



CLIMATE SMART GRAM PANCHAYAT ACTION PLAN

Jawahar Nagar Pursari

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
- Recharge pits
- Tree plantations
- Reboring of handpumps
- Enhancing drainage infrastructure

Short Term

Installation of RWH structures in all PRI buildings | Rejuvenation of 4 ponds, ~1,000 trees planted around water bodies | Repair of 10 wells | 15 handpumps rebored | 15 recharge pits constructed | Construction of 2.5 km drainage network & cleaning of existing drains (2 km)

Medium Term

Maintenance of ponds, wells and drainage network | Installation of RWH structures in 100 households

Long Term

Continued maintenance of water resources | Installation of RWH structures in 100 households

Key Departments

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

Estimated Cost

Over ₹2.1 crores across three phases (Short Term: ~₹1.3 crores | Medium Term: ~₹35 lakhs | Long Term: ~₹50 lakhs crores)

Sustainable Agriculture

- Micro-irrigation
- Farm ponds
- Construction of bunds
- Adoption of drought tolerant varieties of rice & wheat; shift to dry direct seeded rice
- Crop rotation & mixed cropping with drought resilient crops like millets
- Transition to natural farming
- Sustainable livestock management

Short Term

Introduction of micro-irrigation on 20 ha (30%) | Construction of bunds on 71 ha (50%) of agricultural land | Construction of farm ponds (as required) | Transitioning ~21 ha (15%) of agricultural land to natural farming

Medium Term

Expanding micro-irrigation on ~26 ha (70%) of agricultural land | Construction of bunds on 71 ha (100%) of agricultural land | Transitioning ~36 ha (cumulative 40%) to natural farming

Long Term

Expanding micro-irrigation on ~19 ha of suitable land | Maintenance of infrastructure | 100% transition to natural farming (~85 ha)

Departments

Department of Agriculture | 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, Etah

Estimated Cost

Over ₹4.2 crores across three phases (Short term: ~₹73 lakhs | Medium term: ~₹1.1 crores | Long term: ₹2.2 crores)

Enhancing Green Spaces and Biodiversity

- Plantation of trees
- Agroforestry
- Arogya Van
- Establishing a nursery

Short Term

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

Medium Term

Plantation of 1,500 to 2,000 tree saplings | Sequestration potential: up to 17,500 tCO₂ (in 15 to 20 years) | Adoption of Agroforestry in ~32 ha land | Sequestration potential: up to 32,000 tCO₂ (in 20 years) | Maintenance of nursery

Long Term

Additional 1,500 to 2,000 saplings planted | Sequestration potential: up to 17,500 tCO₂ (in 15 to 20 years) | Adoption of Agroforestry in ~49 ha land | Sequestration potential: up to 49,000 tCO₂ (in 20 years) | Maintenance of nursery

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 ₹1.4 crores across three phases (Short term: ~₹27 lakhs | Medium term: ~₹51 lakhs | Long term: ~₹64 lakhs)

Sustainable Solid Waste Management

- Enhanced waste management infrastructure
- Compost, vermicompost & NADEP pits
- Sanitation management
- Ban on single-use plastics
- Enhancing sanitation infrastructure

Short Term

Setting up segregation and storage facility | Installation of 25 waste bins | Procurement of 1 electric garbage van | Setting up of 20 vermicompost pits & 10 NADEP pits | Construction of 50 individual toilets | Engagement of 200-250 women for manufacturing plastic-alternative products (SHG alignment)

Medium Term

Installation of additional waste bins and maintenance of existing infrastructure | Construction of 1 community toilet | Scaling up partnerships

Long Term

Installation of 1 GP-level plastic shredder | 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 ₹11.3 lakhs across three phases (Short term: ~₹8.3 lakhs | Medium term: ~₹3 lakhs)

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 | Solarisation of 20 grid connected electric pumps | 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) | Installation of 15 solar street & 10 high-mast street lights | Solar potential: 50 kWp | Mitigation potential: 55 tCO₂e per year

Medium Term

Solar rooftop installation on 40% of pucca houses (197) | Agro-photovoltaic installed on 2 ha | Solar potential: 894 kWp | Mitigation potential: 982 tCO₂e per year

Long Term

Solar rooftop installation on 100% of pucca houses (295) | Agro-photovoltaic installed on 2 ha | Encouraging all new pump sets to be solar powered | Replacing all CFL light fixtures with LED tube lights/ bulbs; installation of EE fans across households | Installation of additional high mast & solar street lights (as required) | Solar potential: 1,090 kWp | Mitigation potential: 1,197 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 ₹11 crores across three phases (Short term: ~₹39 lakhs | Medium term: ~₹6.3 crores | Long term: ~₹5 crores)

Sustainable and Enhanced Mobility

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

Short Term

RCC interlocking and repair works (2.5 km) | Replacing 4 diesel autos with e-autorickshaws in the GP | Promoting adoption of 5 e-tractors and 5 e-goods carriers

Medium Term

Maintenance of existing road infrastructure | Additional e-autorickshaws added to GP fleet (as required) | Mitigation potential: 1.31 tCO₂e per e-autorickshaw

Long Term

Additional e-autorickshaws added to IPT fleet (as required) | 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 ₹4.1 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 3 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 | 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