### VISVESVARAYA TECHNOLOGICAL UNIVERSITY

Jnana Sangama, Belagavi – 590018



#### NSS ACTIVITY REPORT

on

# WASTE MANAGEMENT-PUBLIC, PRIVATE AND GOVT ORGANISATION

Submitted in partial fulfilment for the award of degree of

**Bachelor of Engineering** 

in

**Information Science and Engineering** 

Submitted by MANOJ KUMAR (1AT22IS062)

Under the Guidance of PROF.VINOTH KUMAR ASSIST PROFESSOR Department of ISE AIT Bengaluru



DEPARTMENT OF INFORMATION SCIENCE AND ENGINEERING

### ATRIA INSTITUTE OF TECHNOLOGY

HEBBAL, Bengaluru - 5600234s

2023-2024

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#### DEPARTMENT OF INFORMATION SCIENCE AND ENGINEERING

### **CERTIFICATE**

Certified that the NSS Activity entitled **WASTE MANEGEMENT** carried out by **Mr.MANOJ KUMAR**, bearing the USN **1AT22IS062**, a bonafide student of **ATRIA INSTITUTE OF TECHNOLOGY** in partial fulfilment for the award of **BACHELOR OF ENGINEERING** IN **INFORMATION SCIENCE AND ENGINEERING** of **VISVESVARAYA TECHNOLOGICAL UNIVERSITY**, Belgaum during the year **2023-2024**. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the departmental library. The report has been approved as it satisfies the academic requirements in respect of NSS activity prescribed for the said Degree.

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### INTRODUCTION

#### 1.1 About NSS

National Service Scheme (NSS) was introduced in 1969 with the primary objective of developing the personality and character of the student youth through voluntary community service, 'Education through Service' is the purpose of the NSS. The ideological orientation of the NSS is inspired by the ideals of Mahatma Gandhi. Very appropriately, the motto of NSS is "NOT ME, BUT YOU". An NSS volunteer places the 'community' before 'self'. This reflects the essence of democratic living and upholds the need for selfless service and appreciation of the other person's point of view and also to show consideration for fellow human beings. Therefore, it should be the aim of the NSS to demonstrate this motto in its day-to-day programme.

The scheme is administered by the Ministry of Youth Affairs and Sports, Government of India. The primary objective of the NSS is to provide opportunities to the youth to participate in various nation-building activities, such as literacy drives, health campaigns, blood donation, plantation, and cleanliness drives, to name a few. NSS volunteers work towards developing the community by implementing various schemes, programmes and policies.

The NSS programme has been successful in inculcating a sense of social responsibility and patriotism among the youth of India. It has also helped in developing the skills of leadership, organization, and management among the volunteers. Many students have been inspired to pursue social work as a career after participating in the NSS programme. Overall, the National Service Scheme provides an excellent opportunity for the youth to contribute to the society and nation-building efforts, while also developing their personality and skills.

NSS Logo: The NSS logo is a combination of four hands holding a wheel with a motto "Not Me But You" inscribed in it. The four hands represent the youth of the nation, who are committed



to selfless service to the community.

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# 1.2 List of NSS Activities prescribed

- I. Organic farming, Indian Agriculture (Past, Present and Future) Connectivity for marketing.
- 2. NVaste management—Public, Private and Govt organization, 5 R 's,
- 3. Setting of the information imparting club for women leading to contribution in social and economic issues.
- 4. Water conservation techniques Role of different stakeholders— Implementation,
- 5. Preparing an actionable business proposal for enhancing the village income and approach for implementation.
- 6, Helping local schools to achieve good results and enhance their enrolment in Higher/technical/vocational education.
- 7. Developing Sustainable Water management system for rural areas and implementation approaches.
- 8. Contribution to any national level initiative of Government of India, Foreg. Digital India, Skill India, Swachh Bharat, Atmanirbhar Bharath, Make in India, Mudra scheme, Skill development programs etc.
- 9. Spreading public awareness under rural outreach programs, (Minimum5 programs),
- 10. Social connect and responsibilities.
- Il. Plantation and adoption of plants. Know your plants.
- 12. Organize National integration and social harmony events (workshops/seminars.
- 13. Govt. school Rejuvenation and helping them to achieve good infrastructure.

# **OBJECTIVE**

### 2.1 Title of the Activity

Waste Management — Public, Private & Govt. organization

What is Waste Management?

All the activities that are required to manage this waste from the point of collecting to recycling and monitoring is called waste management.

It is a way to systematically and safely dispose waste which can be hamful and caused diseases and injuries. Waste management deals with all types of waste, including industrial, biological, household, municipal, organic, biomedical, radioactive wastes.

### 2.1.1 Types of Waste Management

Some types of waste management are:

#### Recycling

This is one of the types of waste management practices and probably the most efficient one that involves the process of converting waste materials into new, reusable products. In the recycling process, discarded materials or waste such as plastic are exposed to extreme heat temperatures or shredded and then used to make something else that is useful.

#### Composting

Composting is a natural and easy non-biodegradable process that turns organic wastes into nutrient-rich food for plants and it is the best type of waste disposal it is cheap, reliable, and healthy for the environment

#### Landfills

Landfills — are the process of burying waste under the soil of left to pile in heaps. Landfills are also known as dumping sites, garbage ground, tip, rubbish dump, etc. which are sites specifically designed to dump garbage, it is the oldest form of garbage disposal and also the most common.

#### Avoiding or Minimizing Waste

his method of managing waste is much easier, it is simply reducing the creation of waste materials thereby

reducing the amount Of waste going to dumping sites. Avoiding or minimizing waste also involves when we as individuals reduce the amount of waste wc produce.

### 2.1.2 5 R's of waste management

Applying the 5 Rts to our waste management and recycling strategies can positively impact the outcome of our program by significantly reducing the amount of waste generated. Before disposing of the waste, we must walk through each of the 5 R steps in the following order:

#### STEP ONE- REFUSE



Fig 2.1 Refuse

The first element of the 5 R's hierarchy. Learning to refuse waste can take some practice but incorporating this step into our strategy is the most effective way to minimize waste. When working with vendors, refuse unnecessary product packaging and request reusable or returnable containers. Making smarter purchasing decisions and setting standards and expectations early in the process, makes it easier for organizations to "refuse" waste in the first place.

#### STEP TWO- REDUCE



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We must reduce the use of harmful, wasteful, and non-recyclable products. Reducing dependency on these kinds of products results in less waste materials ending up in landfill

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and the associated negative environmental impacts. For example, when printing a document, print double-sided to cut your waste output in half.

#### STEP THREE -REUSE



Fig 2.3 Reuse

Single-use plastics have created a "throw-away" culture by normalizing consumer behavior of using materials once and then throwing them away. The rate at which we consume plastics has become unimaginable and the plastic crisis has become one of the world's greatest environmental challenges. In an effort to reduce waste, reuse items throughout the workplace instead of buying new ones. Replace all of the single-use eating utensils, Styrofoam cups, water bottles, and paper plates with compostable or reusable alternatives. Once you master one area, prioritize reuse for other products in your facility like cardboard boxes, food containers, and rechargeable batteries, etc.

#### STEP FOUR- REPURPOSE



Fig 2.4 Repurpose

For every item that can't be refused, reduced, or reused, try repurposing it. Many people in the green community refer to this method as 'Upcycling'. Sometimes it requires using

some creativity but the possibilities are endless. Try using wasted printer paper for scrap paper, cardboard boxes for storing supplies, binder clips to hold power cords and chargers in place, and even mason jars, coffee mugs, and tin cans for holding pens and pencils, Designate an area of your workplace or home as an Upcycle Station or Store room for collecting and storing supplies. Encourage others to add items to the station they no longer need and to check there before purchasing new supplies,



Fig 2.5 Recycle

Last but definitely not least: Recycle. Once you've gone through all of the other R 's, recycling is the most environment friendly waste disposal method, Last but not least, if you absolutely cannot do something else with your stuff, find a way to recycle it, Buy in bulk to reliminate excess packaging that needs to be recycled.

These were some of the main R's of waste management but the list could go on like repair, repaint, rot, refurbish, reclaim, etc. It is critical to educate and encourage everyone to practice these R 's of waste management and in fact, this should be a priority for municipalities and governments.

# 2.2 Objective of the activity

- •Waste management is important as it keeps the environment clean and safe from dangerous disease and also from the toxic effects of inorganic and biodegradable element present in waste.
- •We need waste management for a systematic and proper disposal of waste
- •Proper segregation of waste into biodegradable and non-biodegradable waste or wet and dry waste.
- •To motivate the onlookers and general public to clean public places like parks, lakes, market places etc. And not to litter around and dirty them in the first place.
- To avoid harmful waste like plastic and glass pieces from lying around public places, which can cause serious injuries to children playing around, sfray animals and the general public.

# Chapter 3

# **ACTIVITY**

# 3.1 Detailed Timeline of Activity

Day	Activity Done	Duration
Day 1	Sweeping and Collection of waste material at Atria Campus.	7 hours
Day 2	<ul><li>i. Visit to Hebbal park which has temple and market place.</li><li>ii. Composting organic waste from temple and market place.</li></ul>	7 hours 4 hours
Day 3	Segregation of 'Waste at vishnuvardhan park.	6 hours
Day 4	Waste collection at kuppa raju school Ground.	6 hours
Day 5	<ul><li>i, Collection and Collaboration information and photo.</li><li>ii. Report Preparation.</li></ul>	5 hours 5 hours
	TOTAL	40 hours

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# 3.2 Details of the location where activity was carried out

# 302.1 Atria Institute of Technology

As the activity we chose was 'Wttste tnaitagemetlt—Public, Private and Govt. organization" on the first day we chose the place We go to everyday - our coljege, Atria Institute of technology, It is a private educational institute,

On 09 Feb 2024, we did sweeping and collection of waste material from around the college and put them in a landfill at a place behind the college, We collected the waste from places like playground, hostel area, sitting area, parking lot, overfilled dustbins, outside the college gates and compounds etc.

We mainly collected waste like chips and chocolate covers, used masks, water and juice bottles, cardboard piece, used pen and empty refills and lots of paper, plastic and stationary wastes.

After collecting the waste, it was segregated mainly on the basis of plastic waste and paper waste and dumped in different landfills. Some waste which could not be handpicked was swept and put to dustbins.



Fig 3.1 Atria Institute of Technology

# 3.2.2 Hebbal park

For the second day, on sat 9 march 2023, we went to hebbal park, This is a small locality that has a temple and a market place nearby.

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We collected vegetable and temple waste like old flowers, temple decors, vegetable huge jute and plastic bags, unwanted

thrown slippers, broken glass, waste cloth etc on places Jike footpaths, roads, inside the park on benches and walking tracks, none of which were properly disposed Off,

We piled the waste and put it into dustbins. Sotne waste was segregated and put into small landfills in the park whereas huge pieces of waste was reused and recycled.

Fig 3.2 Hebbal park

# 3.2.3 Vishnuvardhan Park

For the third day on 10 Feb 2024, we went to vishnuvardhan Park. The park has several schools, playgrounds and a hospital near it. This park is a very busy place making it dirty most of the times.

We cleaned the park by segregating biodegradable and non-biodegradable waste. We Collected dry leaves, corn waste, wood sticks, dry flowers, plastic bottles, juice tins, glass bottles, plastic bags etc. Some wastes like glass pieces and sharp objects were kept Separately. All types of waste were made sure to be disposed properly.

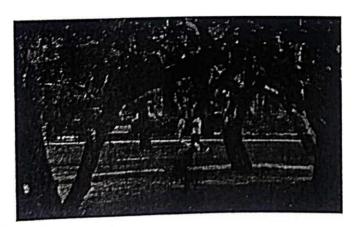


Fig 3.3

# 2.4 Kupparaju School Ground

r fourth day we went Kupparaju School Ground on 11 feb 2024. Many people come here to play, o acts as a parking place for trucks. Hence this place has a lot of mctal scrapes and tyre



We advised the people nearer and mainly the children's not to put wastes on the ground them to dustbins nearby. The children accepted our advice and promised to keep the park

# 3.3 Geo tagged photographs

# 3.3.1 Day – Atria Institute of Technology



Fig 3.5 Waste dumped in a landfill

# 3.3.2 Day 2 – Hebbal park

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Fig 3.7 Compost of temple waste



Fig 3.8 Land cleaned by the team

# 3.3.3 Day 3 vishnuvardhan park

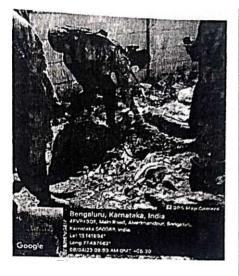




Fig 3.11 Dry leaf waste

Fig 3.12 Cleaning the park

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# **REFLECTION NOTES**

- •Our team learnt the importance ol' proper waste management in protecting the environment and human health.
  - We also learnt different methods and technologies used for waste management, including landfilling, incineration, recycling, and composting.
  - Our team understood the benefits of waste reduction, reuse, and recycling in conserving natural resources and reducing pollution.
  - Our team must educate people about waste management so the production of waste is reduced.
  - Our team also encouraged the onlookers to the clean the public places and convinced them not to litter it in the first place.
  - Our team also advised the children not to litter the place and made them understand the ways and importance of waste management.

Overall, learning about waste management helped us to understand the complex environmental and social issues associated with waste generation and disposal, and empowered us to make correct decisions about our own consumption habits and waste disposal practices.

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# **CONCLUSION**

In conclusion, our team for the NSS activity chose the topic of "Waste management—Public, Private and Govt organization." We did four days of waste management in different public and private institutions. Our team engaged in a range of waste management activities, including the collection and disposal of waste in designated landfills, composting of organic Waste materials, and the segregation of different types Of waste for proper disposal. These activities were aimed at reducing the negative impacts of waste on the environment and human health, and promoting sustainable waste management practices. Through these efforts, our team was able to confi•ibute to the preservation of natural resources and the reduction of pollution, while also raising awareness about the importance of responsible waste management.

Our team not only engaged in various waste management activities, but also actively encouraged the general public to take responsibility for cleaning the environment and reducing waste production. We emphasized the importance of adopting sustainable practices in their daily routines. By educating the public about the 5Rs - Refuse, Reduce, Reuse, Recycle, and Rot (composting) - we aimed to raise awareness about the impact ofwaste on the environment and promote sustainable waste management practices.