



LIFE

Lifestyle for Environment



Kasganj

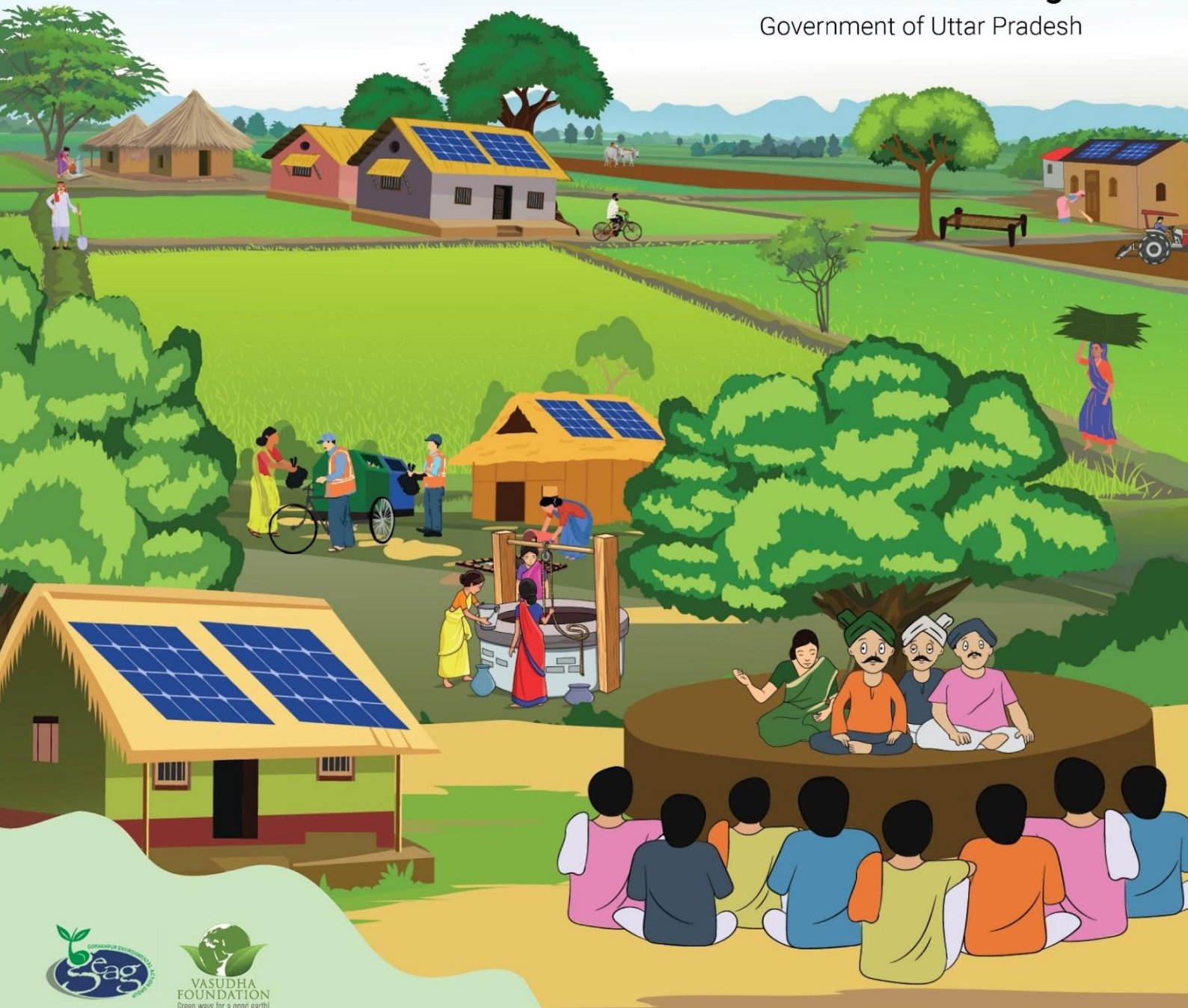
CLIMATE SMART GRAM PANCHAYAT

SUMMARY OF RECOMMENDATIONS

Bhujpura Gram Panchayat

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
- Reboring and repair of handpumps
- Tree plantations
- Enhancing drainage infrastructure
- Capacity building

Short Term

Installation of RWH structures in all (5) PRI buildings | Cleaning of 2 ponds, desilting of 8 wells, reboring of 4 hand pumps and repairing 45 hand pumps | Plantation of ~1,000 trees around water bodies | Construction of 5 recharge pits | Cleaning and desilting 2km of drain | Construction of 1.50 km drainage network | Village Water Security Plan preparation

Medium Term

Maintenance of ponds, drainage channels and other water related infrastructure | Additional plantation of 1,000 trees | Installation of RWH structures in 608 households | Additional recharge pits constructed as per need

Long Term

Continued maintenance of water resources | Installation of RWH structures in 260 households

Key Departments

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

Estimated Cost

Over ₹3.6 crores across three phases (Short Term: ~₹38 lakhs | Medium Term: ~₹2.20 crores | Long Term: ~₹99 lakhs)

Sustainable Agriculture

- Micro-irrigation
- Construction of bunds
- Farm ponds
- Drought tolerant rice and wheat variety
- Nutrient management of crops
- Transition to natural farming
- Integrated pest management
- Sustainable livestock management

Short Term

Introduction of micro-irrigation on ~35 ha and bunds on 119.5 ha | Construction of 5-10 farm ponds | Transitioning 36 ha (15%) of agricultural land to natural farming

Medium Term

Expanding micro-irrigation on 22.7 ha | Construction of bunds on 120.2 ha | Additional 15-20 farm ponds | Transitioning 81 ha (40%) to natural farming

Long Term

Maintenance of infrastructure | 100% transition to natural farming

Departments

Department of Agriculture, Cooperation and Farmer Welfare | Centre for Integrated Pest Management (CIMP) | Department of Horticulture and Food Processing | Department of Land Resources | Fisheries Department | 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, Kasganj

Estimated Cost

Over ₹7.1 crores across three phases (Short Term: ~₹1.4 crores | Medium Term: ~₹2.4 crores | Long Term: ~₹3.3 crores)

Enhancing Green Spaces and Biodiversity

- Plantation of trees
- Agroforestry
- 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

Medium Term

Plantation of 1,500 to 2,000 tree saplings | Sequestration potential (in 15-20 years): up to 17,500 tCO₂ | Adoption of Agroforestry in 12 ha land | Sequestration potential (in 20 years): up to 12,000 tCO₂

Long Term

Additional 1,500 to 2,000 saplings planted | Sequestration potential (in 15-20 years): up to 17,500 tCO₂ | Adoption of Agroforestry in 19 ha land | Sequestration potential (in 20 years): up to 19,000 tCO₂

Departments

Department of Environment, Forests and Climate Change | State Biodiversity Board | Panchayati Raj Department | Rural Development Department

Estimated Cost

Over ₹79.5 lakhs across three phases (Short Term: ~₹12.7 lakhs | Medium Term: ~₹32 lakhs | Long Term: ~₹34.8 lakhs)

Sustainable Solid Waste Management

- Enhanced waste management infrastructure
- Vermi-compost pits
- Sanitation management
- Ban on single-use plastics
- Capacity building

Short Term

Setting up segregation and storage facility | Installation of 18 bins | Procurement of 1 electric garbage van | Setting up of 20 vermi-compost pits | Construction of 25 household toilets and maintenance of 1 community toilet | Engagement of 100-120 women for manufacturing plastic-alternative products (SHG alignment)

Medium and Long Term

Installation of additional waste bins | Setting up additional compost pits and maintenance of existing infrastructure | Scaling up partnerships | 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 ₹11.55 lakhs 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
- Energy efficient (EE) fixtures
- Solar street lights

Short Term

Solar rooftop installation on all government buildings | Solar potential: ~40 kWp | Mitigation potential: ~128 tCO₂e per year | 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) | 80 diesel pumps replaced with solar pumps | Installation of 100 solar LED and 40 high-mast solar LED street lights at key locations in GP

Medium Term

Solar rooftop installation on 40% of pucca houses (347) | Agro-photovoltaic installed on 2 ha | 200 diesel pumps replaced with solar pumps | Solar potential: ~1,541 kWp | Mitigation potential: ~1,902 tCO₂e per year

Long Term

Solar rooftop installation on 100% of pucca houses (521) | Agro-photovoltaic installed on 2 ha | 120 diesel pumps replaced with solar pumps | Replacing all CFL light fixtures with LED tube lights/ bulbs; installation of EE fans

across households | Solar potential: ~2,063 kWp | Mitigation potential: ~2,391 tCO₂e 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 Limited | Panchayati Raj Department | Rural Development Department | Department of Agriculture | Education Department

Estimated Cost

Over ₹27 crores across three phases | (Short Term: ~₹2.3 crores | Medium Term: ~₹12.7 crores | Long Term: ~₹12 crores)

Sustainable and Enhanced Mobility

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

Short Term

Construction of 6.5 km length road | Introducing 2 e-auto rickshaws in the GP | Mitigation Potential: 3.6 tCO₂e | Promoting adoption of 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 ₹93.4 lakhs 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 8 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