

# **Operational and Management Plan for Gobardhan Plants in Sonbhadra**

(Gram Panchayat Chopan & Kewali, Dewali, Ghorawal Block)

## **1. Introduction**

The Gobardhan Project aims to convert cattle dung and organic waste into biogas and organic fertilizer, promoting a circular economy in rural areas. In Sonbhadra, two Gobardhan plants have been established in Chopan and Kewali (Dewali, Ghorawal Block). To ensure financial sustainability, both plants will have flour mill machines installed, which will be operated by Self-Help Groups (SHGs). The revenue generated from the flour mills will be used for plant maintenance and operations.

## **2. Objectives**

Ensure sustainable operation of Gobardhan plants.

Provide biogas as an alternative fuel for rural households.

Generate organic fertilizer for farmers.

Create employment opportunities through SHG-operated flour mills.

Establish a self-sustaining revenue model.

## **3. Implementation Strategy**

### **A. Waste Collection & Processing**

#### **1. Cattle Dung Collection:**

Waste will be collected from local households and dairy farms.

SHGs or Panchayat workers will manage waste collection.

#### **2. Biogas & Fertilizer Production:**

Dung will be processed in anaerobic digesters to produce biogas.

The slurry will be converted into organic fertilizer for agricultural use.

### **B. Flour Mill Operation & Revenue Generation**

#### **1. Installation of Flour Mills:**

Each Gobardhan plant will have a flour mill machine.

The machines will be powered using biogas-generated electricity.

#### **2. Management by Self-Help Groups (SHGs):**

Local SHGs (especially women's groups) will run the flour mills.

A profit-sharing model will be developed to support both SHGs and plant operations.

### **3. Revenue Streams:**

**Flour Mill Charges:** Households will pay a small fee for grinding wheat, maize, and other grains.

**Biogas Sales:** Rural households and small businesses can subscribe to biogas services.

**Organic Fertilizer Sales:** Farmers will be encouraged to purchase affordable organic compost. Gram panchayat revenue also will be increase.

### **C. Community Engagement & Capacity Building**

#### **1. SHG Training & Skill Development:**

Training sessions on biogas plant operations, waste management, and flour mill handling.

Financial literacy and business skills training for SHG members.

#### **2. Awareness Campaigns:**

Promotion of biogas as a clean energy source.

Demonstration of organic fertilizer benefits in farming.

#### **4. Financial Sustainability & Governance**

##### **A. Cost & Revenue Model**

##### **B. Governance & Monitoring**

1. Management by SHGs: Regular meetings to oversee plant operations.

2. District-Level Monitoring: Panchayat and government officials will review progress.

3. Performance-Based Incentives: SHGs will receive additional benefits based on efficiency.

##### **5. Expected Impact**

✓ Reduction in LPG and firewood dependency through biogas adoption.

✓ Better waste management and sanitation in villages.

✓ Employment generation for rural women through SHG participation.

✓ Improved soil health with organic fertilizers.

✓ Economic empowerment through self-sustaining revenue models.

##### **6. Conclusion & Way Forward**

This integrated approach of linking biogas production with flour mill operations ensures a sustainable and profitable model for rural development. The Gobardhan plants in Sonbhadra can serve as replicable models for other villages in Uttar Pradesh. Future expansion can include more Gram Panchayats, additional revenue streams (e.g., cattle feed production), and increased biogas distribution networks.