



CLIMATE SMART GRAM PANCHAYAT

SUMMARY OF RECOMMENDATIONS

Amethi

Kamrauli Gram Panchayat

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





Sustainable Agriculture

- Micro-irrigation
- Construction of bunds
- Farm ponds
- Drought-tolerant rice and wheat varieties
- Setting up mini-weather station
- Transition to natural farming
- Sustainable livestock management

Short Term

Introduction of micro-irrigation on ~4 ha (100%) | Construction of bunds on ~90 ha | Construction of 5 farm ponds | Install 1 mini weather monitoring station | Transitioning 40 ha of land to natural farming

Medium Term

Expanding micro-irrigation | Construction of bunds on ~90 ha | Additional farm ponds as required | Additional 4 mini weather monitoring stations | Transitioning 80 ha of land to natural farming

Long Term

Expanding micro-irrigation | Maintenance of infrastructure | Transitioning 60 ha of land 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, Amethi

Estimated Cost

Over ₹4.8 crores across three phases (Short Term: ~₹1.18 crores | Medium Term: ~₹2.1 crores | Long Term: ~₹1.5 crores)

Management and Rejuvenation of Water Bodies

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

Short Term

Installation of RWH structures in all (4) PRI buildings | Cleaning and desilting of 19 water bodies | Cleaning and restoration of 26 wells | Construction of 4 recharge pits | Plantation of 500 tree saplings | Construction of 2.3 km drainage network | Construction of 200 household toilets

Medium Term

Install RWH in 156 pucca households | Additional recharge pits as required | Maintenance of water bodies | Plant additional 500 saplings

Long Term

Installation of RWH structures in 60 households | Additional recharge pits | Maintenance of water bodies

Departments

Rural Development Department | Irrigation and Water Resources Department | Uttar Pradesh Department of Land Resource | Infrastructure and Industrial Development Department | State Construction and Infrastructure Development Corporation (SIDCO) | District Industries Centre (DIC)

Estimated Cost

Over ₹5 crores across three phases (Short Term: ~₹2.5 crores | Medium Term: ~₹1.6 crores | Long Term: ~₹94 lakhs)

Enhancing Green Spaces and Biodiversity

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

Short Term

Plantation of 500 tree saplings | Sequestration potential (in 15-20 years): 1,800 tCO₂ | Establishing *Arogya Van* on 0.1 ha allocated land

Medium Term

Plantation of 500 tree saplings | Sequestration potential (in 15-20 years): ~1,800 tCO₂ | Adoption of Agroforestry in ~20 ha land | Sequestration potential (in 20 years): ~20,000 tCO₂

Long Term

Additional 1,000 saplings planted | Sequestration potential: 4,800 tCO₂ (in 15 to 20 years) | Adoption of Agroforestry in ~20 ha land | Sequestration potential: 39,600 tCO₂ (in 20 years)

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 | SIDCO & DIC| Infrastructure and Industrial Development Department

Estimated Cost

Over ₹61 lakhs across three phases (Short Term:~ ₹6.7 lakhs | Medium Term:~ ₹22.5 lakhs | Long Term: ~₹31.8 lakhs)

Sustainable Solid Waste Management

- Enhanced waste management infrastructure
- Vermicompost pits & Nadep compost pits
- Ban on single-use plastics

Short Term

Procurement of 1 electric garbage van | Setting up segregation and storage facility | Installation of 20 waste bins | Construction of 45 vermicompost and 20 Nadep compost | Ban on single-use plastics | Engagement of 100 women for manufacturing plastic-alternative products

Medium and Long Term

Installation of additional 10 waste bins | Maintenance of existing infrastructure | Construction of Additional compost pits |Establishing composite marketing enterprise | Scaling up partnerships

Departments

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

Estimated Cost

Over ₹15.3 lakhs across three phases (Short Term: ~₹13.8 lakhs | Medium Term: ~₹1.5 lakhs)

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 | 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) | Installation of 100 solar street lights at key locations in GP | Solar potential: 4.1 kWp | Mitigation potential: 15 tCO₂e per year

Medium Term

Solar rooftop installation on 40% of pucca houses (67) | Agro-photovoltaic installed on 2 ha | 7 diesel pumps replaced with solar pumps | Replace the 60 existing LED streetlights with solar street lights | Install 5 high mast streetlights | Solar potential: 701 kWp | Mitigation potential: ~776.35 tCO₂e per year

Long Term

Solar rooftop installation on 25 to 30% of 633 suitable pucca houses | Agro-photovoltaic installed on 2 ha | Diesel pumps replaced with solar pumps | Replacing all CFL light fixtures with LED tube lights/ bulbs; installation of EE fans across households | Solar potential: ~800 kWp | Mitigation potential: 878 tCO₂e per year

Departments

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 ₹12.98 crores across three phases (Short Term: ~₹47.8 lakhs | Medium Term: ~₹6.1 crores | Long Term: ~₹6.4 crores)

Sustainable and Enhanced Mobility

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

Short Term

Repair of existing roads (1.53 km) | Promoting adoption of e-tractors (10) & e-goods carriers (5) | Replacing 10 auto-rickshaws with e-rickshaws | Mitigation potential: 17.3 tCO₂e per year

Medium and Long Term

Maintenance of existing infrastructure | Expanding public transport (as required) | Replacing 10 auto-rickshaws with e-autorickshaws | Mitigation potential: 17.3 tCO₂e per auto

Departments

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

Estimated Cost

Over ₹5.8 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, 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 period.

Please refer to action plan for detailed recommendations