



CLIMATE SMART GRAM PANCHAYAT

SUMMARY OF RECOMMENDATIONS

Ainchhwara Gram Panchayat

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

Chitrakoot





Enhancing Green Spaces and Biodiversity

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

Short Term

Plantation of 1,500 tree saplings | Sequestration potential (in 15-20 years): 5,400 tCO₂ | Establishing *Arogya Van* on 2 ha allocated land

Medium Term

Plantation of 1,500 to 2,000 tree saplings | Sequestration potential (in 15-20 years): 7,200 tCO₂ | Adoption of Agroforestry in ~40 ha land | Establishing *Arogya Van* on 2 ha allocated land

Long Term

Additional 2,000 to 2,500 saplings planted | Sequestration potential (in 15-20 years): 8,900 tCO₂ | Adoption of Agroforestry in ~80 ha land

Key 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 ₹3 crores across three phases (Short term: ~ ₹19.3 lakhs | Medium term: ~ ₹1 crore | Long term: ~ ₹1.8 crores)

Management and Rejuvenation of Water Bodies

- Rainwater harvesting
- Rejuvenation of ponds
- Construction of retention ponds
- Repair of wells
- Tree plantations
- Recharge pits
- Reboring of hand pumps
- Enhancing drainage infrastructure
- Capacity building

Short Term

Installation of RWH structures in all PRI buildings (100%) | Rejuvenation of 6 ponds | ~1,000 trees planted around water bodies | Construction of retention pond (1) | Construction of recharge pits (30) | Reboring of handpumps (10) | Cleaning and restoration of wells (25) | Construction of culverts & canals

Medium Term

Maintenance of 6 ponds, 1 retention pond, wells (25), hand pumps (70), recharge pits (30) & drainage infrastructure | Construction of 2 retention pond | Additional 1,000 trees planted around water bodies | Installation of RWH structures in 100 households

Long Term

Continued maintenance of water resources | Installation of RWH structures in 300 households

Departments

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

Estimated Cost

Over ₹4.3 crores across three phases (Short Term: ~ ₹2 crores | Medium Term: ~ ₹87.5 lakhs | Long Term: ~ ₹1.4 crores)

Sustainable Agriculture

- Micro-irrigation
- Bunds
- Farm ponds
- Transition to natural farming
- Adoption of drought tolerant varieties of rice & wheat
- Dry direct seeded rice
- Sustainable livestock management

Short Term

Introduction of micro-irrigation on 60 ha (60%) | Construction of 10 farm ponds | Transitioning 60 ha of agricultural land to natural farming | Construction of bunds on ~100 ha agricultural land

Medium Term

Expanding micro-irrigation on 40 ha (100%) | Additional farm ponds (15) | Transitioning additional 100 ha to natural farming | Construction of bunds in remaining 200 ha agriculture land (67%)

Long Term

Micro irrigation on additional agricultural land as required | Maintenance of infrastructure | Transitioning additional 140 ha to natural farming (100%)

Departments

Department of Agriculture | Soil Conservation Department| Horticulture Department | Centre for Integrated Pest Management (CIPM)|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, Chitrakoot

Estimated Cost

Over ₹9 crores across three phases (Short term: ~₹2.3 crores |Medium term: ~₹3.2 crores | Long term: ~₹3.5 crores)



Sustainable Solid Waste Management

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

Short Term

Setting up segregation and storage facility (solid waste management yard) | Installation of 14 waste bins | Procurement of 1 electric garbage van | Setting up of compost pits | Ban on single-use plastics | Engagement of 100 women for manufacturing plastic-alternative products (SHG alignment)

Medium Term

Installation of additional waste bins (10) |Installation of recycling & plastic shredder unit (1) | Engagement of additional 200 women for manufacturing plastic-alternative products (SHG alignment) | Setting up new compost pits | Maintenance of existing infrastructure | Scaling up partnerships | Regular awareness, training and capacity-building programs

Long Term

Engagement of additional 300 women for manufacturing plastic-alternative products (SHG alignment) | Setting up new compost pits | Maintenance of existing infrastructure | Scaling up partnerships | Regular awareness, training and capacity-building programs

Departments

Panchayati Raj Department | Public Health Department | Department of Rural Development | Department of Agriculture | Uttar Pradesh Khadi and Village Industries Board

Estimated Cost

~₹57.5 lakhs across 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 rooftop installation for suitable residential buildings | 24 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 30 solar street lights & 5 high-mast solar LED streetlights at key locations in GP | Solar potential: 23.5 kWp | Mitigation potential: 51 tCO₂e per year

Medium Term

Solar rooftop installation on 40% of pucca houses (160) | Agro-photovoltaic installed on 4 ha | 36 additional diesel pumps replaced with solar pumps | Installation of additional 60 solar street lights & 5 high-mast solar LED streetlights at key locations in GP | Solar potential: ~1,480 kWp | Mitigation potential: ~1662.8 tCO₂e per year

Long Term

Solar rooftop installation on 60% of pucca houses (240) | Agro-photovoltaic installed on 6 ha | 60 remaining diesel pumps replaced with solar pumps | Replacing all CFL light fixtures with LED tube lights/ bulbs; installation of EE fans across households | Solar potential: ~2,220 kWp | Mitigation potential: 2,501 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 Vidyut Vitran Nigam Limited | Panchayati Raj Department | Rural Development Department | Department of Agriculture | Education Department

Estimated Cost

Over ₹32.7 crores across three phases (Short term: ~₹1 crore | Medium term: ~₹12.4 crores | Long term: ~₹19.3 crores)

Sustainable and Enhanced Mobility

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

Short Term

Repair of existing roads | Developing 5 km. of existing kuccha roads to pucca roads | Construction of 600 m long footpaths | 8 diesel autos replaced with 8 e-auto rickshaws | Mitigation potential: 85.88 tCO₂e | Setup 4-5 e- auto rickshaws transit stop/pick-up points | Introducing 10 e-auto rickshaws in the GP | Promoting adoption of 2 to 3 e-tractors and 2 to 3 e-goods carriers

Medium Term and Long Term

Maintenance of existing infrastructure | Construction of additional 1km long footpath | Introducing additional 20 e-auto rickshaws in the GP | Adoption of additional 2 to 3 e-tractors and 2 to 3 e-goods carriers

Departments

Infrastructure and Industrial Development Department | Transport Department | Panchayati Raj Department | Department of Rural Development

Estimated Cost

Approx ₹7.3 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 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 200-300 more women and other groups as per need and enhancing marketing of products and services | Setting up of cold storage (48-96 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