





CLIMATE SMART GRAM PANCHAYAT



SUMMARY OF RECOMMENDATIONS

Dilawarpur Devkali Gram Panchayat

Department of Environment, Forest and Climate Change

Government of Uttar Pradesh











Sustainable Agriculture

- Micro-irrigation
- Farm ponds
- · Construction of bunds
- · Transition to natural farming
- Drought tolerant rice and wheat variety.
- Sustainable livestock management

Short Term

Introduction of micro-irrigation on 34 ha (30%) | Construction of bunds on 80 ha agricultural land | Construction of 5 farm ponds | Transitioning 24 ha (15%) of agricultural land to natural farming

Medium Term

Expanding micro- irrigation on 45 ha (70%) | Additional farm ponds | Transitioning 40 ha (40%) to natural farming | Construction of bunds in remaining 79 ha agriculture land

Long Term

Expanding micro- irrigation on 34 ha (100%) | Maintenance of infrastructure | 100% transition to natural farming

Departments

Department of Agriculture | 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, Shahjahanpur

Estimated Cost

Over ₹2.8 crores across three phases (Short Term: ~₹63 lakhs | Medium Term: ~₹86 lakhs | Long Term: ~₹ 1.3 crores)

Management and Rejuvenation of Water Bodies

- Rainwater harvesting
- Rejuvenation of ponds
- Tree plantations
- Enhancing drainage infrastructure

Short Term

Installation of RwH structures in all (4) PRI buildings | Rejuvenation of 6 ponds | ~1,000 trees planted around water bodies | Construction of drains (1.365 km) & Repair of existing drains (1.9km)

Medium Term

Maintenance of ponds, drainage channels and other water-related infrastructure | 1,000 trees planted around water bodies | Installation of RwH structures in 30 households

Long Term

Continued maintenance of water resources | Installation of RwH structures in 70 households

Departments

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

Estimated Cost

Over ₹2.7 crores across three phases (Short Term: ~₹1.9 crores | Medium Term: ~₹32 lakhs | Long Term: ~₹47 lakhs)

Enhancing Green Spaces and Biodiversity

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

Short Term

Plantation of 1,000 tree saplings | Sequestration potential (in 15-20 years): Up to 3600 tCO $_2$ | Establishing *Arogya Van* on 0.2 ha allocated land

Medium Term

Plantation of 1,000 to 1,500 tree saplings | Sequestration potential: 4,800 tCO_2 (in 15 to 20 years) | Adoption of agroforestry in ~10 ha land | Sequestration potential: 9,900 tCO_2 (in 20 years)

Long Term

Additional 1,000 to 1,500 saplings planted | Sequestration potential: up to 4,800 tCO $_2$ (in 15 to 20 years) | Adoption of Agroforestry in ~10 ha land | Sequestration potential: 9,900 tCO $_2$ (in 20 years)

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 ₹53 lakhs across three phases (Short Term:~ ₹13 lakhs | Medium Term:~ ₹20 lakhs | Long Term: ~ ₹20 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 & setup resource recovery centre (1) | Installation of 20 bins | Procurement of 1 electric garbage van | Setting up of 50 compost pits | Engagement of 200-250 women for manufacturing plastic-alternative products (SHG alignment)

Medium and Long Term

Installation of additional waste bins, compost pits and maintenance of existing infrastructure | Scaling up partnerships | Regular awareness, training and capacity-building programs

Departments

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

Estimated Cost

Over ₹16.55 lakhs across three phases

Access to Clean, Sustainable, Affordable and Reliable Energy

- Solar rooftop
- 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 | 10 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) | Installing 100 solar street lights at key locations in GP | Solar potential: 46.2 kWp | Mitigation potential: ~61.5 tCO₂e per year

Medium Term

Solar rooftop installation on 40% of pucca houses (180) | Agro-photovoltaic installed on 2 ha | 15 additional diesel pumps replaced with solar pumps | Installation of 100 solar street lights at key locations in GP | Solar potential: 1,040 kWp | Mitigation potential: ~1,158 tCO₂e per year

Long Term

Solar rooftop installation on 100% of pucca houses (269) | Agro-photovoltaic installed on 2 ha | 25 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: \sim 1,307 kWp | Mitigation potential: \sim 1,461 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 ₹17.7 crores across three phases (Short Term: ~₹95.6 lakhs | Medium Term: ~₹7.7 crores | Long Term: ~₹9.1 crores)

Sustainable and Enhanced Mobility

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

Short Term

Repair of existing roads (1.5 km) | Introducing 10 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

Estimated Cost

Over ₹1.2 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

Medium Term

Expanding capacity building programmes to cover more women and other groups as per need and enhancing marketing of products and services

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