

Plastic Waste Management (PWM) under SBM-G Phase II — Progress, Challenges & Way Forward (Pratapgarh District)

Background & Programme Objectives

- Under **Swachh Bharat Mission-Grameen (SBM-G) Phase II (2020–21 to 2025-26)**, the mission's objectives include sustaining **Open Defecation Free (ODF)** status and improving rural cleanliness through **Solid and Liquid Waste Management (SLWM)**, with **Plastic Waste Management (PWM)** as a key component. Plastic waste management is now an integral part of SLWM and a criterion for ODF Plus classification of villages.
 - The **operational guidelines** under Phase II mandate collection, segregation, transportation, processing, disposal and establishing **forward linkages** for plastic waste — including **block-level Plastic Waste Management Units (PWMUs)**, **Material Recovery Facilities (MRFs)**, recycling chains, reuse in road construction and co-processing in industries.
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□ 1. Progress of PWM under SBM-G Phase II (2020 onwards)

District Level

- **Plastic Waste Management** is explicitly included in the SBM-G Phase II SLWM framework with dedicated provisions for **block level PWMUs** (up to ₹16 lakh per unit) to support rural plastic waste processing infrastructure.
 - **3 blocks across district have functional Plastic Waste Management Units** under the mission, indicating progress in establishing processing infrastructure.
 - **3 blocks Plastic Waste Management Units are under construction and other residual blocks are linked with MRFs .**
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□ 2. Challenges Faced in PWM Implementation

a) Incomplete Block Coverage & Functional Saturation

- Not all blocks in district, have **fully functional PWMUs or linkage with MRFs** or recycling markets, leaving residual blocks without end-to-end plastic waste processing and forward linkages.

b) Weak Forward Linkages & Market Linkages

- Establishing **effective forward linkages** from rural plastic collection (village level) to block PWMUs and onward to **recyclers, urban MRFs, cement co-processing or road construction** remains operationally weak in several areas. Lack of assured market linkages or processing contracts reduces sustainability.

c) Limited Resources for O&M

- PWMUs often face gaps in **operation & maintenance (O&M)** funds, skilled manpower, and business models to make processing units viable beyond initial commissioning.

d) Behaviour Change and Collection Gaps

- **Household-level segregation** of plastics, door-to-door collection consistency and community participation remain challenges, impacting the volumes of plastic reaching PWMUs for processing.
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□ 3. Way Forward — Saturation & Forward Linkages (Pratapgarh District)

A. Achieve Complete Block Coverage

1. **Accelerate Mapping & PWMU Establishment**
 - Ensure every **Block in Pratapgarh district** has a functional **PWMU** as per SBM-G operational norms with associated vehicles and equipment (shredder, baler, dust remover) to manage non-recyclable plastic waste.
 - Track **residual blocks** pending PWMU establishment and prioritise towards 100 % saturation by 2026-27.
2. **Linkage with Urban MRFs**
 - For blocks where independent PWMUs may be delayed, formalise **linkages with existing Urban MRFs** at nearby towns to ensure aggregated plastic waste has a processing pathway.

B. Strengthen Forward Linkages for Plastic End-Use

1. **Recycling and Market Integration**
 - Build partnerships with authorised **plastic recyclers, scrap dealers**, and local industries to channel recyclable plastics to recyclers and non-recyclable plastic for **road construction or cement co-processing** as per SBM-G guidelines.
2. **Promote Road Construction Linkages**
 - Leverage guidelines that support using shredded plastic waste in rural road construction for both environmental impact and waste diversion.
3. **Community Level Collection**
 - Support **Gram Panchayats (GPs)** to integrate plastic waste action plans into GPDP, develop door-to-door collection systems, and construct village-level segregation and storage sheds.

C. Operational & Maintenance (O&M) Arrangements

1. **Operational Contracts & SHG/Private Engagement**
 - Implement **O&M contracts** with **Self-Help Groups (SHGs), NGOs, waste entrepreneurs**, or private operators for PWMUs. Provide capacity building on **machine operation, safety, record-keeping, and marketing of processed plastic products**.
2. **Sustainable Finance & Business Models**
 - Develop **sustainable business models** for PWMUs, including revenue from sale of recyclable plastic bales, service charges for waste aggregation, and funds from **CSR or MPLAD/MLALAD** sources to bridge O&M costs.
3. **Collection & Transportation Systems**
 - Acquire or lease **collection vehicles** with compartments for segregated plastic waste to ensure efficient movement from villages to PWMUs or MRFs.

D. Behaviour Change, Training & Monitoring

1. **IEC & Community Awareness**

- Conduct **Information, Education & Communication (IEC)** campaigns focused on reducing single-use plastics, segregation at source, and plastic waste delivery to collection points.
2. **Capacity Building**
- Train GP members, safai mitras, and community volunteers on **plastic segregation, data tracking, and safe handling** to improve participation and compliance with PWM rules.
3. **Monitoring & MIS Reporting**
- Integrate PWM data on **SBM-G MIS dashboards** (e.g., PM52 PWM units), track coverage and functionality indicators for PWMUs, and include verification in Block monitoring reports.