#### **Solid Waste Management (SWM)**

#### 1. Introduction

Kanpurdehat district faces significant challenges in managing solid waste due to its diverse geography, urban-rural mix, and industrial presence. A sustainable and community-driven strategy is essential to ensure efficient waste disposal, resource recovery, and environmental protection.

## 2. Objectives

Achieve 100% door-to-door waste collection in all Gram Panchayats and urban areas.

Promote waste segregation at the source into biodegradable and non-biodegradable waste.

Strengthen recycling and composting infrastructure to minimize landfill waste.

Integrate informal waste collecto`rs and local communities into the SWM system.

## 3. Iplementation Strategy

A. Waste Collection & Segregation

- 1. Door-to-Door Collection: Deploy waste collection vehicles in urban and rural areas, ensuring daily pick-up.
- 2. Two-Bin System: Introduce green bins for biodegradable waste and blue bins for non-biodegradable waste at households and commercial establishments.
- 3. Monitoring Mechanism: Engage self-help groups (SHGs) and local youth for awareness and compliance checks.

### **B. Processing & Recycling**

- 1. Organic Waste Management: Establish composting and biogas units in villages and urban wards for converting biodegradable waste into compost.
- 2. Material Recovery Facilities (MRFs): Set up MRFs for sorting and recycling dry waste, including plastics, metals, and paper.

Plastic Waste Management: Expand the 'मेरा प्लास्टिक मेरी ज़िम्मेदारी campaign by installing plastic collection bags at every household and encouraging proper disposal.

### C. Disposal & Landfill Reduction

- 1. Zero Landfill Approach: Prioritize waste-to-energy, composting, and recycling to reduce landfill dependency.
- 2. Scientific Landfills: Develop engineered landfill sites for non-recyclable waste with proper leachate **treatment.**

# **D.** Community Participation & Awareness

- 1. Behavioral Change Campaigns: Organize street plays, workshops, and school awareness programs on SWM.
- 2. Incentive Schemes: Reward households and commercial entities for best waste management practices.
- 3. Panchayat-Level SWM Committees: Form local committees to monitor waste collection, segregation, and processing.

### E. Institutional & Policy Support

- 1. Convergence with MGNREGA & Swachh Bharat Mission: Utilize funds and workforce under government schemes for SWM infrastructure development.
- 2. Capacity Building: Train municipal and Gram Panchayat officials, SHGs, and sanitation workers in SWM best practices.
- 3. Enforcement of By-Laws: Implement strict penalties for littering, open dumping, and non-segregation of waste.
- 4. Expected Outcomes

Reduction in open dumping and waste burning.

Enhanced recycling and resource recovery.

Improved cleanliness in villages and towns.

Increased participation of local communities in waste management.

A decentralized, participatory, and technology-driven SWM strategy can transform kanpur dehat into a model district for waste management. Collaboration among government agencies, local communities, and private players will be key to achieving long-term sustainability in waste management.