



# CLIMATE SMART GRAM PANCHAYAT

## SUMMARY OF RECOMMENDATIONS

### Badshapur Gram Panchayat

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





## Management and Rejuvenation of Water Bodies

- Rainwater harvesting
- Recharge pits
- Rejuvenation of ponds
- Repair of wells
- Tree plantations
- Enhancing Groundwater Recharge
- Enhancing drainage infrastructure
- Wastewater management
- Capacity building

### Short Term

Installation of RWH structures in all (2) PRI buildings | Construction of 50 recharge pits | Cleaning & boundary construction around 1 pond | Cleaning and repairing of 10 wells | Construction of new drains and the repair of existing ones | Installing siphons at strategic locations | Wastewater treatment through 1 DEWAT (200 KLD capacity) | Village Water Security Plan preparation

### Medium Term

Installation of RWH structures in 103 households | Regular maintenance of ponds, wells, drainage channels and other water related infrastructure

### Long Term

Installation of RWH structures in 102 households | Continued maintenance of water resources

### Key Departments

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

### Estimated Cost

Over ₹2.1 crores across three phases (Short Term: ~₹1.3 crores | Medium Term: ~₹39 lakhs | Long Term: ~₹39 lakhs)

## Sustainable Solid Waste Management

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

### Short Term

Setting up segregation and storage facility | Installation of 32 bins | Procurement of 1 electric garbage van | Setting up of 20 NADEP compost pits and 10 vermicompost pits | Construction of 160 individual toilets | Engagement of 100-120 women for manufacturing plastic-alternative products (SHG alignment)

### Medium and Long Term

Installation of additional waste bins as required | Inclusion of toilets in all newly constructed houses | Maintenance of existing infrastructure | 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

~₹41 lakhs across three phases

## Sustainable Agriculture

- Micro-irrigation
- Bunds
- Farm ponds
- Mini weather monitoring station
- Need based nutrient management in crops
- Transition to natural farming

### Short Term

Introduction of micro-irrigation on ~9 ha | Bund construction with trees around ~31 ha | Setting up 1 mini weather monitoring station | Transitioning 9 ha (15%) of agricultural land to natural farming

### Medium Term

Expanding micro-irrigation on ~12 ha | Bund construction with trees around ~31 ha | Additional farm ponds | Transitioning 25 ha (additional 25%) to natural farming



- Integrated pest management
- Adoption of drought tolerant variety of rice
- Need based nutrient management in crops
- Sustainable livestock management

#### Long Term

Maintenance of infrastructure | 100% transition to natural farming (28 ha)

#### 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, Gorakhpur

#### Estimated Cost

Over ₹1.8 crore across three phases (Short term: ~₹34 lakhs | Medium term: ~₹74 lakhs | Long term: ~₹74 lakhs)

## Enhancing Green Spaces and Biodiversity

- Plantation of trees
- Agroforestry
- Arogya Van
- Creation of nursery
- 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 of allocated land

#### Medium Term

Plantation of 1,000 to 1,500 tree saplings | Adoption of agroforestry in ~14 ha land (14,000 trees planted) | Sequestration potential (in 15-20 years): up to 29,000 tCO<sub>2</sub>

#### Long Term

Additional 1,500 to 2,000 saplings planted | Adoption of agroforestry in ~21 ha land (10,580 trees planted) | Sequestration potential (in 15-20 years): up to 41,000 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 ₹73 lakhs across three phases (Short term: ~₹14 lakhs | Medium term: ~₹24 lakhs | Long term: ~₹33 lakhs)

## 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 | 50 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 50 solar street lights at key locations in GP | Solar potential: ~285 kWp | Mitigation potential: ~64 tCO<sub>2</sub>e per year

#### Medium Term

Solar rooftop installation on 40% of pucca houses (82) | Agro-photovoltaic installed on 2 ha | Purchase of all new pumps to be solar-powered | Installation of additional solar street light (as required) | Solar potential: ~582 kWp | Mitigation potential: ~639 tCO<sub>2</sub>e per year

#### Long Term

Solar rooftop installation on 100% of pucca houses (123) | Agro-photovoltaic installed on 2 ha | Replacing all CFL light fixtures with LED tube lights/ bulbs; installation of EE fans across households | Solar potential: ~623 kWp | Mitigation potential: ~684 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 ₹12 crores across three phases (Short Term: ~₹1.2 crores | Medium Term: ~₹5.3 crores | Long Term: ~₹5.4 crores)

## Sustainable and Enhanced Mobility

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

### Short Term

Construction and repair work of existing roads (~3 km) | Replacing 2 auto rickshaws with e-autorickshaws | Promoting adoption of 5 e-tractors and 5 e-goods carriers

### Medium Term and Long Term

Maintenance of existing 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 ₹1.3 crores 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
- 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 | Involving 10 SHGs | 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 metric tonnes 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**