



CLIMATE SMART GRAM PANCHAYAT

SUMMARY OF RECOMMENDATIONS

AAYAR GRAM PANCHAYAT

**Department of Environment,
Forest and Climate Change**

Government of Uttar Pradesh

Varanasi





Management and Rejuvenation of Water Bodies

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

Short Term

Construction of drainage network | Setting up of 4 DEWATS (~250 KLD each) | Construction of 30 soak pits | Rejuvenation of pond near Rajbhar hamlet | ~1,000 trees planted around water bodies | Installation of RWH structures in all PRI buildings (4) | Installation of filter chambers | Construction of diversion channels

Medium Term

Maintenance of ponds, drainage channels and other water and wastewater related infrastructure | 1,000 additional saplings planted around water bodies | Installation of RWH structures in 114 households | Additional recharge pits

Long Term

Continued maintenance of water resources, related infrastructure, and wastewater infrastructure | Scaling up of DEWATS units based on requirement | Installation of RWH structures in 190 households constructed as per need

Departments

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

Estimated Cost

Over ₹4.1 crores across 3 phases (Short Term: ~₹3 crores | Medium Term: ~₹43 lakhs | Long Term: ~₹66.5 lakhs)

Sustainable Agriculture

- Micro-irrigation
- Farm ponds
- Bund construction
- Resilient farming practices
- Transition to natural farming
- Sustainable livestock management

Short Term

Introduction of micro-irrigation on ~24.5 ha | Construction of 10 farm ponds| Bund construction with trees around ~104 ha agricultural land | Transitioning 31 ha agricultural (15%) of agricultural land to natural farming | Training of 2 para vets

Medium Term

Additional 15 farm ponds constructed| Bund construction with trees around ~104 ha (100% agricultural land| Transitioning ~83 ha (40% cumulative) to natural farming

Long Term

Expanding micro- irrigation as per requirement | Maintenance of bunds and farm ponds| Additional ~94 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, Barabanki

Estimated Cost

Over ₹7.5 crores across 3 phases (Short Term: ~₹1 crore | Medium Term: ~₹2.1 crores | Long Term: ~₹2.3 crores)

Sustainable Solid Waste Management

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

Short Term

Operationalisation of Resource Recovery Centre | Installation of 50 bins | Procurement of 1 electric garbage van | Setting up of 45 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 | Setting up of additional compost pits as per requirement | 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 ₹13 lakhs over 3 phases

Enhancing Green Spaces and Biodiversity

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

Short Term

Plantation of 1,000 tree saplings | Sequestration potential (in 15-20 years): 10,000 tCO₂ | 0.1 ha land allocated for *Arogya Van* | Updation of PBR

Medium Term

Plantation of 1,000 to 1,500 tree saplings | Sequestration potential (in 15-20 years): ~12,500 tCO₂ | *Arogya Van* established | Adoption of Agroforestry in ~49 ha land | Sequestration potential (in 15-20 years): ~49,000 tCO₂

Long Term

Adoption of agroforestry in additional ~74 ha land | Sequestration potential (in 15-20 years): ~74,000 tCO₂

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 ₹99.6 lakhs over 3 phases (Short Term: ~₹13 lakhs | Medium Term: ~₹35.4 lakhs | Long Term: ~₹51.2 lakhs)

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 lights

Short Term

Solar rooftop installation on all government buildings | 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 highmasts (Panchayat Bhawan and Primary school) | Installation 45 solar street lights at key locations in GP | Solarisation of 50 grid-connected pumps | Solar potential: 296 kWp | Mitigation potential: 75.5 tCO₂e per year

Medium Term

Solar rooftop installation on 40% of pucca houses (256) | Agro-photovoltaic

installed on ~2 ha | Solar potential: ~1,268 kWp | Mitigation potential: ~1,392 tCO₂e per year

Long Term

Solar rooftop installation on 100% of pucca houses (385) | Agro-photovoltaic installed on ~2 ha of agricultural land | Replacing all CFL light fixtures with LED tube lights/ bulbs; installation of EE fans across households | Solar potential: ~1,655 kWp | Mitigation potential: 1,817 tCO₂e 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) | Purvanchal Vidyut Vitran Nigam Limited | Panchayati Raj Department | Rural Development Department | Department of Agriculture | Education Department

Estimated Cost

Over ₹19 crores across three phases (Short term: ~₹1.5 crores | Medium Term: ~₹7.7 crores | Long Term: ~₹9.9 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 ~50 m | Replacing 15 diesel auto rickshaws with e-auto rickshaws in the GP | Promoting adoption of 5 e-tractors and 5 e-goods carriers

Medium 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 ₹1.2 crores across 3 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 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