



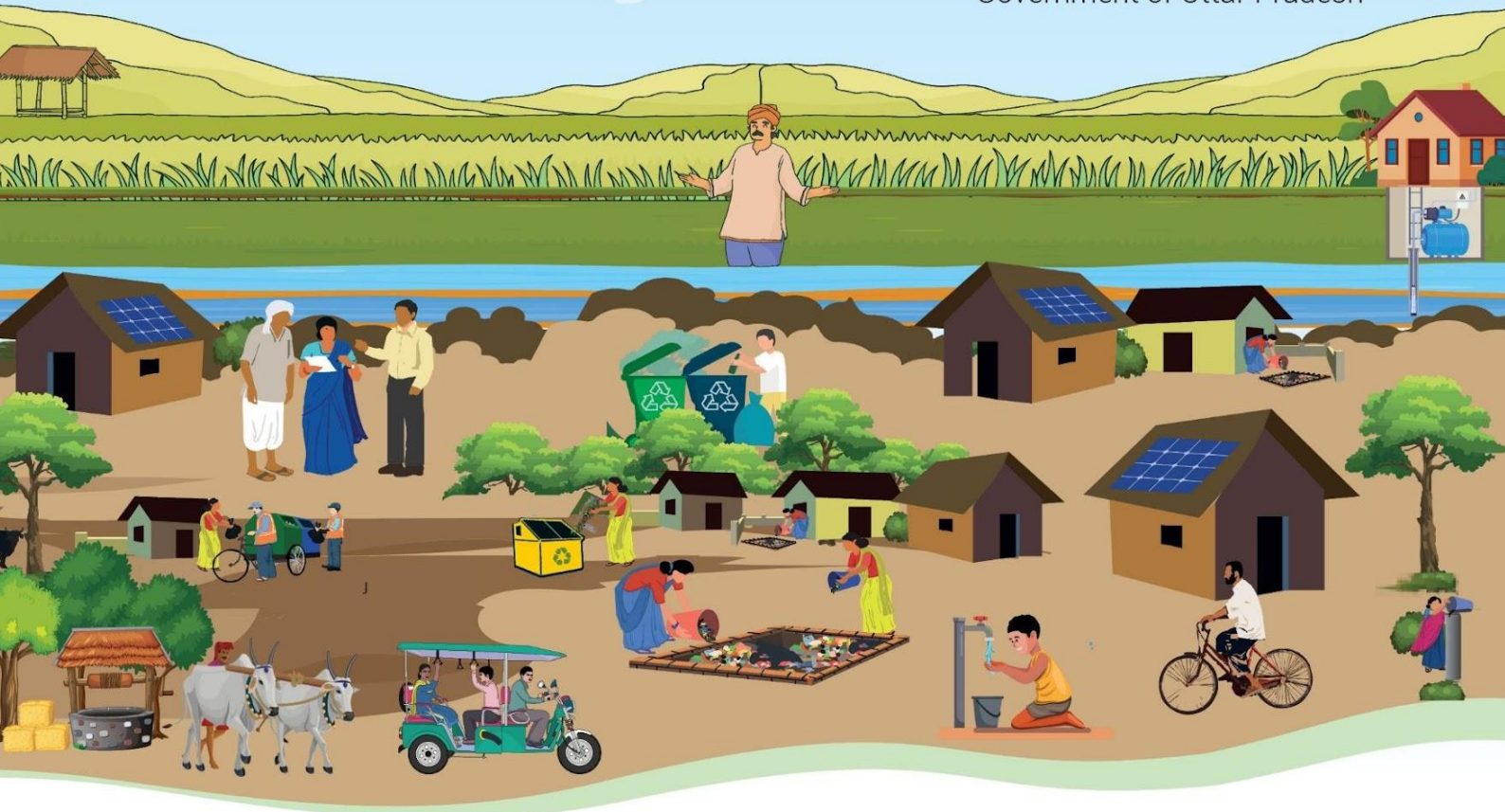
CLIMATE SMART GRAM PANCHAYAT

SUMMARY OF RECOMMENDATIONS

Sant Kabir Nagar

Nehiya Khurd Buzurg
Gram Panchayat

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





Enhancing Green Spaces and Biodiversity

- Plantation of trees
- Agroforestry
- Arogya Van

Short Term

Plantation of 1,500 tree saplings | Sequestration potential: 5,400 tCO₂ (in 15 to 20 years) | Establishing Arogya Van on 0.1 ha allocated land

Medium Term

Plantation of 1,500 to 2,000 tree saplings | Sequestration potential: 7,200 tCO₂ (in 15 to 20 years) | Adoption of Agroforestry in 55 ha land | Sequestration potential: 49,000 tCO₂ (in 20 years)

Long Term

Additional 2,000 to 2,500 saplings planted | Sequestration potential: 8,900 tCO₂ (in 15 to 20 years) | Adoption of Agroforestry in 82 ha land | Sequestration potential: 73,000 tCO₂ (in 20 years)

Key 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 ₹1.1 crores across three phases (Short Term: ~₹18 lakhs | Medium Term: ~₹41 lakhs | Long Term: ~₹57 lakhs)

Management and Rejuvenation of Water Bodies

- Rainwater harvesting
- Rejuvenation of ponds
- Repair of wells
- Tree plantations
- Recharge pits
- Enhancing drainage infrastructure

Short Term

Installation of RWH structures in all PRI buildings | Rejuvenation of 3 ponds, ~1,000 trees planted around water bodies | Repair of 11 wells | Construction of 30 recharge pits | Construction of 3 km drainage network & installation of siphon

Medium Term

Maintenance of ponds, wells and drainage network | Installation of RWH structures in 25 households

Long Term

Continued maintenance of water resources | Installation of RWH structures in 25 households

Departments

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

Estimated Cost

Over ₹2.52 crores across three phases (Short Term: ~₹84 lakhs | Medium Term: ~₹98 lakhs | Long Term: ~₹68 lakhs crores)

Sustainable Agriculture

- Micro-irrigation
- Farm ponds
- Construction of bunds
- Adoption of drought tolerant varieties of rice & wheat
- Crop rotation & mixed cropping with drought resilient crops like millets
- Transition to natural farming

Short Term

Introduction of micro-irrigation on 11.7 ha (50%) | Construction of bunds on 112.5 ha (75%) of agricultural land | Construction of 5 farm ponds | Transitioning 22.5ha (15%) of agricultural land to natural farming

Medium Term

Expanding micro-irrigation on 11.77 ha | Construction of bunds on 150 ha (100%) of agricultural land | Construction of 10 farm ponds |

- Sustainable livestock management

Transitioning 56.25 ha (cumulative 40%) to natural farming

Long Term

Expanding micro-irrigation | Maintenance of infrastructure | 100% transition to natural farming (112.50 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, Sant Kabir Nagar

Estimated Cost

Over ₹72.71 lakhs across three phases (Short Term: ~₹21.34 lakhs | Medium Term: ~₹35.64 lakhs | Long Term: ₹15.73 lakhs)



Sustainable Solid Waste Management

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

Short Term

Setting up segregation pits (88) and storage facility | Installation of 20 waste bins | Procurement of 1 electric garbage van | Setting up of 30 vermicompost pits & 15 NADEP pits | Engagement of 200-250 women for manufacturing plastic-alternative products (SHG alignment)

Medium Term

Installation of additional waste bins (10) and maintenance of existing infrastructure | 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 ₹52.8 lakhs across three phases (Short Term: ~₹44.8 lakhs | Medium Term: ~₹3 lakhs | Long Term: ~₹5 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 | 18 diesel pumps replaced with solar 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 92 solar street & 8 high-mast street lights | Solar potential: 27 kWp | Mitigation potential: 56 tCO₂e per year

Medium Term

Solar rooftop installation on 40% of pucca houses (167) | Agro-photovoltaic installed on 2 ha | 27 diesel pumps replaced with solar pumps | 90 LED street lights replaced with solar street lights & 10 high mast street lights | Solar potential: 1,001 kWp | Mitigation potential: 1,127 tCO₂e per year

Long Term

Solar rooftop installation on 100% of pucca houses (250) | Agro-photovoltaic installed on 2 ha | 45 diesel pumps replaced with solar pumps | Replacing all CFL light fixtures with LED tube lights/ bulbs; installation of EE fans across households | Installation of additional high mast street lights (as required) | Solar potential: 1,250 kWp | Mitigation potential: 1,420 tCO₂e per year

Departments

MNRE | Uttar Pradesh New and Renewable Energy Development Agency (UPNEDA) | Uttar Pradesh Power Corporation Limited (UPPCL) | Purvanchal Vidyut Vitran Nigam Limited | Panchayati Raj Department | Rural Development Department | Department of Agriculture | Education Department

Estimated Cost

Over ₹16 crores across three phases (Short Term: ~₹72 lakhs | Medium Term: ~₹7.3 crores | Long Term: ~₹8.4 crores)

Sustainable and Enhanced Mobility

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

Short Term

Road elevation works (3.5 km) & CC/interlocking works (2.5 km) | Introducing 10 e-autorickshaws in the GP | Promoting adoption of 5 e-tractors and 5 e-goods carriers

Medium Term

Maintenance of existing road infrastructure | Additional 10 e-autorickshaws in the GP | Mitigation potential: 1.8 tCO_{2e} per e-auto-rickshaw

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 ₹5.4 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 200 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 | 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