

# To Educate and Create Awareness About the Proper Disposal of Solid Waste for Environmental Sustainability

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## INTRODUCTION

Waste operation (or waste disposal) include the processes and conduct needed to manage waste from its commencement to its final disposal. This includes the collection, transport, treatment and disposal of waste, together with monitoring and regulation of the waste operation process and waste- related laws, technologies, profitable mechanisms. Waste can be disposed grounded on material, similar to plastic, paper, glass, essence, and organic waste.

Categorization may also be grounded on hazard eventuality, including radioactive, ignitable, contagious, poisonous, or non-toxic wastes. Orders may also pertain to the origin of the waste, whether artificial, domestic, marketable, institutional, or construction and obliteration including natural, ménage, external, organic wastes. In some cases, waste can pose a trouble to mortal health.

Health issues are associated throughout the process of waste operation through the running of solid waste. Waste operation is intended to reduce adverse goods of waste on mortal health and the terrain. Around the world, waste generation rates are rising. In 2016, the worlds' metropolises generated 2.01 billion tons of solid waste, amounting to a footmark of 0.74 kilograms per person per day. The fast population growth and urbanization, periodic waste generation is anticipated to increase by 70 from 2016 situations to 3.40 billion tons in 2050.

Waste operation practices aren't invariant among developed and developing nations, regions like civic and pastoral areas, and domestic and artificial sectors can all take different approaches. Proper operation of waste is important for erecting sustainable and inhabitable metropolises, but it remains a challenge for numerous developing countries and metropolises. A report set up that effective waste operation is fairly precious, generally comprising 20 – 50 of external

budgets. Operating this essential external service requires integrated systems that are effective, sustainable, and socially supported.

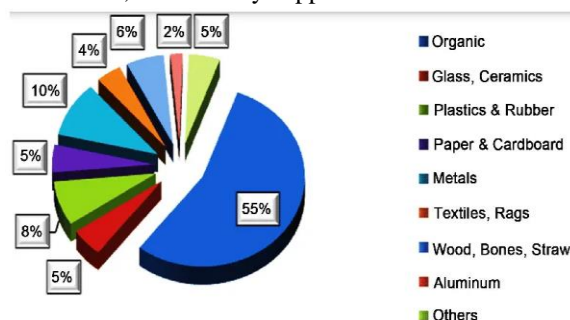


Fig 1: Percentage of Solid Waste Disposal in Different Countries

## OBJECTIVE

- To educate an individual to identify the different types of solid waste.
- To develop an awareness about the environment and its associated problems.
- Increase reuse of different kinds of waste.
- Reduce the percentage of recyclable material to landfill.
- To provide an opportunities to commit protect and improve environment.

## SIGNIFICANCE OF THE STUDY

The most important reason for proper waste management is to reduce the amount of waste in the landfill and protect the environment and for the health and safety of the students and society. Everyone should be aware of how waste segregation can create the difference between the survival of the earth and deteriorating effects in the natural biological system. Just like humans and the terrain, unhappy running of waste and scrap can have an adverse impact on creatures and marine life. When the waste is disposed

or recycled in a safe, ethical, and responsible manner, it helps reduce the negative impacts of the environment.

#### IMPORTANCE OF WASTE MANAGEMENT

Waste management is essential in today's society. Due to increase in population, the generation of waste is getting doubled day by day. Moreover, the increase in waste is affecting the lives of many people. Waste management reduces the effect of waste on the environment and health. It can also help to reuse or recycle resources. In order to maintain a healthy life, proper hygiene and sanitation are necessary.

#### ADVANTAGES OF WASTE MANAGEMENT

- Decreases bad odor and keeps the environment clean.
- Reduces pollution.
- Reduces the production of waste.
- It generates employment.
- Plastic wrappers can be used to Produce Energy.

#### PROJECT EXECUTION

For execution of the Project, proposal was framed and approval has been taken from the Principal and Management. Then the team was made which included 15 janitors, 100 students and 10 faculty members. The first meeting was conducted to educate and create awareness and a questionnaire was prepared to check the knowledge about the waste management and the responses were recorded to educate and to create an awareness PPT was made and presented to the students by the selected faculties.

By this time I was able to create an awareness about the different types of waste thereby segregating and disposing waste in proper bins which are placed in the campus at different places. We have also taken the permission from nearby colleges to organize a lecture and conduct an awareness program to educate about different types of waste and their proper disposal method. We also conducted awareness program on solid waste management in the rural areas by our volunteers and to educate them who noted down their problems. A small campaign was organized to stop the

use of plastic bags in the campus and motivate them to find another alternative method in daily routine.

Now at this stage, students are capable to differentiate between waste as biological waste and other solid waste. They researched and selected the simplest and the easiest ways to use biological waste to make a Compost in the campus and have planned to use it in the campus garden.

In line with this Workshop cum Exhibition on "Waste Management for sustainability" was organized on 3rd March 2022. Number of events were conducted such as paper presentation, debate, video and poster presentation and models prepared from "Best out of waste".

The Chief Guest of the event was Dr. B. V Subba Rao (Advisor and Technical Member – Water Sector, Bureau of Indian Standard, and Govt. of India). The Program was graced by Mrs. Rizwana Begum, Secretary LIET, Principal, Vice Principal, Dean First Year and other Heads of the departments.

The speaker emphasized on the usage of waste products and recycling which reduces wastage and improves sustainability. He also focused on the importance of youth in to make a change in the society. The exhibition saw a variety of useful products made by 200 student of different year and different branches of LIET. The beautiful items were made by reused glass, thread, paper, cardboard, pamphlets and plastic waste and made Titanic from newspaper, Hydraulic tree shifter (from syringe, tube, cardboard), Tornado (with the help of aquarium tank, fan and battery and dry ice), Tree house and garden (by newspaper, colored paper, cardboard and plastic), waterfall, water dispenser from plastic bottles and cardboard, night lamp (by used paper cup), wall hangings (Ice cream stick, disposable spoon), a model of waste water treatment plant, decorative items and many more things.

To motivate and develop the sense of accountability, competition was held and the winners from each category were selected and certificates and prizes were distributed to the winners. In my view the program was a great success in inculcating the required understanding of proper disposal and reuse of solid waste disposal.

#### CHANGE THAT WERE MEASURED

1. Reduce packaging purchases (purchase of vegetables, fruits with local farmers).
2. Reuse Bags, containers, and other items (for purchasing of floor, oil etc.)
3. Using reusable shopping bag to the grocery (avoiding using plastic bags)
4. In the canteen lunch is packed and delivered in paper bags.
5. Reuse of containers.
6. Reuse single-sided printed pages paper.
7. Preparation of compost from biological waste.
8. Reduces the amount of waste due to segregation.

### FUTURE STUDY

Solid waste management is an integral part of an environmental management system. Approaches have to be modified into a more practical and effective option to establish sustainability based on the (3R-5R) principles.

Reduce → Reuse → Recycle

Reduce → Reuse → Recycle → Reject → Repair

Waste management reduces environmental impact to pollution prevention and source reduction, reuse or redistribution of unwanted, treatment and recycling of materials within the waste and disposal.

This study can be taken up further at large scale for 2<sup>nd</sup>, 3<sup>rd</sup> and final year students of the Institution to manage and reduce its environmental impact pollution prevention and source reduction, reuse or redistribution of unwanted, surplus materials, treatment, reclamation, and recycling of materials within the waste and disposal reuse and recycle of plastic waste.

### CONCLUSION

To conclude I am very happy and satisfied by my change project which created an awareness among the students toward the sustainability of the environment. As we can see, there are plenty of reasons and it's important to practice proper waste management techniques. The solid waste should be properly disposed of for the protection of the environment and mankind. Then the planet will remain a beautiful and safe place to live in today and in the future.





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