



CLIMATE SMART GRAM PANCHAYAT

SUMMARY OF RECOMMENDATIONS

BALIPATTI RANI GAON GRAM PANCHAYAT

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





Management and Rejuvenation of Water Bodies

- Enhancing drainage infrastructure
- Rejuvenation of ponds
- Retention ponds
- Tree plantations
- Rainwater Harvesting
- Capacity building

Short Term

Construction of 785 m new drains | Installation of filter chambers on drains | Rejuvenation of 7 ponds | Creation of 10 retention ponds | ~1,000 trees planted around water bodies | Installation of RWH structures in all PRI buildings (4) | Village Water Security Plan preparation

Medium Term

Maintenance of ponds and other water related infrastructure | Additional trees planted around water bodies | Installation of RWH structures in 31 pucca households | Additional 30 recharge pits constructed

Long Term

Continued maintenance of water resources | Installation of RWH structures in 357 pucca households

Key Departments

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

Estimated Cost

Over ₹3 crores across three phases (Short Term: ~₹1 crore | Medium Term: ~₹37 lakhs | Long Term: ~₹1.5 crores)

Sustainable Agriculture

- Micro-irrigation
- Bunds
- Farm ponds
- Adoption of machaan farming
- Transition to natural farming
- Sustainable livestock management

Short Term

Introduction of micro-irrigation on 34 ha | Ensure bunds on 506 ha agricultural land | Construction of 10 farm ponds | Transitioning 152 ha (15%) of agricultural land to natural farming

Medium Term

Expanding bunds to another 506 ha agricultural land | Additional 20 farm ponds | Transitioning 405 ha (40%) to natural farming

Long Term

Maintenance of bunds and farm ponds | 100% 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 | Agriculture Technology Management Agency (ATMA) | Animal Husbandry Department | Uttar Pradesh New and Renewable Energy Development Agency (UPNEDA) | Regional Centres for Organic Farming | Krishi Vigyan Kendra, Farrukhabad

Estimated Cost

Over ₹25 crores across three phases (Short term: ~₹4.3 crores | Medium term: ~₹10 crores | Long term: ~ ₹11 crores)

Enhancing Green Spaces and Biodiversity

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

Short Term

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

Medium Term

Plantation of 1,000 to 1,500 tree saplings | Adoption of Agroforestry in ~130 ha land | Sequestration potential (in 15-20 years): up to 1,42,500 tCO₂

Long Term

Additional Plantation of 1,500 to 2,000 tree saplings | Adoption of Agroforestry in ~194 ha land | Sequestration potential (in 15-20 years): up to 2,11,500 tCO₂

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 ₹1.8 crores across three phases (Short term: ~₹15 lakhs | Medium term: ~₹67.7 lakhs | Long term: ~₹1 crores)

Sustainable Solid Waste Management

- Establishing a waste management system
- Compost pits
- Sanitation management through construction of toilets
- Ban on single-use plastics

Short Term

Setting up segregation and storage facility | Procurement of 1 electric garbage van | Installation of 20 waste bins | Setting up of 80 vermicompost and 100 Nadep compost pits | Enhancing household toilet coverage | Ban on single-use plastics | Engagement of 100 women for manufacturing plastic-alternative products (SHG alignment)

Medium Term and Long Term

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

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 ₹93 lakhs across three phases

Sustainable and Enhanced Mobility

- Enhancing existing road infrastructure
- Enhancing public transport
- E-vehicles and E-tractors

Short Term

Interlocking of 70 m road stretch | Establishing hiring facility with 5 e-tractors and 5 e-goods carriers

Medium Term 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 ₹1 crore across three phases

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

Short Term

Solar rooftop installation on all government buildings | 42 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, Energy Efficient fans) |

- Energy efficient (EE) fixtures
- Solar street lights

Installation of 25 solar LED street lights and 10 high mast solar LED street lights at key locations in GP | Solar potential: ~271 kWp | Mitigation potential: ~88 tCO_{2e} per year

Medium Term

Solar rooftop installation on 40% of pucca houses (215) | Agro-photovoltaic installed on 2 ha | 63 diesel pumps replaced with solar pumps | Suitable households to adopt clean cooking interventions like household biogas, solar induction cookstoves and improved chulhas | Replacing all CFL light fixtures with LED tube lights/ bulbs; installation of energy efficient fans across households | Installation of 25 solar LED street lights and 10 high mast solar LED street lights at key locations in GP | Solar potential: ~1,493 kWp | Mitigation potential: ~1,323 tCO_{2e} per year

Long Term

Solar rooftop installation on 100% of pucca houses (323) | Agro-photovoltaic installed on 2 ha | 105 diesel pumps replaced with solar pumps | Replacing all CFL light fixtures with LED tube lights; installation of energy efficient fans across households | Solar potential: ~2,046 kWp | Mitigation potential: ~1,722 tCO_{2e} 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) | Dakshinanchal Vidyut Vitran Nigam Ltd | Panchayati Raj Department | Rural Development Department | Department of Agriculture | Education Department

Estimated Cost

Over 20 crores across three phases (Short term: ~₹1.35 crores | Medium term: ~₹8.5 crores | Long term: ~ ₹10 crores)

Enhancing Livelihoods and Green Entrepreneurship

- Engaging SHGs to manufacture sustainable products
- Organic fertilizer production
- Improving livelihoods through aquaculture
- 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 2 SHGs | Establishing partnerships between Panchayat, community members, FPOs for marketing and selling of compost | Promoting sustainable aquaculture practices | 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 | State Fisheries Development Board | 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