



PUNAR SUTRA



From Action to Impact

Sustainability & Circularity in Textile Value Chain
Navi Mumbai

Environmental Assessment Report

7,343 kg

PCT Collected

61,644

Contributors

83%

Channelisation Rate

167

Women Engaged

3,318

Products Made

Reporting Period: March 2025 – September 2025 · Assessed by Environmental Management Centre Pvt Ltd (EMC)

Punarsutra is not recycling fabric—we are redesigning its destiny.
By transforming post-consumer textiles into curated products,
we shift fabric from an end-of-life material to a beginning of a new story.



We're giving them a second life—woven into beautiful coasters by skilled hands using traditional frame looms.



“Crafted by Hand, Powered by Purpose”

Skilled women artisans upcycle the waste into unique, eco-friendly jewellery pieces.

Context

India's Textile Waste Crisis



India generates approximately 7.8 million tonnes of textile waste annually. Only 34% is reused and 25% recycled — the rest is largely landfilled or incinerated.

The informal recycling sector, once handling 90% of cotton waste, now struggles with synthetic blends. Systemic gaps — absent EPR frameworks, low consumer awareness, and inadequate segregation infrastructure — demand urgent intervention.

i This pilot project establishes a replicable framework for post-consumer textile (PCT) recovery, advancing circular economy principles and women's empowerment.

Multi-Stakeholder Collaboration

Project Partners & Framework

Textiles Committee, MoT,
Gol

Nodal Agency — overall
monitoring, technical and policy
support

NMMC

Ground-level implementation —
infrastructure support and material
transport

SBI Foundation

Key financial partner — CSR
funding for effective
implementation

IDH India

Knowledge & Technology Partner — market linkages,
capacity building

Tisser Artisans Trust

On-ground implementation — community engagement,
TRF operations, skill development

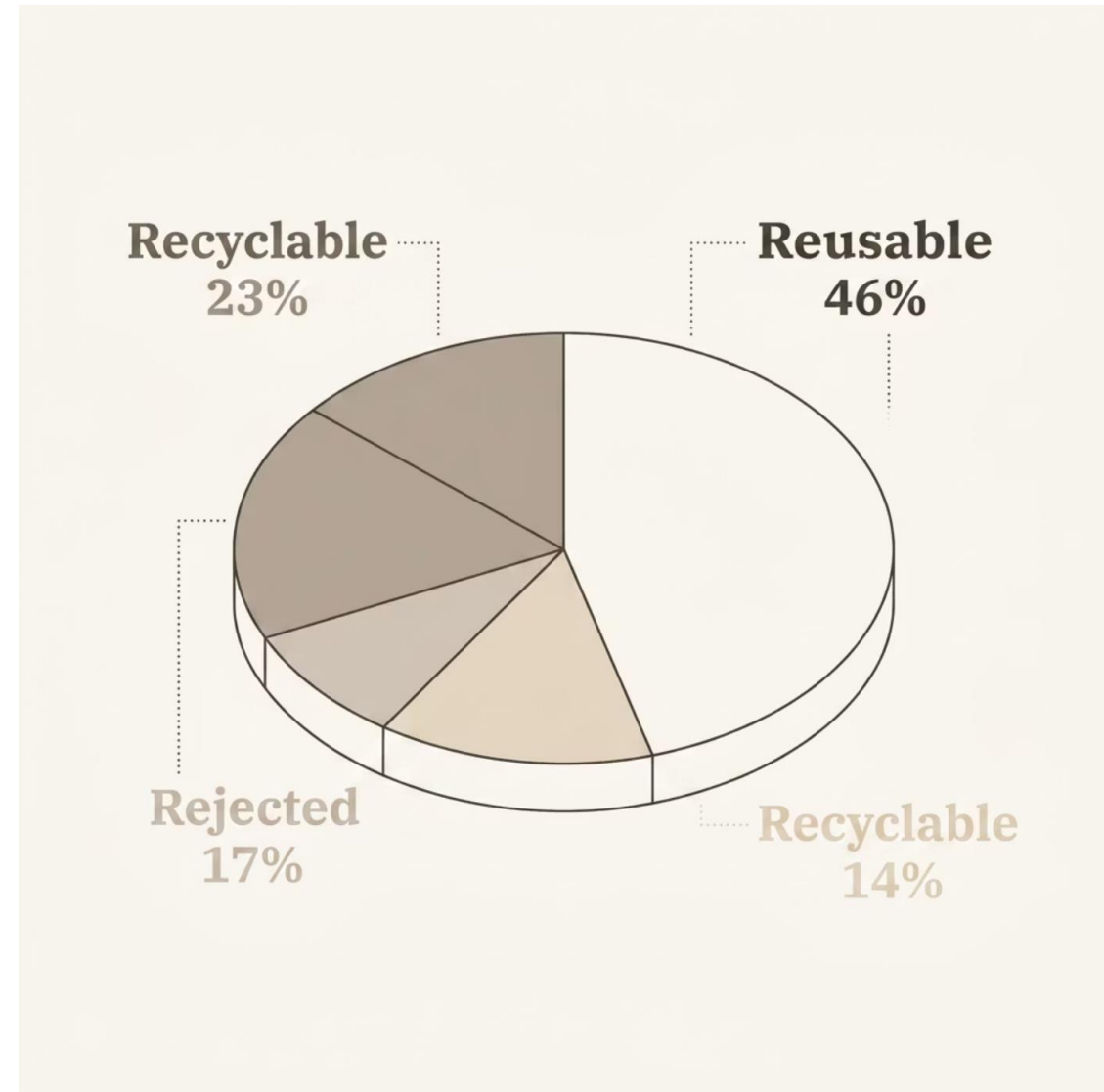
The five-step operational process: **Collection** → **Transportation** → **Sorting** → **Categorisation** → **Processing** — maximising material recovery and value creation across eight municipal wards of Navi Mumbai.



Scaling Up PCT Recovery

Monthly collection surged from **465.7 kg** (March–June) to **1,826.9 kg** (July–September) — a **292% increase**. Over 90 societies participated by September 2025.

The KOSHA automated fibre sorting device processed over **14,000 garment pieces**, drastically reducing material loss. Non-textile components (zippers, buttons, hooks) — totalling **53.90 kg** — were reused as accessories in upcycled products.



✔ Overall channelisation rate: **83%**. Rejected waste fell from **41%** in April 2025 to **18%** in September 2025.

Products & Market Outreach

From Waste to Market-Ready Goods

56

Product Categories

~350 unique design variations

3,318

Products Manufactured

Bags, coasters, jewellery, table mats & more

3,070

Units Sold

Across 5 exhibition venues in Mumbai

₹26,650

Revenue Generated

From 29 product types

Exhibitions at Nexus Mall, NMMC Head Office, Priyadarshani Dadar, Goregaon-NESCO, and **India Maritime Week 2025** validated market demand for eco-friendly upcycled products.



Women Empowerment & Livelihood



Of 106 active participants, **87** were previously full-time homemakers with no personal income. Today, women earn **₹6,000–₹10,500/month** in flexible roles — quality control, upcycling artisans, and Master Trainers.

54

Zero-balance SBI bank accounts opened

36

Women issued ABHA / Ayushman Bharat health insurance cards

24

Fire extinguishers installed with safety training

Stories of Change

Voices from the TRF



Shobha, 37 · Belapur

Former housemaid, now operates the KOSHA Fibre Identification Device. Earns ₹10,000/month — a role model in her community.



Sujata Pawar, 35 · Navi Mumbai

Progressed from basic weaving to advanced handloom. Promoted to **Master Trainer**, earning ₹12,000/month despite severe family hardship.



Laxmi Surve, 20 · Navi Mumbai

Previously illiterate housemaid. Now makes one bag per day. *"Dedication and opportunity can change lives."*



Ujwala Bhandari, 43 · Belapur

Overcame a speech disability to master handloom operations. Earns ₹10,500/month, supporting her children's education.

Measurable Outcomes for a Circular Future

3.08 tCO₂e

Greenhouse gas emissions avoided through upcycling, recycling & downcycling

83% Diverted

7,343 kg PCT channelised away from landfills

128 Women

First-time formally employed — advancing SDG 5 & SDG 8



**SDG 5:
Gender
Equality.**

Fostering diverse teams and leadership.



**SDG 8:
Decent
Work.**

Economic growth and job opportunities.



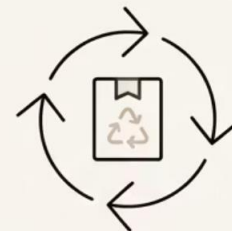
**SDG 9:
Industry &
Innovation**

Clean tech and smart R&D.



**SDG 11:
Sustainable
Cities.**

Inclusive, safe urban infrastructure.



**SDG 12:
Responsible
Consumption**

Circular models and less waste.



**SDG 13:
Climate
Action**

Reduced emissions and resilient strategy.



Next Steps

A Model for the Future

Expand Collection

Scale collection points to schools, corporates, retail, and community centres across Navi Mumbai.

Diversify Products

Penetrate fashion, accessories, and home décor segments aligned to current market trends.

Implement Technology

Deploy smart bins, automated sorting, and digital real-time monitoring platforms.

Digital Traceability

Establish end-to-end tracking of textile waste from collection to end-of-life processing.

Strengthen ESG

Regular audits, transparent disclosure, and robust monitoring of environmental and social metrics.

A Scalable Model for India's Textile Sector

These progressive actions collectively enable Tisser to strengthen its role in textile circularity while amplifying environmental, economic, and social gains — positioning this initiative as a scalable model for sustainable circular economy practices in India's textile sector.

7,343 kg

PCT Collected & Channelised

292%

Collection Growth

167 Women

Empowered with Skills & Income

3.08 tCO₂e

Emissions Avoided





PUNARSUTRA



At Punarsutra, every discarded fabric carries a past—and a possibility. We collect post-consumer textiles and reimagine them into thoughtfully designed products,

Where waste becomes resource and stories are woven anew.

Through this process, we are not just creating products

We are rewriting the journey of fabric from consumption to conscious creation.