



CLIMATE SMART GRAM PANCHAYAT

SUMMARY OF RECOMMENDATIONS



Chandauli

Mawaiya Gram Panchayat

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





Management and Rejuvenation of Water Bodies

- Maintenance of water bodies
- Repair of hand pumps
- Tree plantations
- Enhancing drainage infrastructure
- Rainwater harvesting
- Recharge pits
- Expanding piped water connectivity

Short Term

Rejuvenation of 3 ponds, 5 wells, and 2 canals, ~1,000 trees planted around water bodies | Installation of 1 hand pump and repairing 20 hand pumps | Construction of 1.13 km drainage network | Installation of RWH structures in all (7) PRI buildings | Construction of 4 recharge pits

Medium Term

Regular maintenance of ponds, drainage channels and other water related infrastructure | Additional plantation of ~1000 trees | Installation of RWH structures in 180 households | Additional soak pits constructed as per need

Long Term

Continued maintenance of water resources | Installation of RWH structures in 190 households

Key Departments

Rural Development Department | Irrigation and Water Resources Department | Uttar Pradesh Department of Land Resource | Jal Jeevan Mission - Ministry of Jal Shakti, Government of India

Estimated Cost

Over ₹2.6 crores over 3 phases (Short Term: ~₹98.5 lakhs | Medium Term: ~₹82.3 lakhs | Long Term: ~₹85.8 lakhs)

Enhancing Green Spaces and Biodiversity

- Plantation of trees
- Agroforestry
- Arogya Van

Short Term

Plantation of 1,000 tree saplings | Sequestration potential: 10,000 tCO₂ in 20 years | Establishing Arogya Van on 0.1 ha allocated land

Medium Term

Plantation of 1,500 tree saplings | Adoption of Agroforestry in ~47 ha land (4,700 trees planted) | Sequestration potential: 59,500 tCO₂ in 20 years

Long Term

Additional 1,500 saplings planted | Adoption of Agroforestry in ~ 71 ha land (7,100 trees planted) | Sequestration potential: 83,500 tCO₂ in 20 years

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 ₹92 lakhs across three phases (Short term: ~₹13 lakhs | Medium term: ~₹34.7 lakhs | Long term: ~₹44.3 lakhs)

Sustainable Agriculture

- Micro-irrigation
- Bunds with trees
- Farm ponds
- Transition to natural farming
- Sustainable livestock management

Short Term

Introduction of micro-irrigation on ~ 7.5 ha | Construction of 73 ha tree bunds | Construction of 4 farm ponds| Transitioning 22 ha (15%) of agricultural land to natural farming

Medium Term

Expanding micro- irrigation on 10 ha | Tree bunds in remaining 73 ha (100% covered) | Additional 10 farm ponds | Transitioning 49 ha (40% cumulative) to natural farming

Long Term

Expanding micro-irrigation on 7.5 ha | Maintenance of infrastructure | 75 ha (100% covered) 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 | Agriculture Technology Management Agency (ATMA) | Regional Centres for Organic Farming | Krishi Vigyan Kendra, Chandauli

Estimated Cost

Over ₹4 crores across three phases (Short term: ~₹68.9 lakhs | Medium term: ~₹1.4 crores | Long term: ~₹1.9 crores)

Sustainable Solid Waste Management

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

Short Term

Setting up 1 resource recovery center | Procurement of 1 electric garbage van | Installation of 10 bins | Hiring 6 sanitation workers | Construction of 50 compost pits | Construction and repairing of toilets in 40 households | Engagement of 100 women for manufacturing plastic-alternative products (SHG alignment)

Medium and Long Term

Installation of additional waste bins, compost pits, and 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

Over ₹89.55 lakhs over 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 potential: 66.5 kWp | Mitigation potential: 73 tCO₂e per year | Solar rooftop installation for suitable residential buildings | 9 diesel pumps replaced with solar pumps | Mitigation potential: 9.45 tCO₂e per year | 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 25 solar street lights along roads and 2 solar high mast at schools

Medium Term

Solar rooftop installation on 50% of pucca houses (185) | Agro-photovoltaic installed on 2 ha | Additional installation of solar lights and solar high mast | Replacing all CFL light fixtures with LED tube lights/ bulbs; installation of EE fans across households | Solar potential: ~1,055 kWp | Mitigation potential: ~1,158 tCO₂e per year

Long Term

Solar rooftop installation on 100% of pucca houses (185) | Agro-photovoltaic installed on 2 ha | Replacing all CFL light fixtures with LED tube lights/ bulbs; installation of EE fans across households | Solar potential: ~1,055 kWp | Mitigation potential: ~1,158 tCO₂e per year

Departments

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 | Agriculture Department | Education Department | Ministry of Petroleum and Natural Gas, Government of India

Estimated Cost

Over ₹ 14.9 crores across three phases (Short term: ~₹74.6 lakhs | Medium term: ~₹7 crores | Long term: ~₹7.2 crores)

Sustainable and Enhanced Mobility

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

Short Term

Repairing and maintenance of road infrastructure | Addition of 12 e-auto rickshaws in the GP | Promoting adoption of 5 e-tractors and 5 e-commercial vehicles

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 ₹1.51 crores across three phases (Short term: ~₹1.2 crores | Medium term: ~₹29 lakhs)

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 9 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.

Please refer to action plan for detailed recommendations