



# CLIMATE SMART GRAM PANCHAYAT

## SUMMARY OF RECOMMENDATIONS



Kaushambi

### Bara Gram Panchayat

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





## Management and Rejuvenation of Water Bodies

- Rejuvenation of ponds
- Repair of wells
- Repair of canal
- Tree plantations
- Enhancing drainage infrastructure
- Rainwater Harvesting
- Recharge pits
- Capacity building

### Short Term

Rejuvenation of 8 ponds | Cleaning and repairing of 2 wells | Reboring of 10 hand pumps | Repairing 3.5 km stretch of canal | ~1,000 trees planted around water bodies | Construction of 1.5 km drainage network | Installation of RWH structures in all PRI buildings (6) | Construction of 20 recharge pits | Village Water Security Plan preparation

### Medium Term

Maintenance of ponds, wells and other water related infrastructure | Additional trees planted around water bodies | Installation of RWH structures in 132 pucca households | Additional 30 recharge pits constructed

### Long Term

Continued maintenance of water resources | Installation of RWH structures in 153 pucca households

### Key Departments

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

### Estimated Cost

Over ₹2.6 crores across three phases (Short Term: ~₹81 lakhs | Medium Term: ~₹94 lakhs | Long Term: ~₹91 lakhs)

## Sustainable Agriculture

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

### Short Term

Introduction of micro-irrigation on 19 ha | Ensure bunds on 70 ha agricultural land | Construction of 5-10 farm ponds | Transitioning 21 ha (15%) of agricultural land to natural farming

### Medium and Long Term

Expanding bunds to another 70 ha agricultural land | Additional 15-20 farm ponds | Transitioning 56 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, Kaushambi

### Estimated Cost

Over ₹17 crores across three phases (Short term: ~₹3 crores | Medium term: ~₹6 crores | Long term: ~ ₹7.5 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 tCO<sub>2</sub> | Establishing Arogya Van on 0.1 ha allocated land | Establishing one horticulture nursery

### Medium Term

Plantation of 1,000 to 1,500 tree saplings | Adoption of Agroforestry in ~23 ha land | Sequestration potential (in 15-20 years): up to 35,500 tCO<sub>2</sub>

### Long Term

Additional Plantation of 1,500 to 2,000 tree saplings | Adoption of Agroforestry in ~35 ha land | Sequestration potential (in 15-20 years): up to 52,500 tCO<sub>2</sub>

### 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 ₹76 lakhs across three phases (Short term: ~₹15 lakhs | Medium term: ~₹25 lakhs | Long term: ~₹36 lakhs)

## 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 5 vermicompost and 5 Nadep pits | Repairing school and community toilets | Ban on single-use plastics | Engagement of 100-120 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

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 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 | Solarisation of 9 grid connected electric pump sets | 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) | Installation of 60 solar LED street lights and 17 high mast solar LED street lights at key locations in GP | Solar potential: ~55 kWp | Mitigation potential: ~60 tCO<sub>2</sub>e per year

### Medium Term

Solar rooftop installation on 40% of pucca houses (127) | Agro-photovoltaic installed on 2 ha | 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 60 solar LED street lights at key locations in GP | Solar potential: ~381 kWp | Mitigation potential: ~418 tCO<sub>2</sub>e per year

### Long Term

Solar rooftop installation on 100% of pucca houses (190) | Agro-photovoltaic installed on 2 ha | Replacing all CFL light fixtures with LED tube lights; installation of Energy Efficient fans across households | Solar potential: ~570 kWp | Mitigation potential: ~625 tCO<sub>2</sub>e 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) | Purvanchal Vidyut Vitran Nigam Limited | Panchayati Raj Department | Rural Development Department | Department of Agriculture | Education Department

### Estimated Cost

Over ₹14 crores across three phases (Short term: ~₹5.6 crores | Medium term: ~₹6 crores | Long term: ~ ₹1.9 crores)

## Sustainable and Enhanced Mobility

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

### Short Term

Replacing 3 diesel autorickshaws with e-autorickshaws | Mitigation potential: 7.2 tCO<sub>2</sub>e | 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 ₹89 lakhs across three phases

## Enhancing Livelihoods and Green Entrepreneurship

- Engaging SHGs to manufacture sustainable products
- Establishing a Dairy processing unit
- 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 4 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 | Expansion of Milk Cooperative/FPO operation by covering nearby villages/blocks

### 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**