



INDIAN INSTITUTE OF TECHNOLOGY BOMBAY

Swachhata Activities Report 2024

17th September - 2nd October 2024

The following Departments and Sections carried various activities in regard to Swachhata Pakhwada 2024

Photo links: [Swachhata Pakhwada 2024](#)

<https://drive.google.com/drive/folders/1XWpEnquNkCDoQ5FKntEMNIK6nNA49JVn>

1. Swachhata Pledge | 18 September, 2024

IIT Bombay employees came together to undertake the Swachhata Pledge. Registrar Mr. Ganesh Bhorkade spoke on the importance of maintaining cleanliness on campus.



2. Health Checkup Camp | 24 & 25 September, 2024

Public Health Office (PHO), IIT Bombay organised Safai-Mitra Suraksha Shivir for the housekeeping staff of the Institute.



**3. Safai Mitra Suraksha Shivar/ Dignity Camps For Sanitation Workers:
23rd, 26th and 27th September, 2024**

IIT Bombay's PHO conducted Safai Mitra Suraksha Shivar/ Dignity Camps for sanitation workers in batches. During these camps, various preventive healthcare screenings were held. The Institute had also organised awareness sessions regarding various welfare schemes of the central and state government for the benefit of the sanitation workers.



4. Ek Ped Maa Ke Naam (Tree Plantation) at IIT Bombay | 24 September, 2024

IIT Bombay invited Dr. Shekhar C. Mande, Distinguished Professor, J. C. Bose Fellow, National Centre For Cell Science, Pune to plant a tree for a green future together! Many faculty, officers and staff also joined.



5. Shredding Machine Facility | September 17 Onwards

PHO had set up a shredding machine facility for all departments to get rid of all unwanted documents.



6. Rabies Awareness Camp | 28 September, 2024

7. PHO conducted a camp to create awareness regarding Rabies. The speakers included Dr. Sneha Ramesh Tatelu, Sr. Veterinary Officer, BMC; Adv. Bhavya Poojari, Deputy Education Manager, Mission Rabies, Mumbai and Ms. Raj Mariwala, animal behaviourist.



8. Mega Cleanliness Drive | 28 September, 2024

Joining hands for the Swachhata Me Jan Bhagidari campaign, IIT Bombay residents participated in large numbers in a mega cleanliness drive held in the campus.



9. Cyclothon | 28 September, 2024

A cyclothon was organised on campus. The participants were gifted cloth bags, protein bars and Swachhata badges to highlight the importance of hygiene and sustainability.



10. Nukkad Natak (Street Play) | 29 September, 2024

IIT Bombay students staged a Nukkad Natak (Street Play) to raise awareness about hygiene and



cleanliness.

11. QR codes installation for feedback/ complaint regarding sanitation for housekeeping: September 17 onwards

PHO and Hostel Affairs Council pasted QR codes in all hostels, academic, administrative and residential areas to take suggestions/ feedback to improve the cleaning services.



12. Powai Lake Cleanup Drive | 2 October 2024

On the occasion of Gandhi Jayanti, Abhyuday, a student-run social body of IIT Bombay, successfully organized a Powai Lake Cleanup Drive, promoting cleanliness and environmental sustainability. With the help of over 150+ dedicated volunteers, they managed to remove 2 tonnes of waste on a 2 kms stretch along the Powai lake. It was truly inspiring to see so many individuals come together, united by the cause of making a tangible difference in our community.



13. Gandhi Jayanti and prize distribution ceremony

2 October 2024

On the occasion of the birth anniversary of the Father of the Nation Mahatma Gandhiji and the third Prime Minister of India Lal Bahadur Shastriji, IIT Bombay had organised the prize distribution ceremony of Swachhata Pakhwada 2024. Cultural programme Swaranjali was also held on this day.

Appreciation certificates for various competitions held as part of Swachhata Pakhwada 2024 were distributed to students of Campus School, Kendriya Vidyalaya and IIT Bombay.

Prof. K.P. Kaliappan, Dean (Strategy) on behalf of the Institute Cleanliness Assessment Committee, announced the top 3 winning departments as a part of the **"Clean & Green Campus Initiative 2024"**. The Civil Engineering (1st), Aerospace Engineering (2nd), and the Industrial Engineering and Operations Research (3rd) departments were recognized for maintaining cleanliness in their academic units and premises.



14. Old bicycles

An email was circulated to IIT Bombay residents to claim the bicycles lying in the various places in the campus



15. Competitions by Schools:

Both Schools at IIT Bombay celebrated Swachhata Pakhwada 2024 by conducting competitions as follows:

PM SHRI Kendriya Vidyalaya, IIT Bombay, Powai, Mumbai :

Topics:

1. Swachhata
2. Elimination of Single Use Plastics
3. Water Conservation
4. Forest Conservation

Sr.No.	Date	Activity	Classes Participating
1	17.09.2024	Drawing Competition	Classes VI - VIII
2	17.09.2024	Slogan Writing Competition	Classes VI - VIII
3	17.09.2024	Essay Writing Competition	Classes IX-XII
4	19.09.2024	Poster Making Competition	Classes VI-VIII
5	19.09.2024	Poem Composition	Classes VI-VIII

IIT Bombay Campus School and Jr. College, Powai, Mumbai:

Topics:

1. Swachhata
2. Water Conservation
3. Forest Conservation

Sr.No.	Date	Activity	Classes Participating
1	18.09.2024	Poster Making Competition	Classes I - XII
2	18.09.2024	Slogan Writing Competition	Classes II - XII
3	18.09.2024	Best Out of Waste Competition	Classes I - XII
4	19.09.2024	Elocution Competition	Classes II, XII, IV-X

Photos Link:

<https://drive.google.com/drive/folders/18wrd3J5tmJzyuk8EEFZI8ARiDERHh3bl?usp=sharing>

Activities by Student Teams

From January-September 2024

NSS IIT Bombay

1. Cleanliness Drives

A) Airoli Mangroves Forest: (During January)



Cleanliness drives were conducted in the Mangrove forests of Airoli, Mumbai. 100+ volunteers participated. The cleanup drive aimed to remove the plastic waste, restoring the mangroves to their natural state and raising awareness about the need for environmental conservation. Through this activity, participants learned about the interconnectedness of ecosystems and the significant impact human actions can have on nature. The event not only helped in preserving a vital ecological area but also underscored the importance of cleanliness and the collective responsibility we all share in protecting the environment. In both the drives, proper care of the hygiene of the volunteers was taken. People were given gloves and masks to cover their mouth.

B) Powai Lake Cleaning Drive: (During March)

Besides on-campus activities, NSS IIT Bombay organised a cleaning drive at Powai Lake. Student volunteers collaborated with the campus workers (PHO workers) to remove waste and litter from the lake and its surroundings. This drive not only helped preserve Powai Lake's natural beauty but also raised awareness about the need to keep our water bodies clean and free from pollution.



The Environment and Sustainability Department of NSS IIT Bombay conducted several impactful activities to raise awareness about environmental issues and promote sustainable practices within the campus community.

2. Awareness Campaign

Waste Segregation: (During March)

A major part of the celebration was an awareness campaign about the importance of dry and wet waste segregation. The campaign was conducted in residential areas on campus to educate residents on how to properly separate waste, ensuring that recyclables and compostable materials are managed responsibly. This initiative aimed to encourage environmentally friendly waste disposal practices and reduce landfill burden.

3. Reduce, Reuse, Recycle!

Volunteers collected large no. of flex banners and plastic bottles and converted these items into stools, sapling covers, stationery pouches, paper bags and more.

a. Paper Recycling (During February)

The NSS IIT Bombay organized a paper recycling activity to promote environmental conservation and cleanliness. By recycling used paper, the initiative aimed to reduce waste, save trees, and minimize the carbon footprint associated with paper production. This hands-on activity not only highlighted the environmental benefits of recycling but also emphasized the importance of



reducing waste in our daily lives. Participants learned how small actions, like recycling, can significantly impact the environment by conserving resources and reducing pollution. The activity underscored the need for sustainable practices and the collective responsibility we all share in protecting and preserving nature.

b. Best out of waste (During March)

A large number of plastic bottles and containers, collected from all over the institute by the Environment and Sustainability (EnS) Department volunteers, have been made into stools, flex covers, sapling covers, stationery pouches, paper bags and many other items. Volunteers collected close to 4000 waste plastic bottles from the institute eateries and secured flex banners to create innovative reusable products.

c. Independence Day Seed Flag Distribution (15 August)



In a unique and environmentally conscious celebration, the Environment and Sustainability Department distributed over 500 seed flag badges on Independence Day. These special badges, made from biodegradable materials and embedded with plant seeds, symbolized patriotism and a commitment to environmental stewardship. The recipients were encouraged to plant these seed badges, contributing to the growth of new plants and furthering the cause of environmental conservation. This innovative idea combined national pride with ecological responsibility, encouraging students and staff to take part in sustainable practices even during festive occasions.⁶

4. Field visits

a. GEV Eco Village: (During March)

A group of over 150 volunteers visited Govardhan Eco Village to understand the sustainable community model for eco-friendly practices like organic farming, rainwater harvesting and waste management. The visit emphasized the importance of cleanliness and nature conservation, highlighting how sustainable practices can significantly impact the environment. The experience inspired volunteers to adopt eco-friendly habits, reinforcing their commitment to protecting and preserving the environment.

b. Vigyaan Ashram: (During April)



NSS Team visited Vigyan Ashram, a pioneering centre for rural technology and sustainable development. During the visit, students explored various innovative hacks designed to improve hygiene, cleanliness, and waste management. These techniques are not only eco-friendly but also practical, making them accessible for rural communities.

The Ashram's approach empowers rural citizens by providing them with the tools and knowledge to address local challenges, leading to their overall development. The visit reinforced the importance of sustainable solutions in tackling hygiene and waste-related issues, while also highlighting the significant role of community-driven initiatives in rural empowerment.

5. Plantation Drives:

a. Republic Day Tulsi plantation (During January)



In celebration of Republic Day on January 26th, the Environment and Sustainability Department of NSS IIT Bombay organized a special Tulsi plantation activity. Tulsi, or holy basil, is not only revered for its cultural and spiritual importance but is also valued for its numerous medicinal properties. Planting Tulsi carries symbolic meaning, representing the growth of unity, strength, and well-being. This initiative encouraged students and staff to come together and plant Tulsi seeds, fostering a sense of community while promoting health and positivity. By engaging in this meaningful activity, participants contributed to both environmental preservation and cultural heritage. The event also highlighted the importance of nurturing plants that are integral to our traditions and well-being. Through this Tulsi plantation drive, we aimed to inspire the campus community to embrace sustainable practices while celebrating the spirit of Republic Day with a focus on unity and shared responsibility for the environment.

b. 200+ saplings plantation (During July)



As part of their ongoing efforts to promote sustainability and restore the natural environment, the department organized a tree plantation drive. Over 200 saplings were planted in various locations outside the campus, contributing to a greener and healthier environment.

Tree plantation plays a crucial role in offsetting carbon emissions, improving air quality, and enhancing biodiversity, and promote cleanliness in deserted areas

6. Cloth Collection Campaign (CCC)& Graduation Collection Drive (During May)

CCC is divided into two phases. Phase 1 involves collection over a 10-day period from the students' hostels. Phase 2 is carried out in the IIT Bombay's residential area. The volunteers are divided into groups and given areas, after which there are four or five visits to the areas to collect clothing from interested parties. After being separated, the donated clothing is given to NGOs, PHO workers and slums. We have gathered and donated more than 15 tonnes of clothing, utilising what would have otherwise been considered waste—used clothing.

The Graduation Collection Dive is an add-on to CCC, that collects the belongings of graduating students that are of no significant use to them, like buckets, mattresses and books.



7. Eco-friendly Ganesha (31 August & 1 September)



To encourage the Institute residents to replace conventional POP idols and adopt more sustainable ones, an eco-friendly Ganesh clay idol-making workshop was conducted, in which a large number of students participated, including NSS. The idols made by professional workers were given to the hostel authorities to encourage them to replace their PoP idols. An innovative addition included placing seeds inside the clay idols so that when festival time is over, instead of flowing these idols into the river, they can be mixed with the soil so that the seed gets planted. We have facilitated the making of more than 1000 eco-friendly Ganapati so far, seeding the idea of sustainability with spirituality!

Team Zero Waste

1) Surveys, Quantification and Sensitization:

- **Campus Waste Management Multi-Stakeholder Survey (July 2024 - Ongoing):** Primary data collection through conversation with stakeholders in the institute waste management value chain to quantify, identify bottlenecks in waste minimization. Interacted with PHO staff, PHO management team, hostel councils, mess managers and 3 canteens uptill now for data collection. This is part of an overall project to propose solutions to improve efficiency and ensure circularity in waste management.
- **Fast Consumption and Related Waste Survey (August 2024):** This survey gathered detailed information on the frequency and patterns of consumer behaviour in two key areas: instant food/ groceries delivery and clothing. Specifically, it examines how often individuals order food from canteens or quick-delivery services, as well as the frequency and quantity of clothing purchases which produces additional packaging waste. Additionally, it explores the lifecycle of clothing items, including what happens to them when they are no longer in use (e.g., donation, recycling, resale, or disposal). This data was used to estimate packaging waste from these activities. Hostel wise results were published on our social media along with impacts and measures to reduce the same.



- **Single Use Plastic Mitigation (August 2024-Ongoing):** In collaboration with the PHO team, sensitization was conducted in academic and hostel areas about the single use plastic ban. We have put up 50 posters in key areas including hostels, academic buildings, library and at canteens/ shops, guiding students on the implication of the single use plastic ban and urging them to not accept single use plastic bags and cups. Our team spoke to mess managers to provide suggestions to minimize the use of single use/ take away cups during meals and ensure segregation of the same from food waste. Further, we have spoken to canteen owners in order to understand their challenges due to the ban, sensitise them on the definition and implications of single use plastics and suggest alternatives.



- **Partnered with Local Conference of Youth (LCOY), India (July-August 2024):** Helped LCOY India (a UNICEF and UNFCCC event held from 15th-18th August 2024) design a Zero-Waste Event through mapping of event flow with potential waste

generation to identify avenues for improvement, suggested local measures/ alternatives to mitigate waste generation at source. Contributed to the National Youth Statement and Global Youth Statement to be presented at COP29 Azerbaijan. We also collected inputs from IIT Bombay students and contributed to the National Youth Statement. A session was conducted by Team Zero-Waste at LCOY India on the role of technology in tackling waste management challenges.



- **Ongoing CleanTech Projects (April 2024 to Present):**

- ❖ Autonomous Waste Segregation: A bin that autonomously segregates different kinds of waste for better segregation and collections (using both cameras and other sensors)
- ❖ Achieved a 10% increase in accuracy (compared to standard) while using computer vision & machine learning models to identify the waste type from pictures
- ❖ Optimised selection of sensors to give the best result at minimum cost
- ❖ Plastic Extruder - A device that melts recycled plastic to create 3d printing wire
- ❖ Our prototype makes the system more autonomous and controllable extending it to all kinds of plastic

- **Social Media Awareness:(April 2024 to Present)**



Team Abhyuday

- **Versova Beach Clean-Up (April 2024):** A group of volunteers visiting Versova Beach for the Cleanup conducted the Clean-up with Shikhar Dhawan Foundation and under the leadership of the UN Environment Champion of the Earth 2016, Afroz Shah



- **Powai Lake Clean-Up (June 2024):** Over 200 student volunteers came together on World Environment Day to conduct a clean-up drive at Powai Lake in Mumbai, where they collected a significant amount of garbage, including plastic bottles, bags and other non-biodegradable waste and disposed of it properly, making a positive impact on the environment and promoting a sustainable lifestyle.



- **Green Earth Campaign (July 2024):** On the occasion of World Nature Conservation Day, we embarked on a journey of art, nature, and community. Our Green Earth Campaign brought together passionate individuals to make a positive impact. From exploring the world of art to contributing to a greener planet by planting trees, we created memories that will last a lifetime.



- **Dana Pani Beach Clean-Up (August 2024):** A group of volunteers visited Dana Pani Beach on Madh Island conducting the Clean-up under the leadership of the UN Environment Champion of the Earth 2016, Afroz Shah.



SOCIAL MEDIA

Sr. No.	Brief Details of Activity	Date	Social Media Links
1	<p>Swachhata Pledge</p> <p>IIT Bombay employees came together on September 18, 2024 to undertake the "Swachhata Pledge". Registrar Mr. Ganesh Bhorkade spoke on the importance of maintaining cleanliness on campus.</p>	18.09.2024	<p>Facebook: https://bit.ly/3N3y10u X: https://bit.ly/3ZGYgRN LinkedIn: https://bit.ly/3zIFdvF</p>
2	<p>SafaiMitra Suraksha Shivar</p> <p>Health Checkup Camp</p> <p>As part of the ongoing #SwachhtaHiSeva2024, IIT Bombay organised Safai-Mitra Suraksha Shivar for the housekeeping staff of the Institute on 24 Sept, 2024.</p>	24-25 Sept. 2024	<p>Facebook: https://bit.ly/4eDS0yt X: https://bit.ly/4gEjcyS LinkedIn: https://bit.ly/4eilsud</p>
3	<p>SafaiMitra Suraksha Shivar</p> <p>Schemes Awareness Programme</p> <p>IIT Bombay's Public Health Office is conducting Safai Mitra Suraksha Shivar /Dignity Camps for Sanitation Workers in batches. During these camps, preventive health care screening is being done and efforts are taken to create awareness amongst the workers regarding various welfare schemes of the Central and State Government.</p>	23, 26 & 27 Sept. 2024	<p>Facebook: https://bit.ly/3ZF4PnK X: https://bit.ly/3XJsUHp LinkedIn: https://bit.ly/4eFsDw5</p>

4	<p>Swachhata Mei Jan Bhaagidari</p> <p>Ek Ped Maa Ke Naam (Tree Plantation) at IIT Bombay</p> <p>In support of #SwachhataHiSeva2024, we invited Dr. Shekhar C. Mande, Distinguished Professor, J. C. Bose Fellow, National Centre For Cell Science, Pune to plant a tree for a green future together!</p>	24.09.2024	<p>Facebook: https://bit.ly/4gHHhVt X: https://bit.ly/3MZB5e3 LinkedIn: https://bit.ly/3XEzSO5</p>
5	<p>Shredding Machine Facility</p> <p>As part of the ongoing #SwachhataHiSeva2024, IIT Bombay has set up shredding machine facility for all departments to get rid of all unwanted documents.</p>	26.09.2024	<p>Facebook: https://bit.ly/4ditIsM X: https://bit.ly/4ekTrSv LinkedIn: https://bit.ly/3N2jhPb</p>
6	<p>Rabies Awareness Camp</p> <p>IIT Bombay conducted a camp today to create awareness regarding Rabies, as part of Swachhata Pakhwada 2024. The speakers included Dr. Sneha Ramesh Tatelu, Sr. Veterinary Officer, BMC; Adv. Bhavya Poojari, Deputy Education Manager, Mission Rabies, Mumbai and Ms. Raj Mariwala, animal behaviourist.</p>	28.09.2024	<p>Facebook: https://bit.ly/3N2p4Vb X: https://bit.ly/3Nc5buB LinkedIn: https://bit.ly/3XDyACY</p>
7	<p>Mega Cleanliness Drive</p> <p>Joining hands for the Swachhata Me Jan Bhagidar Campaign, IIT Bombay residents participated in a large number in a Mega Cleanliness Drive held in the campus.</p>	28.09.2024	<p>Facebook: https://bit.ly/4doohbH X: https://bit.ly/4ei9ZL0 LinkedIn: https://bit.ly/4eoyxlt</p>
8	<p>Cyclathon</p> <p>A cyclathon was organised on Sept 28 as part of #SwachhataHiSewa2024. The participants were gifted cloth bags, protein bars and Swachhata badges</p>	28.09.2024	<p>Facebook: https://bit.ly/3zFOMM8 X: https://bit.ly/3N3m3nx LinkedIn: https://bit.ly/4eFGlz6</p>

	to highlight the importance of hygiene and sustainability.		
9	<p>Nukkad Natak (Street Play)</p> <p>IIT Bombay students staged a nukkad natak (street play) to raise the awareness about hygiene and cleanliness on September 29 as part of #swachhatapakhwada2024</p>	29.09.2024	<p>Facebook:https://bit.ly/48ad1P2 X: https://bit.ly/3Nn17bg LinkedIn:https://bit.ly/3UaJajV</p>
10	<p>QR codes installation for feedback/ complaint regarding sanitation for housekeeping</p> <p>As part of #swachhatapakhwada2024, QR codes were installed by the Public Health Office and Hostel Affairs Council in all hostels, academic, administrative and residential areas to take suggestions/ feedback to improvise the cleaning services.</p>	30.09.2024	<p>Facebook: https://bit.ly/4gHcqsB X: https://bit.ly/3TNEvnQ LinkedIn: https://bit.ly/3zt5DSI</p>
11	<p>Powai Lake Cleanup Drive</p> <p>On the occasion of Gandhi Jayanti, Abhyuday, IIT Bombay, successfully organized a Powai Lake Cleanup Drive aimed at promoting cleanliness and environmental sustainability. With the help of over 150+ dedicated volunteers, they managed to remove 2 tonnes of waste on a 2 kms stretch along the Powai lake. It was truly inspiring to see so many individuals come together, united by the cause of making a tangible difference in our community.</p> <p>A big thank you to everyone who contributed to the success of this event. Let's continue working towards a cleaner, greener and more sustainable future!</p>	02.10.2024	<p>Facebook: https://bit.ly/4dPdjfl X: https://bit.ly/4f5FwOg LinkedIn: https://bit.ly/3BLIHPV</p>