



CLIMATE SMART GRAM PANCHAYAT

SUMMARY OF RECOMMENDATIONS



Satari Gram Panchayat

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





Management and Rejuvenation of Water Bodies

- Rainwater harvesting
- Rejuvenation of ponds and canals
- Tree plantations
- Enhancing drainage infrastructure
- Capacity building

Short Term

Installation of RWH structures in all (9) PRI buildings | Cleaning and digging of canals, deepening of ponds (2/4) and reborings of 12 hand pumps | Plantation of ~1,000 trees around water bodies | Construction of new drains of 5 km, 0.25 km long embankment and 3 check dams | Village Water Security Plan preparation

Medium Term

Maintenance of ponds, canals, drainage channels and other water-related infrastructure | Additional plantation of 1,000 trees | Installation of RWH structures in 250 households

Long Term

Continued maintenance of water resources | Installation of RWH structures in 270 households

Key Departments

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

Estimated Cost

Over ₹2.6 crores across three phases (Short Term: ~₹49.4 lakhs | Medium Term: ~₹1 crore | Long Term: ~₹1.1 crores)

Sustainable Solid Waste Management

- Enhanced waste management infrastructure
- Compost and vermi-compost pits
- Sanitation management
- Ban on single-use plastics
- Capacity building

Short Term

Setting up segregation and storage facility | Installation of 40 bins | Procurement of 1 electric garbage van | Setting up of 20 Nadep and vermi-compost pits | Construction of twin pit toilet | Engagement of 100-120 women for manufacturing plastic-alternative products (SHG alignment)

Medium and Long Term

Installation of additional waste bins | Setting up additional twin pit toilets | 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 ₹32 lakhs across three phases

Sustainable Agriculture

- Micro-irrigation
- Bunds
- Farm ponds
- Mulching
- Growing low water requirement

Short Term

Introduction of micro-irrigation on ~70 ha (30%) and bunds on 379.6 ha (50%) | Construction of 5 farm ponds | Setting up 1 mini weather station | Transitioning 114 ha (15%) of agricultural land to natural farming

- Awareness of crop loss insurance program
- Mini weather station
- Transition to natural farming
- Integrated pest management
- Sustainable livestock management

Medium Term

Expanding micro-irrigation on ~94 ha (40%) | 100% bund construction on agricultural land (379.6 ha) | Additional farm ponds as per need | Transitioning 190 ha (25%) to natural farming

Long Term

Micro-irrigation on ~70 ha (100%) | Maintenance of infrastructure | 100% transition to natural farming

Departments

Department of Agriculture | Centre for Integrated Pest Management (CIMP) | Department of Horticulture and Food Processing | Department of Land Resources | Fisheries Department | Jal Shakti Department | Animal Husbandry Department | Uttar Pradesh New and Renewable Energy Development Agency (UPNEDA) | Regional Centres for Organic Farming | Krishi Vigyan Kendra, Mahoba

Estimated Cost

Over ₹11.1 crores across three phases (Short Term: ~₹3.6 crores | Medium Term: ~₹5.7 crores | Long Term: ~₹1.8 crores)

Enhancing Green Spaces and Biodiversity

- Plantation of trees
- *Arogya Van*
- Agroforestry
- People's Biodiversity Register

Short Term

Plantation of 2,000 tree saplings | Sequestration potential (in 15-20 years): 20,000 tCO₂ | Establishing *Arogya Van* on 0.1 ha allocated land

Medium Term

Plantation of 2,000 to 2,500 tree saplings | Sequestration potential (in 15-20 years): up to 25,000 tCO₂ | Adoption of Agroforestry in 85 ha land | Sequestration potential (in 20 years): up to 85,000 tCO₂ | Established and maintained *Arogya Van*

Long Term

Additional 2,500 to 3,000 saplings planted | Sequestration potential (in 15-20 years): up to 30,500 tCO₂ | Adoption of Agroforestry in 126 ha land | Sequestration potential (in 20 years): up to 1,26,000 tCO₂

Departments

Department of Environment, Forests and Climate Change | State Biodiversity Board | Panchayati Raj Department | Rural Development Department

Estimated Cost

Over ₹1.8 crores across three phases (Short Term: ~₹25.4 lakhs | Medium Term: ~₹66.8 lakhs | Long Term: ~₹88.5 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 potential: 60 kWp | Mitigation potential: 97.3 tCO₂e per year | Solar rooftop installation for suitable residential building | 30 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 40 solar LED and 5 high-mast solar LED street lights at key locations in GP

Medium Term

Solar rooftop installation on 40% of pucca houses (172) | Agro-photovoltaic installed on 2 ha | Solarisation of 25 grid connected electric pumps | Additional 40 solar LED and 5 high-mast solar LED street lights | Solar potential: ~1,016 kWp | Mitigation potential: ~1,142 tCO₂e per year

Long Term

Solar rooftop installation on 100% of pucca houses (432) | Agro-photovoltaic

installed on 2 ha | Solarisation of 20 grid connected electric pump | Replacing all CFL light fixtures with LED tube lights/ bulbs; installation of EE fans across households | Solar potential: ~1,280 kWp | Mitigation potential: ~1,427 tCO_{2e} 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) | Dakshinanchal Vidyut Vitran Nigam Limited | Panchayati Raj Department | Rural Development Department | Department of Agriculture | Education Department

Estimated Cost

Over ₹17.3 crores across three phases | (Short Term: ~₹1.3 crores | Medium Term: ~₹7.8 crores | Long Term: ~₹8.2 crores)

Sustainable and Enhanced Mobility

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

Short Term

10 diesel auto-rickshaws replaced with e-autorickshaws | Mitigation Potential : ~1.73 tCO_{2e} per auto | Promoting adoption of 5 e-tractors and 5 e-goods carriers

Medium and Long Term

5 diesel auto-rickshaws replaced with e-auto rickshaws and additional e-auto rickshaws as per need | Mitigation Potential: 1.65 tCO_{2e} | Maintenance of existing infrastructure | Awareness programmes on benefits of e-vehicles

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 ₹1.23 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
- Dairy processing unit
- Solar powered cold storage facility
- Production and sale of natural medicines and supplements
- O&M of RE installations

Short Term

Engage 100 women, other entrepreneurs and involve 15 SHGs in manufacturing of sustainable products | Establish dairy processing unit involving 100 women and farmer, and 15 SHGs | Capacity building, training and demonstration sessions | Establishing partnerships between Panchayat, community members, FPOs for marketing and selling of compost and dairy products | 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