



Lalitpur

CLIMATE SMART GRAM PANCHAYAT

SUMMARY OF RECOMMENDATIONS

UDAIPURA GRAM PANCHAYAT

Department of Environment,
Forest and Climate Change

Government of Uttar Pradesh





Management and Rejuvenation of Water Bodies

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

Short Term

Installation of RWH structures in all (6) PRI buildings | Rejuvenation of 2 ponds, ~1,000 trees planted around water bodies | Repairing of 105 wells and re boring of 15 handpumps | Construction of 2 check dams | Construction of ~3 km drainage network | Construction of chamber and cleaning of existing drains (300m) | Wastewater treatment through 1 MLD DEWATs and soak pits | Construction of 35 recharge pits

Medium Term

Maintenance of ponds, drainage channels and other water related infrastructure | Installation of RWH structures in 80 households | Additional 1000 trees planted | Construction of 35 recharge pits | Soak pits constructed as per need

Long Term

Continued maintenance of water resources | Installation of RWH structures in 159 households

Key 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: ~₹3.3 crores | Medium Term: ~₹40.3 lakhs | Long Term: ~₹55.6 lakhs)

Sustainable Agriculture

- Drought Management
- Micro-irrigation
- Tree Bunds
- Farm ponds
- Transition to natural farming
- Integrated pest management
- Setting up mini-weather station
- Sustainable livestock management

Short Term

Introduction of micro-irrigation in ~ 240 ha | Tree bunds in 705 ha (50% of total agricultural area) | Construction of 10 farm ponds | Setting up 1 mini weather monitoring station | Transitioning 82 ha (15%) of agricultural land to natural farming

Medium Term

Expanding micro-irrigation in ~ 320 ha | Tree bunds in remaining 705 ha (100% covered) | Construction of 15 farm ponds | Transitioning 137 ha (40%) of agricultural land to natural farming

Long Term

Expanding micro-irrigation in remaining ~ 800 ha | Maintenance of infrastructure | Transitioning 329 ha (100% covered) of agricultural land to natural farming

Departments

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

Estimated Cost

Over ₹22 crores across three phases (Short term: ₹4.6 crores | Medium term: ₹6.8 crores | Long term: ₹10.5 crores)

Enhancing Green Spaces and Biodiversity

- Plantation of trees
- Agroforestry
- Arogya Van
- 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 | Adoption of Agroforestry in ~203 ha land | Sequestration potential (in 15-20 years): 2,28,000 tCO₂

Long Term

Additional 2,500 to 3,000 saplings planted | Adoption of Agroforestry in remaining ~305 ha land | Sequestration potential (in 15-20 years): 3,35,000 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 | Infrastructure and Industrial Development Department

Estimated Cost

Over ₹2.9 crores across three phases (Short Term: ~₹29.7 lakhs | Medium Term: ~₹1.1 crores | Long Term: ~₹1.6 crores)

Sustainable Solid Waste Management

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

Short Term

Setting up segregation and storage facility | Installation of 40 waste bins | Procurement of 2 electric garbage van | Setting up of 20 vermicompost and 70 Nadep compost pits | Repairing existing school toilets | Engagement of 100 women for manufacturing plastic-alternative products (SHG alignment)

Medium Term

Installation of additional 40 waste bins | Maintenance of existing infrastructure | Scaling up partnerships | Setting up new compost pits as per need | Engagement of additional 200 women for manufacturing plastic-alternative products (SHG alignment)

Long Term

Maintenance of existing infrastructure | Scaling up partnerships | Engagement of additional 300 women for manufacturing plastic-alternative products (SHG alignment) | 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 ₹10 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

Short Term

Solar rooftop installation on government buildings (6) | 60 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 50 solar LED street lights potential: 95 tCO_{2e} per year

- Solar street lights

Medium Term

Solar rooftop installation on 40% of pucca houses (225) | Agro-photovoltaic installed on 2 ha | 90 diesel pumps replaced with solar pumps | Solar potential: ~1,175 kWp | Mitigation potential: ~1,384.5 tCO₂e per year

Long Term

Solar rooftop installation on 100% of pucca houses (337) | Agro-photovoltaic installed on 2 ha | Remaining 150 diesel pumps replaced with solar pumps | Replacing all CFL light fixtures with LED tube lights/ bulbs; installation of EE fans across households | Solar potential: ~1,511 kWp | Mitigation potential: 1,816.5 tCO₂e 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 ₹24.1 crores across three phases (Short Term: ~₹2.1 crores | Medium Term: ~₹9.7 crores | Long Term: ~₹12.3 crores)

Sustainable and Enhanced Mobility

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

Short Term

Construction and repairing of road infrastructure (~10 km) | e-auto rickshaws added to the fleet as per need | 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 | Promoting adoption of electric two-wheelers

Departments

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

Estimated Cost

Over ₹1.7 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 7 SHGs | Establishing partnerships between Panchayat, community members, farmer groups 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