



CLIMATE SMART GRAM PANCHAYAT

SUMMARY OF RECOMMENDATIONS



Balrampur

Farenda Gram Panchayat

Department of Environment,
Forest and Climate Change

Government of Uttar Pradesh





Sustainable Agriculture

- Micro-irrigation
- Construction of bunds
- Drought-tolerant rice and wheat varieties
- Transition to natural farming
- Sustainable livestock management

Short Term

Introduction of micro-irrigation on ~22 ha (30%) | Construction of bunds on ~88 ha (50%) | Transitioning 35 ha (20%) of land to natural farming

Medium Term

Expanding micro-irrigation on 29 ha(cumulatively 70%) | Construction of bunds on ~89 ha (50%) | Transitioning 53 ha (cumulative 50%) of land to natural farming

Long Term

Expanding micro-irrigation on remaining 21 ha (100%) | Tree plantation | Transitioning 89 ha of land to natural farming

Departments

Department of Agriculture | Horticulture Department | Soil Conservation Department | Department of Land Resources | Jal Shakti Department | Regional Centres for Organic Farming | Krishi Vigyan Kendra, Balrampur

Estimated Cost

Over ₹5.1 crores across three phases (Short Term: ~₹1.1 crores | Medium Term: ~₹1.6 crores | Long Term: ~₹2.4 crores)



Management and Rejuvenation of Water Bodies

- Rainwater harvesting
- Rejuvenation of ponds
- Repair of wells
- Deeping of low elevated area
- Tree plantations
- Recharge pits
- Enhancing drainage infrastructure
- Wastewater management

Short Term

Installation of RWH structures in all (7) PRI buildings | Cleaning and desilting of 2 water bodies | Deeping of low elevated area (40.46 ha) | Cleaning and restoration of wells (9) | Construction of 5 recharge pits | Repair broken drains (600m) | Construction of concrete drain (600 m) | Cleaning of drains (2)| Cleaning of canal

Medium Term

Install RWH in 70 pucca households | Maintenance of water bodies and plantations | Construction of ponds (3)

Long Term

Installation of RWH structures in 100 households | Additional recharge pits| Maintenance of water bodies and plantations | Construction of additional drains & canals

Departments

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

Estimated Cost

Over ₹2.6 crores across three phases (Short Term: ~₹1.7 crores | Medium Term: ~₹53 lakhs | Long Term: ~₹44 lakhs)



Enhancing Green Spaces and Biodiversity

- Restoration and conservation of forest
- Plantation of trees
- Agroforestry
- *Arogya Van*
- People's Biodiversity Register

Short Term

Restoration and conservation of forest (8 ha) | 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) | Establishing Arogya Van on 0.1 ha allocated land | Adoption of agroforestry in 20 ha land | Sequestration potential: 20,000 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 ~20 ha land | Sequestration potential: 20,000 tCO₂ (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 ₹92.2 lakhs across three phases (Short Term:~ ₹19.2 lakhs | Medium Term:~ ₹33 lakhs | Long Term: ~₹40 lakhs)

Sustainable Solid Waste Management

- Enhanced waste management infrastructure
- Compost pits
- Ban on single-use plastics

Short Term

Setting up segregation and storage facility | Procurement of 1 electric garbage van | Installation of 35 waste bins | Construction of 5 compost pits & 2 vermicompost | Ban on single-use plastics | Engaging 100 women for manufacturing plastic-alternative products

Medium and Long Term

Recycling and plastic shredder unit (1) | Installation of additional 10 waste bins | Maintenance of existing infrastructure | Construction of additional compost pits | Scaling up partnerships

Departments

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

Estimated Cost

Over ₹22 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 | 30 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 20 solar LED streetlights & 5 high mast street lights | Solar potential: 19 kWp | Mitigation potential: ~52.36 tCO₂e per year

Medium Term

Solar rooftop installation on 40% of pucca houses (148) | Agro-photovoltaic installed on 4 ha | 45 diesel pumps replaced with solar pumps | Replacing existing fixtures in all houses with LED tube lights/bulbs | Installing 20 solar LED streetlights | Install 5 high mast streetlights | Solar potential: 1,444 kWp | Mitigation potential: ~1,632.75 tCO₂e per year

Long Term

Solar rooftop installation on 66% of pucca houses (222) | Agro-photovoltaic installed on 6 ha | 75 Diesel pumps replaced with solar pumps | Replacing all CFL light fixtures with LED tube lights/ bulbs; installation of EE fans across households | Installing 10 more solar LED streetlights | Solar potential: ~2,166 kWp | Mitigation potential: ~2,456.75 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 ₹32.2 crores across three phases (Short Term: ~₹89.9 lakhs | Medium Term: ~₹12.5 crores | Long Term: ~₹18.8 crores)

Sustainable and Enhanced Mobility

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

Short Term

Road elevation (500 m) | Construction of pitch (pucca) roads (1.02 km) | Adoption of 10 e-autorickshaws | Maintenance of existing infrastructure | Developing 2-3 e-autorickshaws transit stop/pick-up points

Medium and Long Term

Additional 10 e-autorickshaws | Maintenance of existing infrastructure | Expanding public transport (as required) | Developing 5-6 e-auto rickshaws transit stop/pick-up points

Departments

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

Estimated Cost

Over ₹1.7 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 (14-29 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 land beyond.*

Please refer to action plan for detailed recommendations