

Plastic story

From Waste to Purpose: Indian Cities Are Rewriting the Plastic Story

Syllabus: *PIB Article*

A recent feature highlights how Indian cities are tackling plastic pollution through **Reduce, Reuse, Return, Recover and Recreate**.

The initiatives show that effective plastic management requires not only regulations but also **community participation, behavioural change, local innovation and better waste-management systems**.

Policy Context

- **Swachh Bharat Mission (SBM)** was launched on **2 October 2014**, strengthening waste collection, segregation, processing and recovery.
- Identified **single-use plastic (SUP) items were prohibited from 1 July 2022**.
- The approach is gradually shifting from simply disposing of plastic to **resource recovery and circular economy practices**.

Five-Part Plastic Management Approach

A. Reduce - Changing Market Behaviour

Trichy, Tamil Nadu

- Three farmers' markets—**Tennur, K.K. Nagar and Woraiyur**—covering **220 vendors** were targeted.
- The **“Thunippai Thiruvizhai” (Cloth-Bag Festival)** promoted

reusable bags.

- Single-use plastic avoided:
 - Tennur: **2,200 kg in one year**
 - K.K. Nagar: **620 kg in four months**
 - Woraiyur: **300 kg in six months**
- **Lesson:** Repeated small behavioural changes at markets can significantly reduce plastic consumption.

B. Reuse - Thaila ATMs

Vita, Maharashtra

- **Five Thaila ATMs** provide reusable cotton bags at busy locations.
- Around **6,000 bags** have been sold, with nearly **200 bags sold in a day** at the weekly market.
- Women from **Self-Help Groups (SHGs)** stitch the bags, linking environmental protection with livelihoods.
- In Indapur, authorities seized **25 kg plastic bags** and imposed a **₹90,000 fine**; in Wardha, an SHG distributed **17,000 paper bags**.

C. Return - Giving Plastic Economic Value

Andaman & Nicobar Islands

- Used milk pouches can be returned at collection points for incentives such as **fresh milk and discounts**.
- By November 2024, **17,600 milk pouches** had been collected, rewarding residents with **352 litres of milk**.
- **Significance:** Incentives can turn responsible disposal into a regular community habit.

D. Recover - Plastic Gets a Second Life

Bengaluru

- UNDP's **Project Prithvi** supports the **Swachhata Kendra**

Material Recovery Facility, established in 2019.

- Plastic is **sorted, shredded and baled** for recycling.
- The centre provided employment to **76 Safai Saathis** during COVID-19.
- Recovered plastic is used for **roads, agricultural water pipes and furniture**.
- This illustrates the principles of a **circular economy**, where waste becomes a productive resource.

E. Recreate - Converting Difficult Plastics

Patiala, Punjab

- **Multilayered Plastics (MLPs)** such as wrappers and sachets are difficult to recycle because they combine different materials.
- A Plastic Recycling Facility converts them into flakes and then **chipboard** through hot and cold pressing.
- Capacity: **10 tonnes/day**, producing **75-100 chipboards**.
- These can be used for **furniture, roofing and temporary shelters** and resist water and termites.

Significance

These initiatives demonstrate a transition from a “**use-and-dispose**” **model to a circular plastic economy**.

Benefits include:

- Reduced plastic pollution and landfill burden
- Better source segregation and recycling
- Green employment opportunities
- Greater citizen participation
- Support for local enterprises and SHGs
- Conversion of waste into useful products

Road Ahead

India needs to strengthen:

- **Source segregation and door-to-door collection**
- Material Recovery Facilities
- Recycling infrastructure
- **Extended Producer Responsibility (EPR)**
- Incentives for reuse and return
- Sustainable packaging and design-for-recycling
- Participation of citizens, SHGs and informal waste workers

Conclusion

- The experiences of **Trichy, Vita, Andaman & Nicobar, Bengaluru and Patiala** demonstrate that India's plastic challenge cannot be solved by regulation alone.
- **Reduce, Reuse, Return, Recover and Recreate** provide a practical pathway in which citizens, markets, municipalities and businesses collectively transform plastic from a waste problem into a recoverable and reusable resource.

Reference

[PIB](#)