





CLIMATE SMART GRAM PANCHAYAT

SUMMARY OF RECOMMENDATIONS

Sant Ravidas Nagar

Domanpur Chiwathiya Gram Panchayat

Department of Environment, Forest and Climate Change

Government of Uttar Pradesh





Management and Rejuvenation of Water Bodies

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

Short Term

Installation of RwH structures in all PRI buildings (3) | Rejuvenation of 3 ponds | ~1,000 trees planted around water bodies | Construction of 20 recharge pits | Repairing of 9 wells and 4 handpumps | Construction of ~2.5 km drainage network | Wastewater treatment through 200 KLD DEWATs and soak pits | Village Water Security Plan preparation

Medium Term

Maintenance of ponds, drainage channels and other water related infrastructure | Installation of RwH structures in 63 households | Additional ~1,000 trees planted around water bodies

Long Term

Continued maintenance of water resources | Installation of RwH structures in 105 households

Key Departments

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

Estimated Cost

Over ₹2.41 crores over three phases (Short Term: ~₹1.6 crores | Medium Term: ~₹33.3 lakhs | Long Term: ~₹48 lakhs)

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 15 waste bins | Procurement of 1 electric garbage van | Construction of toilets in all new houses constructed and 2 community toilets | Setting up of 10 Nadep compost pits and 20 vermicompost pits | Ban on single-use plastics | Engagement of 100-120 women for manufacturing plastic-alternative 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 | Engagement of additional 200 women for manufacturing plasticalternative products (SHG alignment)

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 ~₹32.2 lakhs over three phases

Sustainable Agriculture

- Drought Management
- Micro-irrigation
- Tree Bunds
- Farm ponds
- Transition to natural farming
- Integrated pest management
- Setting up mini-weather station
- Sustainable livestock management

Short Term

Introduction of micro-irrigation in ~ 15 ha | Tree bunds in 96.1 ha (50% of total agricultural area) | Construction of 10 farm ponds | Setting up 1 mini weather monitoring station | Transitioning 28 ha (15%) of agricultural land to natural farming

Medium Term

Tree bunds in remaining 96.1 ha (100% covered) | Additional farm ponds as per need | Transitioning 77 ha (40%) of agricultural land to natural farming

Long Term

Maintenance of infrastructure | Transitioning 87 ha (100% covered) of agricultural land to natural farming

Departments

Department of Agriculture | Department of Horticulture and Food Processing | CIPM - Centre for Integrated Pest Management | Department of Land Resources | Jal Shakti Department | Animal Husbandry Department | Uttar Pradesh New & Renewable Energy Development Agency | Regional Centres for Organic Farming | Krishi Vigyan Kendra, Sant Ravidas Nagar

Estimated Cost

Over ₹5.1 crores across three phases (Short term: ₹96.7 lakhs |Medium term: ₹1.9 crores | Long term: ₹2.2 crores)

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: \sim 20,000 tCO $_2$ in 15-20 years | Establishing Arogya Van on 0.1 ha allocated land

Medium Term

Plantation of 2,000 to 2,500 tree saplings | Adoption of Agroforestry in \sim 71 ha land (7,100 trees planted) | Sequestration potential: \sim 96,000 tCO $_2$ in 15-20 years

Long Term

Additional 2,500 to 3,000 saplings planted | Adoption of Agroforestry in \sim 106 ha land (10,600 trees planted) | Sequestration potential: \sim 1,36,000 tCO₂ in 15-20 years

Departments

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

Estimated Cost

Over ₹1.7 crores across three phases (Short term: ₹25.7 lakhs | Medium term: ₹60.1 lakhs | Long term: ₹80.5 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 | Solar rooftop installation for suitable residential buildings | Solarization of 15 grid connected electric 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 LED street lights and 10 high-mast solar LED at key locations in GP | Solar potential: 30 kWp | Mitigation potential: 33 tCO₂e per year

Medium Term

Solar rooftop installation on 50% of pucca houses | Agro-photovoltaic installed on 2 ha | Installation of 50 solar LED streetlights and 5 high-mast solar LED | Solar potential: \sim 500 kWp | Mitigation potential: \sim 549 tCO₂e per year

Long Term

Solar rooftop installation on remaining 50% of pucca houses | Agro-photovoltaic installed on 2 ha | Replacing all CFL light fixtures with LED tube lights/ bulbs; installation of energy efficient fans across households | Solar potential: \sim 500 kWp | Mitigation potential: \sim 549 tCO₂e 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 ₹10.9 crores across three phases (Short term: ~₹67.8 lakhs | Medium term: ~₹5.2 crores | Long term ~₹5.1 crores)

Sustainable and Enhanced Mobility

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

Short Term

Repairing and maintenance of road infrastructure | Replacing 3 auto rickshaws with e-autorickshaws | Establishing hiring facility with 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 ₹1.9 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 8 SHGs | Establishing partnerships between Panchayat, community members, farmer groups 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.