



CLIMATE SMART GRAM PANCHAYAT

SUMMARY OF RECOMMENDATIONS

Aligarh

Jaidpura Gram Panchayat

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





Management and Rejuvenation of Water Bodies

- Rejuvenation of ponds
- Repair of wells
- Tree plantations
- Enhancing drainage infrastructure
- Rainwater harvesting
- Recharge pits

Short Term

Rejuvenation of 2 ponds ~1,000 trees planted around water bodies | Restoration of 20 wells | Construction of ~3 km drainage network | Installation of RwH structures in all (6) PRI buildings | Construction of 6 recharge pits

Medium Term

Maintenance of 2 ponds and 20 wells | Additional plantation of ~1500 trees | Installation of RwH structures in 94 households | Additional soak pits constructed as per need

Long Term

Maintenance of 2 ponds and 20 wells | Additional plantation of ~2000 trees | Continued maintenance of water resources | Regular maintenance of drains | Installation of RwH structures in 239 households

Departments

Rural Development Department | Irrigation and Water Resources Department, Ministry of Jal Shakti | Uttar Pradesh Department of Land Resource

Estimated Cost

Over ₹3.6 crores across three phases (Short Term: ₹2.1 crores | Medium Term: ₹51.9 lakhs | Long Term: ₹1 crores)

Sustainable Solid Waste Management

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

Short Term

Procurement of 1 electric garbage van | Installation of 14 waste bins | Setting up vermicompost pits as per need | Engagement of ~120 women for manufacturing plastic-alternative products (SHG alignment) | Construction of 1 community toilet

Medium and Long Term

Installation of additional waste bins, compost pits, and maintenance of existing infrastructure | Engagement of additional 200 women for manufacturing plastic-alternative products (SHG alignment) | 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 ₹19.1 lakhs across three phases

Sustainable Agriculture

- Drought Management
- Micro-irrigation
- Tree bunds
- Farm ponds
- Transition to natural farming
- Sustainable livestock management

Short Term

Introduction of micro-irrigation in ~ 8.37 ha | Tree bunds in 150 ha (50% of total agricultural area) | Construction of 5-10 farm ponds | Transitioning 45 ha (15%) of agricultural land to natural farming

Medium Term

Expanding micro-irrigation in 11.16 ha | Tree bunds in remaining 300 ha (100% covered) | Additional 15-20 farm ponds | Transitioning 120 ha (40%) of agricultural land to natural farming

Long Term

Practice of micro-irrigation in remaining 8.39 ha (100% covered) | Maintenance of infrastructure | Transitioning 135 ha (100% covered) of agricultural land to natural farming

Departments

Department of Agriculture, Cooperation and Farmer Welfare | Department of Horticulture and Food Processing | CIPM - Centre for Integrated Pest Management | Department of Land Resources | Jal Shakti Department | Agriculture Technology Management Agency (ATMA) | Animal Husbandry Department | Uttar Pradesh New & Renewable Energy Development Agency | Regional Centres for Organic Farming | Krishi Vigyan Kendra, Aligarh

Estimated Cost

Over ₹7.9 crores across three phases (Short Term: ₹1.3 crores | Medium Term: ₹3.2 crores | Long Term: ₹3.4 crores)

Enhancing Green Spaces and Biodiversity

- Improving green cover
- Plantation of trees
- Arogya Van
- Agroforestry

Short Term

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

Medium Term

Plantation of 1,500 to 2,000 tree saplings | Adoption of agroforestry in ~30 ha land (3,000 trees planted) | Sequestration potential (in 15-20 years): ~47,500 tCO₂

Long Term

Additional 1,500 to 2,000 saplings planted | Adoption of agroforestry in ~ 46.4 ha land (4,640 trees planted) | Sequestration potential: ~63,900 tCO₂ in 15-20 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 ₹97.8 lakhs across three phases (Short Term: ₹12.9 lakhs | Medium Term: ₹39.2 lakhs | Long Term: ₹45.7 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 38 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 3 high-mast solar LED at key locations in GP | Solar potential: 41.8 kWp | Mitigation potential: 46 tCO₂e per year

Medium Term

Solar rooftop installation on 40% of pucca houses (208) | Agro-photovoltaic installed on 2 ha | Installation of 10 solar LED streetlights | Solar potential: ~1,124 kWp | Mitigation potential: ~1,234 tCO₂e per year

Long Term

Solar rooftop installation on 100% of pucca houses (310) | 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: ~1,430 kWp | Mitigation potential: ~1,570 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) | Dakshinanchal Vidhyut Vitran Nigam Limited | Panchayati Raj Department | Rural Development Department | Department of Agriculture | Education Department

Estimated Cost

Over ₹17.5 crores across three phases (Short Term: ~₹1.4 crores | Medium Term: ~₹7.4 crores | Long Term ~₹8.7 crores)

Sustainable and Enhanced Mobility

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

Short Term

Purchasing 5 e-tractors and 5 e-goods carriers | Replacing 10 auto-rickshaws with 10 e-auto rickshaws

Medium 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 ₹1.1 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 9 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