



CLIMATE SMART GRAM PANCHAYAT

SUMMARY OF RECOMMENDATIONS



Auraiya

Kothipur Gram Panchayat

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





Enhancing Green Spaces and Biodiversity

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

Short Term

Plantation of 500 tree saplings | Sequestration potential (in 15-20 years): 5,000 tCO₂ | Establishing Arogya Van on 0.2 ha allocated land

Medium Term

Plantation of 500 to 1,000 tree saplings | Adoption of Agroforestry in ~5 ha land | Sequestration potential (in 15-20 years): 13,000 tCO₂

Long Term

Additional 500 to 1,000 saplings planted | Adoption of Agroforestry in ~6 ha land | Sequestration potential (in 15-20 years): 14,500 tCO₂

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 ₹49 lakhs across three phases (Short term: ~₹6.6 lakhs | Medium term: ~₹11.52 lakhs | Long term: ~₹31 lakhs)



Management and Rejuvenation of Water Bodies

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

Short Term

Installation of RwH structures in all (4) PRI buildings | Rejuvenation of 2 wells and 2 ponds, ~1,000 trees planted around water bodies | Construction of 45 recharge pits | Maintenance of 1.8 km drainage network | Construction of 1 community toilet and 25 household toilets | Wastewater treatment through 2 DEWATs unit (70 KLD each) and soak pits

Medium Term

Installation of RwH structures in 64 households | Maintenance of ponds, wells, drainage channels and other water related infrastructure | Additional recharge pits constructed as per need

Long Term

Installation of RwH structures in 46 households | Maintenance of ponds, wells, drainage channels and other water related infrastructure | Continued maintenance of water resources | Additional recharge pits constructed as per need

Departments

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

Estimated Cost

Over ₹2.11 crores over 3 phases (Short Term: ~₹65.4 lakhs | Medium Term: ~₹69.4 lakhs | Long Term: ~₹76 lakhs)

Sustainable Agriculture

- Micro-irrigation
- Farm ponds
- Bunds
- Transition to natural farming
- Sustainable livestock management
- Soil Health and Management

Short Term

Introduction of micro-irrigation on ~7 ha | Construction of 5 farm ponds | Construction of bunds around 55 ha | Transitioning 16 ha (15%) of agricultural land to natural farming | Reclamation of ~6 ha of sodic soil-affected land

Medium Term

Expanding micro-irrigation on 10 ha | Additional 5 farm ponds | Additional bunds around 55 ha | Transitioning 43 ha to natural farming

Long Term

Micro irrigation on additional ~7 ha (100% suitable agricultural land) | 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 | Jal Shakti Department | Animal Husbandry Department | Uttar Pradesh New and Renewable Energy Development Agency (UPNEDA) | Regional Centres for Organic Farming | Krishi Vigyan Kendra, Auraiya

Estimated Cost

Over ₹3 crores across three phases (Short term: ~₹55 lakhs | Medium term: ~₹83.55 crores | Long term: ~₹1.63 crores)

Sustainable Solid Waste Management

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

Short Term

Setting up segregation and storage facility | Installation of 40 bins | Procurement of 1 electric garbage van | Setting up 45 vermicompost pits | Maintenance and repair of existing Nadep pits | Engagement of 50 women for manufacturing plastic-alternative products (SHG alignment)

Medium Term and Long Term

Installation of additional 10 waste bins 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 ₹13 lakhs over 3 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: 29 kWp | Mitigation potential: 32 tCO₂e per year | Replacing 4 existing diesel pumps with solar pumps | Solar potential: 71.5 kWp | Mitigation potential: 13.65 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 55 solar street lights at key locations in GP

Medium Term

Solar rooftop installation on 40% of pucca houses (62) | Agro-photovoltaic installed on 2 ha | Solarisation of existing grid-connected electric pumps | Replacing existing fixtures in all households with energy efficient fixtures (LED lights, LED bulbs, EE fans) | Solar potential: ~186 kWp | Mitigation potential: ~204 tCO_{2e} per year

Long Term

Solar rooftop installation on 100% of pucca houses (94) | Agro-photovoltaic installed on 2 ha | Replacing all fans with EE fans across households | Solar potential: ~751 kWp | Mitigation potential: 1,480 tCO_{2e} per year

Departments

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 ₹12.82 crores across three phases
(Short Term: ~₹82 lakhs | Medium Term: ~₹6 crores | Long Term: ~₹6 crore)

Sustainable and Enhanced Mobility

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

Short Term

Repairing and maintenance of road infrastructure | Introducing 10 e-auto rickshaws in the GP | Promoting adoption of 5 e-tractors and 5 e-goods carriers

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 ₹1.14 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 50 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 100 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