





# CLIMATE SMART GRAM PANCHAYAT

**SUMMARY OF RECOMMENDATIONS** 

Jaunpur

# **Ahopur Gram Panchayat**

**Department of Environment, Forest and Climate Change** 

Government of Uttar Pradesh





# Sustainable Agriculture

- Micro-irrigation
- Bunds
- Farm ponds
- Need based nutrient management
- Mulchina
- Transition to natural farming
- Sustainable livestock management

# **Short Term**

Introduction of micro-irrigation on 20 ha | Ensure bunds on 64 ha agricultural land | Construction of 5 farm ponds| Transitioning 19 ha (15%) of agricultural land to natural farming

#### **Medium Term**

Expanding bunds to another 64 ha agricultural land | Additional 10 farm ponds | Transitioning 50 ha (40%) to natural farming

#### **Long Term**

Maintenance of bunds and farm ponds | 100% transition to natural farming

## **Key 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, Jaunpur

# **Estimated Cost**

Over ₹3.5 crores across three phases (Short term: ~₹74 lakhs | Medium term: ~₹1.4 crores | Long term: ~ ₹1.4 crores)

# Management and Rejuvenation of Water Bodies

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

### **Short Term**

Rejuvenation of 2 ponds | Cleaning and repairing of 7 wells | Reboring of 15 hand pumps |  $\sim$ 1,000 trees planted around water bodies | Cleaning and digging of 1 km existing drain at specific locations | Construction of 1.5 km drainage network | Installation of RwH structures in all PRI buildings (3) | Construction of 15 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 148 pucca households | Additional 30 recharge pits constructed

### **Long Term**

Continued maintenance of water resources | Installation of RwH structures in 54 pucca households

# **Departments**

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

#### Estimated Cost

Over ₹2.7 crores across three phases (Short Term: ~₹1.5 crores | Medium Term: ~₹86 lakhs | Long Term: ~₹52 lakhs)

# **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  $10,000 \text{ tCO}_2$  | 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  $\sim$ 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  $\sim$ 34 ha land | Sequestration potential (in 15-20 years): up to 51,500 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

#### Fetimated Cost

Over ₹99.5 lakhs across three phases (Short term: ~₹16 lakhs | Medium term: ~₹34 lakhs | Long term: ~₹49.5 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 25 vermicompost and 10 Nadep compost pits | Enhancing household toilet coverage | Ban on single-use plastics | Engagement of 50 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 ₹57 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 | 28 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) | Installation of 45 solar LED street lights and 12 high mast solar LED street lights at key locations in GP | Solar potential:  $\sim$ 174 kWp | Mitigation potential:  $\sim$ 51.4 tCO<sub>2</sub>e per year

## **Medium Term**

Solar rooftop installation on 40% of pucca houses (108) | Agro-photovoltaic installed on 2 ha | 29 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 45 solar LED street lights at key locations in GP |

Solar potential: ~485 kWp | Mitigation potential: ~387 tCO₂e per year

## **Long Term**

Solar rooftop installation on 100% of pucca houses (163) | Agro-photovoltaic installed on 2 ha | Solarisation of 3 grid connected electric pump sets | Replacing all CFL light fixtures with LED tube lights; installation of energy efficient fans across households | Solar potential: ~488 kWp | Mitigation potential: ~536 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 14.5 crores across three phases (Short term: ~₹83 lakhs | Medium term: ~₹6.7 crores | Long term: ~ ₹7 crores)

# Sustainable and Enhanced Mobility

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

#### **Short Term**

Interlocking of 1.25km road | Construction of 1.1 km pavement at specific location | Replacing 2 diesel autorickshaws with e-autorickshaws | Mitigation potential:  $3.27~tCO_2e$  | 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 ₹1.9 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 50 women and other entrepreneurs to establish enterprises across the GP | Involving 7 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 100 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.