

Pratapgarh



# CLIMATE SMART GRAM PANCHAYAT

SUMMARY OF RECOMMENDATIONS

YADAVPATTI GRAM PANCHAYAT

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











### Sustainable Agriculture

- Micro-irrigation
- Bunds •
- Farm ponds
- Transition to natural farming
- Crop rotation and mixed cropping (millets & legumes)
- Sustainable livestock management

#### Short Term

Introduction of micro-irrigation on 30% suitable agricultural land   Bunds on		
748 ha agricultural land (50%)   Construction of farm ponds as required		
Transitioning 17 ha (15%) of agricultural land to natural farming		
Medium Term		
Expanding micro-irrigation on 40% suitable agricultural land   Bunds on		

additional 748 ha agricultural land (100%) | Additional farm ponds constructed as required | Transitioning 45 ha (25%) to natural farming Long Term

Maintenance of infrastructure | 100% transition to natural farming (~50 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, Pratapgarh

#### **Estimated Cost**

Over ₹3.9 crores across three phases (Short term: ~₹43 lakhs | Medium term: ~₹1.5 crores | Long term: ~₹1.9 crores)

### Management and Rejuvenation of Water Bodies

Chart To

	Short Term
Rainwater harvesting	Installation of RwH structures in all (3) PRI buildings   Rejuvenation of 4
Rejuvenation of & deepening of ponds	ponds & deepening of 1 pond   ~1,000 trees planted around water bodies
Repair of wells	Construction of 70 recharge pits   47 handpumps rebored   Construction of
Reboring of handpumps	1.54 km drainage network   Cleaning of existing drains (0.85 km)
Tree plantations	Construction of culverts at strategic locations   Village Water Security Plan
Recharge pits	preparation
Enhancing drainage infrastructure	Medium Term
Wastewater management	Maintenance of ponds, drainage channels and other water related
Capacity building	infrastructure   Installation of RwH structures in pucca households (plot size
	above 1,500 sq. ft.)
	Long Term
	Continued maintenance of water resources   Installation of RwH structures
	in pucca households (plot size above 1,000 sq. ft)
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	Rejuvenation of & deepening of ponds Repair of wells Reboring of handpumps Tree plantations Recharge pits Enhancing drainage infrastructure Wastewater management Capacity building

#### **Departments**

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

#### **Estimated Cost**

Over ₹1.6 crores across three phases (Short Term: ~₹1.3 crores | Medium Term: ~₹15 lakhs | Long Term: ~₹15 lakhs)

### **Enhancing Green Spaces and Biodiversity**

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

#### Short Term

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

#### **Medium Term**

Plantation of 1,500 to 2,000 tree saplings | Sequestration potential (in 15-20 years): 17,500 tCO<sub>2</sub> | Adoption of agroforestry in ~20ha land | Sequestration potential (in 20 years): up to 20,000 tCO<sub>2</sub>

#### Long Term

Additional 1,500 to 2,000 saplings planted | Sequestration potential (in 15-20 years): 17,500 tCO<sub>2</sub>| Adoption of agroforestry in ~30 ha land | Sequestration potential:  $30,000 \text{ tCO}_2$ | Maintenance of nursery

#### **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 ₹85.5 lakhs across three phases (Short term: ~₹14.7 lakhs | Medium term: ~₹33.4 lakhs | Long term: ~₹37.4 lakhs)

## Sustainable Solid Waste Management

- Enhanced waste management infrastructure
- Vermicompost and Nadep pits
- Sanitation management
- Ban on single-use plastics

#### Short Term

Setting up segregation and storage facility | Installation of 15 bins | Procurement of 1 electric garbage van | Setting up of vermicompost (70) & Nadep pits (55) | Construction of toilets in 14 households & repair of 212 existing toilets | Engagement of 100-120 women for manufacturing plasticalternative products (SHG alignment)

#### Medium and Long Term

Installation of additional waste bins | 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**

Approx ₹31.4 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 | Replacing all diesel pumps (4) with solar pumps | 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 1 solar street lights and 1 high mast solar street light at key locations in GP Solar potential: 30 kWp | Mitigation potential: 34 tCO2e per year Medium Term

Solar rooftop installation on 40% of pucca houses (180) | Agro-photovoltaic installed on 2 ha | Solarisation of any new pumps installed Solar potential: ~1,041 kWp | Mitigation potential: ~1,143 tCO<sub>2</sub>e per year

### Solar potential: $\sim$ 1,041 kwp | Mitigation potential: $\sim$ 1,143 toO<sub>2</sub>e per Long Term

Solar rooftop installation on 100% of pucca houses (271) | Agro-photovoltaic installed on 2 ha | Solarisation of any new pumps installed | Replacing all CFL light fixtures with LED tube lights/ bulbs; installation of EE fans across households

Solar potential: ~1,312 kWp | Mitigation potential: ~1,440 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 ₹14.6 crores across three phases (Short Term: ~₹28.6 lakhs | Medium Term: ~₹6.7 crores | Long Term: ~₹7.5 crores)

### **Sustainable and Enhanced Mobility**

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

#### **Short Term**

Repairing and maintenance of road infrastructure | Road construction-RCC (~1.4 km), Interlocking (~1.75 km) | Introducing 4 e-auto rickshaws in the GP | Promoting adoption of 5 e-tractors and 5 e-goods carriers | Mitigation potential: 1.8 tCO<sub>2</sub>e per e-auto-rickshaw Medium Term and Long Term

More e-auto-rickshaws & e-tractors and e-goods carriers added as required | 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 ₹2.7 crores across three phases

### **Enhancing Livelihoods and Green Entrepreneurship**

<ul> <li>Engaging SHGs to manufacture sustainable products</li> <li>Organic fertilizer production</li> <li>E-tractor and e-goods carrier rental services</li> <li>Solar-powered cold storage facility</li> <li>Production and sale of natural medicines and supplements</li> <li>O&amp;M of RE installations</li> </ul>	Short Term Capacity building, training, and support for 100 women and other entrepreneurs to establish enterprises across the GP   Involving 2 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 more women and other groups as per need and enhancing marketing of products and services 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