewater management
- Capacity building

### Short Term

Installation of RWH structures in all (9) PRI buildings | Cleaning, deepening, and clay-lining of 3 ponds| Construction of 6 retention ponds |Reboring of 20 handpumps| Plantation of 1,000 tree saplings | Construction of 4 recharge pits dug

### Medium Term

Installation of RWH structures in 230 households | Maintenance of waterbodies and related infrastructure | 1,000 additional saplings planted around water bodies | Construction of additional recharge pits

### Long Term

Continued maintenance of water resources | Installation of RWH structures in 230 households

### Key Departments

Rural Development Department | Irrigation and Water Resources Department, Ministry of Jal Shakti | Uttar Pradesh Department of Land Resource

### Estimated Cost

Over ₹2.24 crores across three phases (Short Term: ~₹33.4 lakhs | Medium Term: ~₹95.5 lakhs | Long Term: ~₹95.5 lakhs)

## Enhancing Green Spaces and Biodiversity

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

### Short Term

Plantation of 2,000 tree saplings | Sequestration potential (in 15-20 years): 20,000 tCO<sub>2</sub> | Establishing Arogya Van on 0.2 ha allocated land

### Medium Term

Plantation of 3,000 to 4,000 tree saplings | Sequestration potential (in 15-20 years): 40,000 tCO<sub>2</sub> | Adoption of Agroforestry in ~112 ha land | Sequestration potential (in 15-20 years): 1,12,000 tCO<sub>2</sub>

### Long Term

Additional 3,000 to 4,000 saplings planted | Sequestration potential (in 15-20 years): 40,000 tCO<sub>2</sub> | Adoption of Agroforestry in ~112 ha land |Sequestration potential (in 15-20 years): 1,12,000 tCO<sub>2</sub>

### Departments

Department of Environment, Forests and Climate Change | State Biodiversity Board | Panchayati Raj Department | Rural Development Department

### Estimated Cost

Over ₹2.19 crores across three phases (Short Term: ~₹25.65 lakhs | Medium Term: ~₹96.7 lakhs | Long Term: ~₹ 96.7 lakhs)

## Sustainable Solid Waste Management

- Enhanced waste management infrastructure
- Compost pits
- Improving sanitation infrastructure and management
- Ban on single-use plastics

### Short Term

Setting up segregation and storage facility| Procurement of 2 electric garbage vans | Installation of 60 bins | Construction of 20 vermicompost and 20 Nadep compost pits| Construction of 50 household toilets with soak pits| Maintenance of 1 community toilet

### Medium and Long Term

Maintenance of existing waste management infrastructure| Installation of an additional 30 waste bins (if required) | Scaling up partnerships | Regular awareness, training, and capacity-building programs| Engagement of an additional 200 women for manufacturing plastic-alternative products (SHG alignment) | Maintenance of 1 community toilet| Construction of additional soak pits

### 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 ₹22.1 lakhs 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 government buildings | Solar rooftop installation for suitable residential buildings | 7 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 150 solar LED & 5 high mast solar LED street lights in key locations of GP  
Solar potential: 41 kWp | Mitigation potential: ~52.4 tCO<sub>2</sub>e per year

### Medium Term

Solar rooftop installation on 40% of pucca houses (367) | Agro-photovoltaic installed on 2 ha | 11 diesel pumps replaced with solar pumps | Installation of 150 solar LED & 5 high mast solar LED street lights  
Solar potential: ~1,598 kWp | Mitigation potential: ~1,766.6 tCO<sub>2</sub>e per year

### Long Term

Solar rooftop installation on 100% of pucca houses (435) | Agro-photovoltaic installed on 2 ha | 18 diesel pumps replaced with solar pumps | Replacing all CFL light fixtures with LED tube lights/ bulbs; installation of EE fans across households  
Solar potential: ~2,160 kWp | Mitigation potential: ~2,389.9 tCO<sub>2</sub>e per year

### Departments

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

### Estimated Cost

Over ₹20.4 crores across three phases (Short Term: ~₹82.8 lakhs | Medium Term: ~₹8.9 crores | Long Term: ~₹10.7 crores)

## Sustainable Agriculture

- Micro-irrigation
- Farm ponds
- Construction of bunds
- Promote mixed cropping
- Transition to natural farming
- Sustainable livestock management

### Short Term

Introduction of micro-irrigation on ~105 ha (30%) | Construction of bunds with trees on ~670 ha (50%) | Construction of 5 -10 farm ponds| Transitioning 32 ha (15%) of agricultural land to natural farming

### Medium Term

Expanding micro-irrigation on ~140 ha (50%) | Construction of bunds with trees on 673 ha (100%) | Construction of 15-20 farm ponds | Transitioning ~535 ha (40%) to natural farming

### Long Term

Expanding micro-irrigation on ~140 ha (100%) | Maintenance of infrastructure | 100% (608 ha) transition to natural farming

### Departments

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

### Estimated Cost

Over ₹20.58 crores across three phases (Short Term: ~₹6.12 crores | Medium Term: ~₹6.67 crores | Long Term: ~₹7.48 crores)

## Sustainable and Enhanced Mobility

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

### Short Term

Road construction at four locations | Replacing 2 diesel auto-rickshaws with e-autorickshaws | Mitigation potential: 3 tCO<sub>2e</sub> | Promoting adoption of 2 e-tractors and 5 e-goods carriers

### Medium and Long Term

Maintenance of existing infrastructure | Additional e-autorickshaws, e-rickshaws, e-goods and e-tractors as per need

### 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 ₹91.8 lakhs across three phases

## Enhancing Livelihoods and Green Entrepreneurship

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

### Short Term

Engage 100 women, 50 households and 8 SHGs, and other entrepreneurs in the manufacturing of sustainable products | Involving 5 SHGs, women and farmers in dairy processing unit | Capacity building, training, and demonstration sessions | Establishing partnerships between Panchayat, community members, FPOs for marketing and selling of compost and dairy products | 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 recommendation**