

Waste Management

Before you Begin

What is waste?

Eight million tons of plastic waste ends up in sea every year. To put it in perspective, a blue whale weighs 120 tons = 44,000 blue whales.

Estimation of waste generation and understanding its composition are important information for management of waste as this information influences the designing of waste collection and handling facilities, understanding its management and safe disposal. The information also raises awareness of waste being produced at home and what individuals can do to minimize waste and adopt practices like segregation, reuse and composting to support the waste management systems in their towns and cities.

What is a survey?

“Survey” is a method of collecting information via email, telephone or in person from a particular group of individuals which generally represents a fraction of the population being surveyed. The information thus collected is usually called data (Sarantakos, 1998).

Surveys are used by varied people to collect information pertaining to different aspects. Surveys can be administered in two ways - either as a structured interview, during which the respondents are asked questions directly, or as a questionnaire, which the participant fills out on his or her own. Each of these methodologies has its own advantages as well as limitations. The questionnaire for instance produces quick results and is inexpensive; however it is limited by the understanding of the respondent; who may leave the questions unanswered, if not understood.

Undertaking surveys is a pedagogical tool to sensitize students on the issue of waste, increase their understanding and encourage them to look at strategies to address the problem and give the experience of waste management through planning and establishing waste management practices or system in their school.

Waste surveys in the school will help assess the type and quantity of waste produced/ generated in the school. It will help understand the current system of collection, handling and disposal. The survey will help plan appropriate actions.

Waste survey at the community level will help students understand the waste management systems, the role of local municipality in managing waste from any town/ city and how citizens can help the systems work smoothly and efficiently. There are different means of collecting this information.

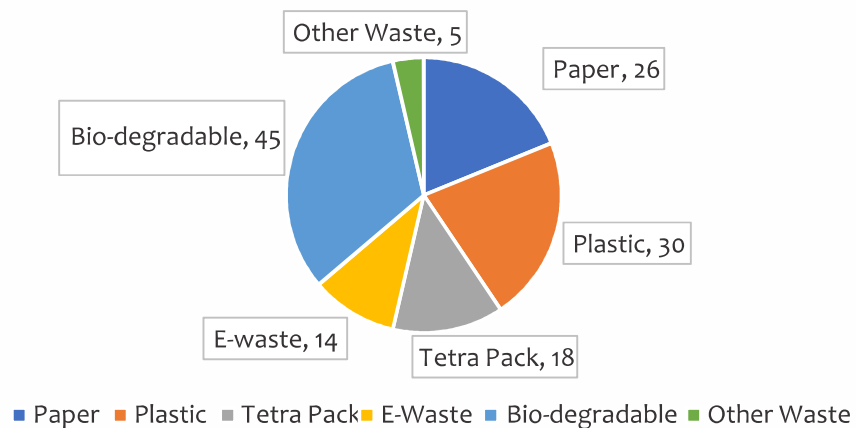
These include assessments, by measuring or assessing the different volumes of wastes generated, questionnaires or other means of conducting surveys.

In order to get the most out of the information (data) collected from surveys, it is important to analyze and interpret the same.

What is 'data' and the need for data representation?

Data is a collection of facts, such as numbers, words, measurements, observations or even just descriptions of things. Data representation, can be done using different methods; tally marks, graphs and pie charts are few of the methods which will be useful for students. Graphs of different types (bar graphs and pie charts) can be used in different situation and help to visualize and compare different pieces of data for ease of understanding and decision-making.

Graph representing waste management in Kgs



Plastic Waste: facts and figures

How much plastic enters the ocean every year ?



1096
Eiffel
Towers



24
Empire State
Buildings



44,444
Blue
Whales



30,180
heaviest sumo
wrestler in history,
Yamamotoyama
Szūb

Source : International Environmental Technology Centre (IETC)
Osaka, Japan