





# CLIMATE SMART GRAM PANCHAYAT SUMMARY OF RECOMMENDATIONS

Shravasti 💓

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Sarvan Tara Gram Panchayat

# Department of Environment, Forest and Climate Change

Government of Uttar Pradesh







# **Enhancing Green Spaces and Biodiversity**

- Community-based plantations
- Creation of nursery
- Arogya Van
- People's Biodiversity Register (PBR)
- Agroforestry

# **Short Term**

Plantation of 1,500 tree saplings | Sequestration potential (in 15-20 years): 15,600 tCO<sub>2</sub> | Establishment of 1 nursery | Establishing *Arogya Van* on 0.1 ha allocated land | Updation of PBR

# **Medium Term**

Plantation of 1,500 to 2,000 tree saplings | Sequestration potential (in 15-20 years): ~20,000 tCO<sub>2</sub> | Adoption of Agroforestry in ~22 ha land | Sequestration potential (in 15-20 years): ~22,000 tCO<sub>2</sub>

# Long Term

Adoption of agroforestry in additional  $\sim$ 32 ha land | Sequestration potential (in 15-20 years):  $\sim$ 23,400 tCO<sub>2</sub>

# **Key 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 ₹68.3 lakhs over 3 phases (Short Term: ~₹21.3 lakhs | Medium Term: ~₹34.2 lakhs | Long Term: ~₹12.8 lakhs)

# **Management and Rejuvenation of Water Bodies**

# • Rainwater harvesting

- Restoration of ponds
- Repair of wells
- Tree plantations
- Recharge pits
- Enhancing drainage infrastructure
- Wastewater management

# **Short Term**

Installation of RwH structures in all PRI buildings | Restoration and boundary construction of 4 ponds, ~1,000 trees planted around water bodies | Cleaning and repair of 17 wells | Construction of 45 recharge pits | Elevation of 15 hand pumps | Construction of 1.3 km drainage network | Cleaning of Goolwa drain | Construction of 1 community toilet

# **Medium Term**

Maintenance of ponds, drainage channels and other water-related infrastructure Installation of RwH structures in 3 households | Additional recharge pits constructed as per need | 1,000 additional saplings planted around water bodies

# Long Term

Short Term

Continued maintenance of water resources, related infrastructure, and wastewater infrastructure, | Installation of RwH structures in 12 households

# Departments

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

# **Estimated Cost**

Over ₹2.4 crores across three phases (Short Term: ~₹1.9 crores | Medium Term: ~₹27.3 lakhs | Long Term: ~₹30.45 lakhs

# Sustainable Agriculture

- Micro-irrigation
- Farm ponds
- Bund construction
- Resilient farming practices

Introduction of micro-irrigation on 11 ha | Construction of 4 farm ponds| Bund construction with trees around ~50 ha | Transitioning 15 ha (15%) of agricultural land to natural farming | Training of 2 para vets

- Transition to natural farming
- Sustainable livestock management

#### Medium Term

Expanding micro-irrigation on 15 ha| Additional 10 farm ponds constructed| Bund construction with trees around ~101 ha| Transitioning ~25 ha (40% cumulative) to natural farming

# Long Term

Expanding micro-irrigation on 11 ha | Maintenance of infrastructure| Additional ~60 ha (100% cumulative) transition to natural farming

#### 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, Shravasti

# **Estimated Cost**

Over ₹3.1 crores across three phases (Short Term: ~₹65.8 lakhs | Medium Term: ~₹88.1 lakhs | Long Term: ~₹1.6 crores

# Sustainable Solid Waste Management

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

#### **Short Term**

Setting up segregation and storage facility | Installation of 20 bins | Procurement of 1 electric garbage van | Setting up of 65 compost pits | Engagement of 100 women for manufacturing plastic-alternative products (SHG alignment)

#### **Medium and Long Term**

Installation of additional waste bins and maintenance of existing infrastructure | 1 GP-level plastic shredder unit | 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**

Approx ₹9.7 lakhs over three phases

# Access to Clean, Sustainable, Affordable and Reliable Energy

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

# Short Term

Solar rooftop installation on all government buildings; Solar potential: 21 kWp | Mitigation potential: 23 tCO<sub>2</sub>e per year | Solar rooftop installation for suitable residential buildings | 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 2 solar high masts (Panchayat Bhawan and Primary school) | Installation of 45 solar street lights at key locations in GP

#### **Medium Term**

Solar rooftop installation on 55% of pucca houses (61) | Agro-photovoltaic installed on ~2.1 ha | 24 diesel pumps replaced with solar pumps | Solar potential: ~315 kWp | Mitigation potential: ~225 tCO<sub>2</sub>e per year

#### Long Term

Solar rooftop installation on 100% of pucca houses (92) | Agro-photovoltaic installed on ~4.2 ha of agricultural land | 40 diesel pumps replaced with solar pumps | Replacing all CFL light fixtures with LED tube lights/ bulbs; installation of EE fans across households | Solar potential: ~496 kWp | Mitigation potential: 342 tCO<sub>2</sub>e per year

#### **Departments**

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

# **Estimated Cost**

Over ₹20 crores across three phases (Short Term: ~₹63.1 lakhs | Medium Term: ~₹6.5 crores | Long Term: ~₹13.4 crores)

# **Sustainable and Enhanced Mobility**

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

# Short Term

Repairing and maintenance of road infrastructure | Road elevation on ~3.6 km | Introducing 5 e-auto rickshaws in the GP | 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 ₹2.2 crore 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 programs 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