Poornam Ecovision

पूर्णमिदं

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Bimonthly Report

May and June 2025

eYantran (E-waste and Plastic Waste Management)

Total Society Drives	: 100+
Number of donors	: 1500+
Ongoing Weekly E-waste Collection Centers	: 32
E-waste Collection	: 6062 kg
Plastic Waste Collection	: 4149 kg
Door to door E-waste collection	: 2096 kg

Volunteering Engagement

No. of activities conducted	: 10
Total volunteers engaged	: 150+
New volunteers connected	: 20

Paripoornam (Fabric Up-cycling)

Cloth Collection	: 4116 kg
Cloth donation	: 4437 kg
Number of bulk orders	: 4
Number of new product samples	: 3
No of promotional stalls	: 5

Green Consultancy

Running Composting Units	: 5
Running Rain Water Harvesting Units	: 11
Waste processed	: 921 kg/day
Rainwater conserved	: 30,46,467 Lit/annum
Total Compost Kit Delivered in may june	: 5

Composting : Turning Waste into Wealth for a Greener Tomorrow

Composting is one of the simplest yet most powerful ways to manage organic waste responsibly. By turning kitchen scraps, garden trimmings, and other biodegradable waste into nutrient-rich compost, we can reduce landfill burden, enrich our soil, and support sustainable living.

Need for Composting

With rapid urbanization and increasing waste generation, managing solid waste has become a challenge. A large portion of household waste is biodegradable. India, home to over 1.4 billion people, generates massive quantities of municipal solid waste every day. A significant portion of this waste—nearly 50–60%—is biodegradable waste. Composting presents an efficient, eco-friendly solution by transforming organic waste into nutrient-rich manure that benefits agriculture, nourishes the soil and closes the nutrient loop.

The Role of Composting in Modern Waste Management

Composting plays a vital role in modern waste management by effectively diverting biodegradable waste from landfills, thereby cutting down harmful greenhouse gas emissions. It aligns with the Solid Waste Management Rules, 2016, which mandate waste segregation and encourage the treatment of biodegradable waste at its source. By minimizing the volume of waste that needs to be collected and transported, composting also helps reduce municipal waste management costs. Moreover, it generates local employment opportunities in waste processing and organic farming sectors. The nutrient-rich organic manure produced through composting lessens the reliance on chemical fertilizers, promoting healthier and more sustainable agriculture.

Home Composting : Turning Kitchen Waste into Black Gold

Composting empowers households to manage their organic waste right at its source. By setting up a simple compost bin, pit, or tumbler in a backyard, balcony, or terrace, families can easily compost food and garden waste. This practice significantly reduces the amount of waste sent to landfills and produces free, nutrient-rich compost to nourish gardens and potted plants. Home composting also encourages responsible waste segregation and sustainable living habits.

Community Composting : Waste to Wealth Together

Community composting involves collective composting efforts in apartments, residential colonies, schools, offices, markets, and local communities. By setting up small decentralized composting units, communities can process large volumes of biodegradable waste locally, reducing the pressure on municipal waste systems. The compost produced can be used for local parks, gardens, or shared among residents, promoting a sense of ownership and responsibility.

Institutional and Municipal Composting

Large-scale composting plants handle bulk organic waste from vegetable markets, temples, restaurants etc . Many municipalities have set up compost yards to convert city's organic waste into compost for sale to farmers.

Current Scenario: Policies and Initiatives

The Indian government has acknowledged the critical role of composting in sustainable waste management through progressive policies and initiatives. The Solid Waste Management Rules, 2016 mandate the segregation of waste at its source into

biodegradable, dry, and domestic hazardous categories, and emphasize the processing of biodegradable waste through composting or biomethanation. The Swachh Bharat Mission, India's flagship cleanliness and sanitation program, actively promotes decentralized waste treatment systems such as composting pits and community composting plants. Additionally, several cities like Pune, Bengaluru, and Indore have implemented successful community and decentralized composting models, transforming market waste, temple offerings, and household wet waste into valuable compost, setting examples for urban waste management across the country.

Technology and Innovation

India is witnessing remarkable technological advancements and innovative solutions to address waste management challenges. Mechanical composters, such as automated in-vessel systems, are being installed in apartments, hotels, and institutions to process organic waste efficiently. Bio-digesters are gaining popularity for their dual benefit of converting organic waste into biogas and nutrient-rich compost. start-ups and waste entrepreneurs are designing smart bins equipped with technology to help monitor moisture and temperature levels, ensuring optimal conditions for faster decomposition.

Challenges

Despite its clear benefits, there is generally low awareness among citizens about proper waste segregation and composting techniques, which hampers the effectiveness of household and community composting. Enforcement of segregation rules at the source remains weak, leading to mixed waste that is difficult to process. In densely populated urban areas, limited space makes it challenging to set up composting units, especially for apartment complexes and small households. Additionally, the lack of strong incentives and well-developed markets for compost often makes large-scale composting plants financially unsustainable, discouraging investments in this vital area of waste management.

The Road Ahead

For composting to reach its full potential in India, a multi-pronged approach is essential. Stronger awareness campaigns are needed to educate citizens about the importance of source segregation and benefits of composting. Incentives for households, Resident Welfare Associations (RWAs), and waste entrepreneurs can encourage widespread adoption of home and community composting. Partnerships between municipalities and private players can help develop effective decentralized composting solutions tailored to local needs. Finally, promoting the use of city compost in agriculture through subsidies and quality certifications can build trust among farmers and reduce dependence on chemical fertilizers, creating a sustainable circular economy for organic waste.

Whether practiced at home or at the community level, composting is an easy, low-cost solution with big environmental benefits. By adopting composting and promoting innovative technologies, we can transform waste into wealth, protect the environment, and contribute to a cleaner, greener, and more sustainable future.

Ms. Anushka Ajay Kajbaje

Advisory Member PEF
Faculty
M.Sc. Environment Science and Technology,
M.Arch – Sustainable Architecture

Special Events

Train The Trainer Workshop

On May 20th, 29 students from Savitribai Phule Pune University participated in a Train the Trainer workshop on making paper bags, organized under the "Earn & Learn" initiative by Ms Rohini Sonawane, VEP Coordinator of Poornam Ecovision Foundation.
These sustainable paper bags provide an eco friendly alternative to single-use plastic while simultaneously offering students a source of income — a perfect blend of environmental and economic empowerment.

Empowering Communities Through Waste Management Training

We recently conducted initiatives focused on household waste management for women at Paripoornam's training units. Our Project Coordinator, Ms. Dakshata Parab, led an insightful Household Waste Management Awareness Session at the Hadapsar unit. A practical Wet Waste Management Training was carried out at the Gokhale Nagar Unit, where Ms. Parab and Ms. Aarti Gite guided around 30 women through composting techniques. Both sessions empowered participants with essential knowledge and skills for efficient waste segregation and composting, fostering cleaner, more sustainable living environments.

Special Events

Flower Waste to Livelihood : Social Innovation

Madhyaratricha Surya, a Pune-based NGO working on the rehabilitation of beggars, has partnered with Poornam Ecovision Foundation for a unique project. The initiative processes flower offerings from religious places into natural powders, providing employment opportunities for the underprivileged beggars.
Poornam conducted training on composting with leftover flower materials. Ms. Parab provided detailed demonstrations, reinforcing how waste materials can be turned into resources while supporting livelihoods.

Poornam at the Sustainable Development Workshop

Poornam Ecovision actively participated in a Sustainable Development Workshop organized by the Environmental Awareness Board and Rambhau Mhalgi Prabodhini.
The workshop featured expert sessions on topics such as water security, climate change, renewable energy, biodiversity, carbon footprint, and India's traditional eco-lifestyle.
Poornam's representatives, Mr. Mukul Gadre and Ms. Vaishali Lokhande,participated in a session on "Our Responsibilities Toward Environment and Sustainable Development."

Special Events

#PledgeToPlanet : Tackling E-Waste Together

On the occasion of World Environment Day, Poornam Ecovision Foundation, in collaboration with Poonawalla Fincorp Ltd., Adar Poonawalla Clean City Initiative, and Sakal NIE, launched the #PledgeToPlanet initiative.

The launch took place on June 5th, 2025, at Dr. Cyrus Poonawalla English Medium High School, Pune. The campaign aims to combat the rising issue of electronic waste through permanent and door-to-door e-waste collection systems. Mr. Walchand Sancheti – Chairman, Camp Education Society, Mr. Subhash Agarwal – Hon. Treasurer, Camp Education Society, Mr. Dileep Jadhav – Sakal NIE, Ms. Kajal Somai – Principal, Cyrus Poonawalla School & Mr. Rajesh Manerikar – CEO, Poornam Ecovision Foundation were the key dignitaries present to grace the occasion.

Special Events

Seed Ball Workshop for Environmental Preservation

To mark World Environment Day, Poornam Ecovision Foundation and Bharat Vikas Parishad organized a seed ball workshop at Symbiosis University, Viman Nagar.
The workshop encouraged faculty and staff to prepare seed balls using native plant seeds, with the goal of planting them in natural areas. Approximately 30–40 individuals, including enthusiastic children, participated in this meaningful initiative. The message was clear: environmental responsibility doesn't end with action — it continues with nurturing and care.

Special Session for Women at Hadapsar Unit

To celebrate World Environment Day, a dedicated session on waste management was organized for women beneficiaries of the Hadapsar unit, who had completed various skill-building programs over the past year.
Certificates were distributed, and the session focused on sustainable contributions through activities like fabric upcycling. The event was graced by Poornam's COO Mr. Mukul Gadre and mentor Mr. Tushar Sonawane, along with 33 women participants and support from Unit Coordinator Damayanti Shelke, Mobilizer Seema Chandgude, and volunteers Rushita and Aarohi. These women not only acquired new skills but also took a strong step toward environmental stewardship.

Special Events

Sneh Melava 2025

On June 15, 2025, Poornam Ecovision Foundation hosted a heartwarming event — the 'Sneha Melava' — exclusively for our passionate eco-friends. The evening was filled with connection, creativity, and commitment to nature.
Venue: Navin Marathi School, Shaniwar Peth, Pune **Time**: 5:00 PM to 7:00 PM

Event Highlights
Environmentally Themed Kirtan
Renowned kirtankar Advaita Umaranikar captivated the audience with her eloquent performance, beautifully weaving environmental awareness into spiritual storytelling.

Volunteer Dialogue & Experience Sharing
Volunteers openly shared their initiatives, ideas, and experiences in the environmental space, fostering inspiration and collaboration.

'Avishkar' – Mini Exhibition
A true show-stealer! Volunteers showcased 7 innovative, eco-friendly projects, reflecting creativity and grassroots impact.

Plastic Pollution Reel Contest
Winners were felicitated by distinguished guests. Bhagyashree Solanki, Hitesh Chaudhary, Rani Hari Rathod, Ardigandh, and Chaitali Jambotkar were the winners who were awarded with prizes.

Eco-Quiz
An engaging quiz conducted by Eco-friend Ms. Manisha Arak kept the energy high and minds sharp. Over 100 volunteers participated, leaving the event rejuvenated and inspired with new energy and ideas. This gathering was a beautiful confluence of nature, relationships, and meaningful action.


Challenges in Recycling of Polymeric Foams

Foams or cellular materials have become an indispensable part of our everyday life. Due to their unique properties like low density, good insulation, high strength-to-weight ratio, and energy absorption capabilities, they are found in a wide range of applications like packaging, insulation, automotive, cushioning, and construction to name a few.
Like all other plastic products and packaging, recycling of the polymeric foams has become extremely important for minimizing environmental impact and promoting a circular economy.
Polymeric foams commonly used are expanded polystyrene (EPS) or Thermocole, polyurethane (PU), polypropylene (EPP) and polyethylene (EPE).Amongst these, EPS, EPP and EPE, being thermoplastics, are relatively easy to recycle. They can be melt-reprocessed with a couple of intermediate steps. PU being a thermoset, melt-reprocessing is not possible and hence requires some chemical or other specialized approaches.

Challenges in Recycling Polymeric Foams

- **Low density :** One of the greatest challenges in foam recycling is the low density. Most of the plastic waste picking and segregation in India is done through waste pickers. Foams contain more than 95% air which makes them voluminous. Thus, this high-volume low weight product is unattractive for the waste pickers to collect and segregate. For this same reason foam transportation is inefficient and expensive.
- **Lack of awareness :** Most of the people are unaware that foam is recyclable leading to improper disposal and contamination.
- **Logistics and transportation :** A relatively evolved and robust network and infrastructure exists in India for collection, segregation, transportation and recycling of plastics. But due to low density and hence high volume, logistics for foam collection and transportation is one of the biggest challenges in foam recycling.
- **Limited infrastructure :** Most of the recycling facilities lack the capacity or specialized equipment to handle foam materials effectively.

Methods of Recycling foam

1. **Mechanical Recycling :** This process is suitable for EPS(thermocole), EPP and EPE. In this process the foam is converted into flakes or pellets by shredding and grinding. Most of these flakes and pellets are reprocessed into new products. Depending on the product requirement, a small percentage of these flakes or pellets can be added during the foam moulding process.
2. **Chemical Recycling :** This process is predominantly used for thermoset foams like polyurethane. The process involves breaking down the polymer into monomers i.e the raw material for making the polymer using solvents or heat. This process requires additional chemicals and energy; hence it turns out to be a costly process.
3. **Energy Recovery :** Being predominantly hydrocarbons, the foams have a large amount of embedded energy. This energy can be recovered by incineration process; largely for foams that cannot be economically recycled. Though this recovers energy, it usually generates harmful emissions if not managed properly.
4. **Landfill :** This should be the last resort for recycling. Ideally no foam should be dumped into landfill. But it so happens that foams that pose extreme challenges in

recycling are dumped into the landfill. There can be leaching of some chemicals into the soil which is a dangerous preposition.

Role of Citizens in Recycling : Citizens can play a significant role in recycling of foam

Segregation : Proper segregation of all types of waste at source is key to recycling. Citizens should separate foam waste from general waste and other recyclables to facilitate easier collection and processing.

Cleaning and Drying : Contaminants in waste is a hurdle in easy recycling. It is best if the citizens can keep the waste clean and dry which improves the recyclability.

Participation in Recycling Programs : Numerous organizations engaged in waste management organize waste collection initiatives at regular intervals. Participation by citizens in these recycling initiatives will help divert the foam from landfills and contribute to recycling. This will bring back the foam in the value chain.

Awareness : Awareness is an essential pillar in waste management. Most of the schools have initiated awareness programs for the students. Educating family, friends, and other members about the environmental impact of foam and the importance of recycling can give a real impetus to collective efforts.

Case study: Recycling of Thermocole (EPS) in Pune and Chennai

Launched in March 2021, RecyCole is an initiative by K. K. Nag Private Ltd for recycling of Thermocole. This initiative has been launched in Pune in partnership with Pune Municipal Corporation and SWaCH and in Chennai with Spreco Recycling. Due to this initiative, more than 800 tons of Thermocole has been diverted away from landfills or burning, saving a huge amount of green-house gas emission. All of us citizens can be a part of this initiative. The process is very simple. As the first step, it is required to segregate the thermocole from other waste. The location and quantity of thermocole needs to be informed on the designated what's app number. Arrangement is made to collect the waste within 2 to 3 working days. Even small quantities are collected. This waste thermocole is brought back to the recycling facility where it is cleaned. Once cleaned, the thermocole is crushed into smaller pieces using a special process. These pieces are then mixed with virgin material to produce blocks and sheets.

All of us citizens can play an important role in recycling of all types of waste by being aware and sensitive. We can join in conserving the limited resources available on planet earth by following the 7 Rs of rethink, refuse, reduce, reuse, repair, regift and recycle.

Dr. Deepti S. Marathe
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Figure 1 : PU foam

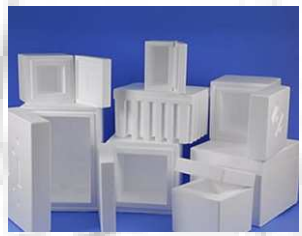

Figure 2: Thermocole

Figure 3: EPE foam

Upcoming Event

Punaravartan

The upcoming Punaravartan event by Poornam Ecovision Foundation is focused on responsibly collecting Shadu clay after the immersion of Ganesh idols during Ganeshotsav. This year, the collection will take place in two ways: first, through door-to-door pickups from households that pre-register for the service; and second, through a one-day donation drive at designated collection centers where citizens can walk in and hand over the clay. We invite everyone to be a part of this eco-friendly initiative—join as a collection center, volunteer, or pre-register for the door-to-door pickup and help us return Shadu clay back to nature, respectfully and sustainably.

Door to Door

E-Waste Collection

Sacn the QR Code

Door to Door

Fabric Collection

Sacn the QR Code

Scan the QR Code to donate to **Poornahuti.**

We have recently relocated to

Kaushalya Niwas, Survey No. 41/B/1 Charwad Road, Sinhgad Rd, Jadhav Nagar, Vadgaon Budruk, Pune, Maharashtra 411041.

E-mail: contact@poornamecovision.org
Contact No.: 020-29521862
Website : www.poornamecovision.org
New Shop Page : www.paripoornam.org.in