

Survey on Waste Management in Shaheed Rajguru College of Applied Sciences for Women

About the survey ::-

The survey was conducted on 4th November, 2020 on *Waste Management* by the students of *Statistics Department of Shaheed Rajguru College of Applied Sciences, Delhi University*.

The following areas and events of the college were targeted:

- Academic block, including canteen
- Residential areas, i.e. the hostel and the mess
- College events
- Roadside and garden areas, i.e. surrounding areas of the college,
- Washrooms

We have further categorised our data into *four* types of wastes:

- Paper Waste
- Plastic Waste
- Sanitary Waste
- Lab Waste, i.e. e-waste, solid/dry waste, etc

About waste management:

Waste management (or waste disposal) includes the activities and actions required to manage waste from its inception to its final disposal. This includes the collection, transport, treatment and disposal of waste, together with monitoring and regulation of the waste management process

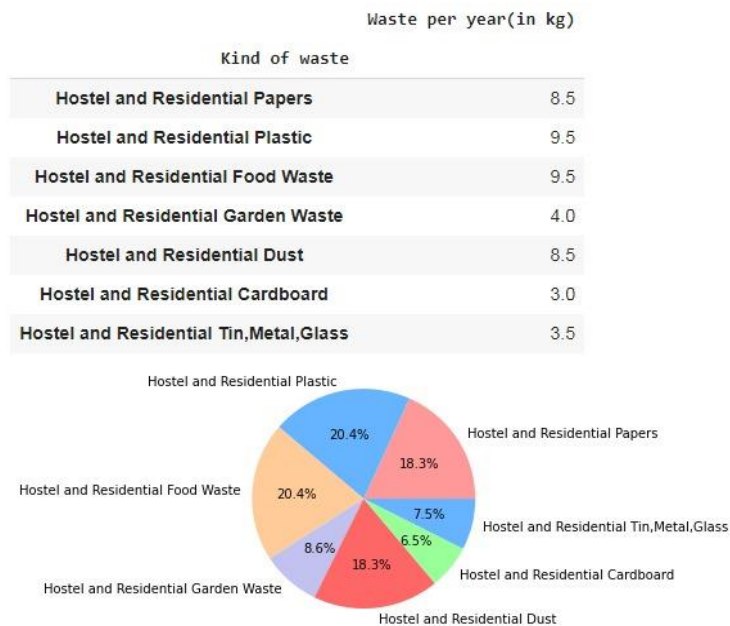
A large portion of waste management practices deal with municipal solid waste (MSW) which is the bulk of the waste that is created by household, industrial, and commercial activity.

Data Collected:-

After surveying the targeted areas of the college, we could analyse the collected data as following.

1. Waste from Residential Areas::

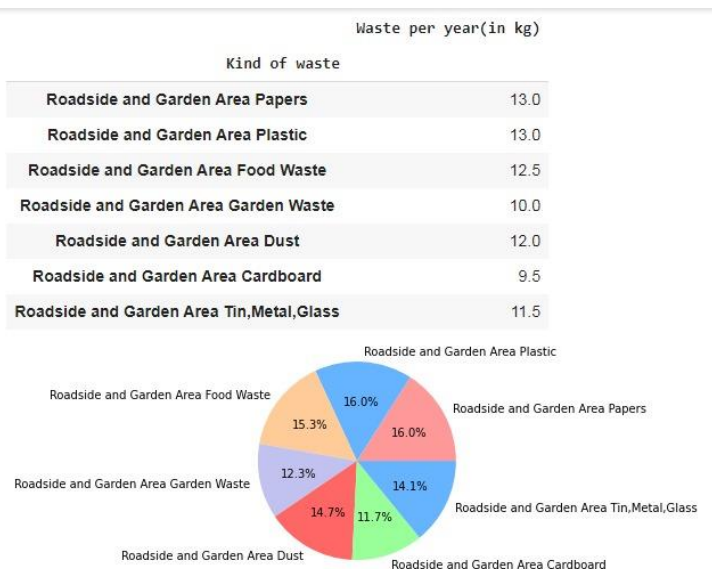
Residential areas includes hostels, mess, staff and teachers residential places.



Looking at the above representation, we can conclude that *wastage of food and plastic waste is maximum (20.4% of the whole waste generation, 9.5 kg of the total waste).*

2. From surrounding areas of the college::

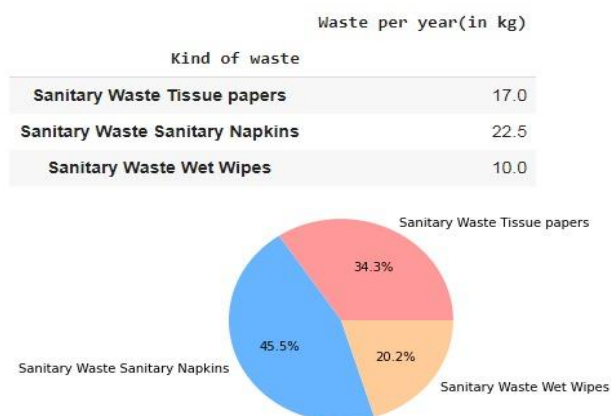
The surrounding areas of the college includes, roadside areas, garden areas etc.



Looking at the above data, we can conclude *that waste of paper and plastic is maximum (16% of the total waste obtained, 13 kg by weight).*

3. Waste generated from Sanitation::

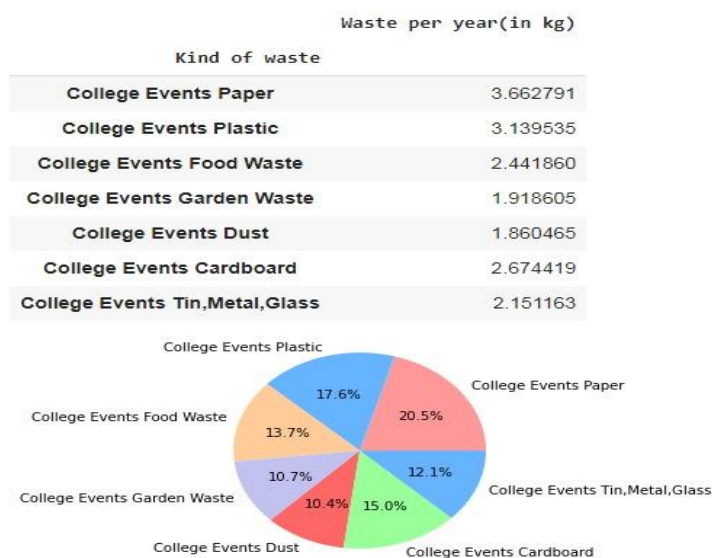
Waste from sanitation includes waste generated from the washrooms.



From the above representation, we can say that *sanitary plastic waste (sanitary napkins)* is most generated (45% of the total waste, 22.5 kg by weight).

4. Waste generated from College Events::

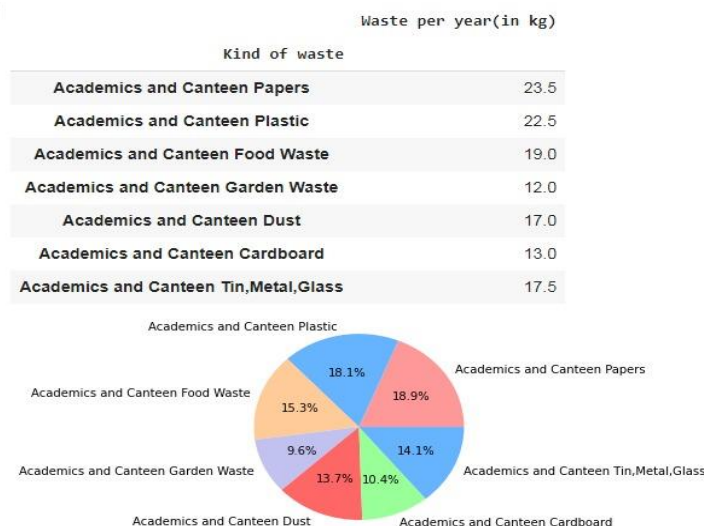
College events includes fests, seminars, events by societies, etc.



From the above representation, we can conclude that *wastage of papers during any event is maximum (20.5% of the total waste, 3.67 kg by weight).*

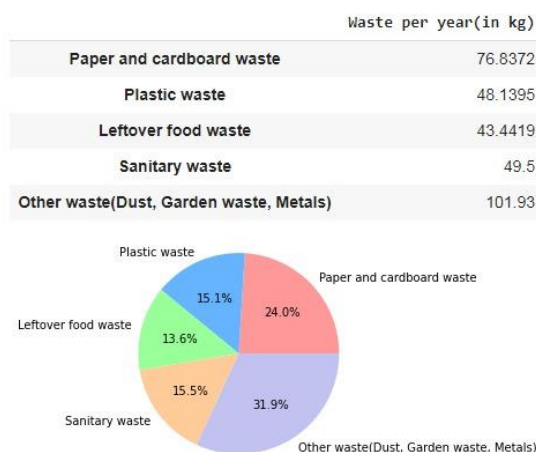
5. Waste generated from Academic block and Canteen::

Lecture halls, canteen vicinity comes under this particular areas.



Looking at the above data, we can conclude that *papers are most wasted, also, food (18.9% and 15.3% of the total waste, 23.5 kg and 19 kg by weight).*

Total Waste::



After surveying the above areas of the college, we came to a conclusion that *paper and cardboard waste is maximum generated by students of statistics department of the college (31.9% of the total waste).*

Waste handling practices which should be adopted:-

Proper management of waste is important for building sustainable and livable areas. We can control production of waste by taking proper measures.

Some of the suggested measures includes-

- Perform a Waste Analysis to determine where you can reduce, reuse and recycle.
- Identify markets for recyclables.

- Recycle plastic, cans and paper - over 400 sets of bins across campus.
- Refill your water bottle at 45 stations across campus.
- Bring your own coffee mug for a discount at all campus cafes.
- Print double sided.
- Consult the CSU Green Event Guide when planning events.
- Sealing with paper tapes
- Skip use of bubble wrap

Conclusion of the Survey:-

The survey was conducted through *Google Forms* (a set of questionnaire was formulated). We have performed the analysis using *Python Programming Language*.

We would also like to extend our gratitude to our respected sir, **Dr. Dharendra Singh**, for giving us this opportunity where we can implement our knowledge and also work for the welfare of the college.

Thanks.

Students involved for covering this topic,

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