



CLIMATE SMART GRAM PANCHAYAT

SUMMARY OF RECOMMENDATIONS



Sultanpur

Diera Gram Panchayat

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





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 30 ha | Construction of 5 farm ponds | Bund construction with trees around ~164 ha | Transitioning 49 ha (15%) of agricultural land to natural farming | Training of 2 para vets

Medium Term

Expanding micro-irrigation on 40 ha | Additional 10 farm ponds constructed | Bund construction with trees around ~164 ha | Transitioning ~82 ha (40% cumulative) to natural farming

Long Term

Additional ~197 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 | Fisheries Department | Uttar Pradesh New and Renewable Energy Development Agency (UPNEDA) | Regional Centres for Organic Farming | Krishi Vigyan Kendra, Sultanpur | Agriculture Technology Management Agency (ATMA)

Estimated Cost

Over ₹9.3 crores across three phases (Short Term: ~₹1.60 crores | Medium Term: ~₹2.53 crores | Long Term: ~₹5.17 crores)

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 (11) PRI buildings | Rejuvenation of 3 ponds | ~1,000 trees planted around water bodies | Cleaning and repair of 8 wells | Construction of 59 recharge pits | Construction of platforms for handpumps | Construction of 2.2 km drainage network | Repair of existing drainage network | Installation of siphons

Medium Term

Maintenance of ponds, drainage channels and other water related infrastructure | Installation of RwH structures in 140 households | Additional recharge pits constructed as per need | 1,000 additional saplings planted around water bodies

Long Term

Continued maintenance of water resources, related infrastructure, and wastewater infrastructure, | Installation of RwH structures in 280 households

Departments

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

Estimated Cost

Over ₹4 crores across three phases (Short Term: ~₹1.72 crores | Medium Term: ~₹90.25 lakhs | Long Term: ~₹1.39 crores)

Enhancing Green Spaces and Biodiversity

- Plantation of trees
- Agroforestry
- Arogya Van
- Bal Van

Short Term

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

- People's Biodiversity Register
- Creation of nursery

Medium Term

Plantation of 1,000 to 1,500 tree saplings | Adoption of Agroforestry in ~24 ha land | Sequestration potential (in 15-20 years): 36,500 tCO₂

Long Term

Additional 1,500 to 2,000 saplings planted | Adoption of Agroforestry in ~37 ha land | Sequestration potential (in 15-20 years): 54,500 tCO₂

Departments

Department of Environment and Forests | State Biodiversity Board | Panchayati Raj Department | Rural Development Department | Central Institute of Medicinal and Aromatic Plants, Lucknow

Estimated Cost

Over ₹1.02 crores across three phases (Short Term: ~₹16 lakhs | Medium Term: ~₹34.60 lakhs | Long Term: ~₹51 lakhs)

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 4 bins | Procurement of 2 electric garbage van | Setting up of 40 vermicompost pits and 18 nadepts | Construction of 24 community toilets | 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 | Engagement of more women for manufacturing plastic-alternative products (SHG alignment) | Scaling up partnerships | Regular awareness, training and capacity-building programs

Departments

Department of Health and Family Welfare | Department of Rural Development | Department of Agriculture | Uttar Pradesh Khadi and Village Industries Board

Estimated Cost

Over ₹17.5 lakhs across three phases

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) | Replacing 9 diesel pumps with solar pumps | Installing of 4 high mast | Installation of 24 solar street lights at key locations in GP | Solar potential: ~67 kWp | Mitigation potential: ~83 tCO₂e per year

Medium Term

Solar rooftop installation on 40% of pucca houses (287) | Agro-photovoltaic installed on 2 ha | Solarisation of 10 existing grid connected pumps | Solar potential: ~1,360 kWp | Mitigation potential: ~1,500 tCO₂e per year

Long Term

Solar rooftop installation on 100% of pucca houses (430) | 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: ~1,790 kWp | Mitigation potential: ~2,000 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) | Madhyanchal Vidyut Vitran Nigam Limited | Panchayati Raj Department | Rural Development Department | Department of Agriculture | Education Department

Estimated Cost

Over ₹18 crores across three phases (Short Term: ~₹59 lakhs | Medium Term: ~₹8 crores | Long Term: ~₹9.7 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 ~4.2 km | Introducing 2 e-auto rickshaws in the GP | Promoting adoption of 5 e-tractors and 5 e-goods carriers

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 ₹3.41 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 16 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 | Uttar Pradesh State Council for Vocational Training

* Expansion of suggested climate smart activities and regular maintenance of any installations and infrastructure throughout the plan implementation land beyond.

Please refer to action plan for detailed recommendations