

Let's ACT BEFORE IT'S TOO LATE!

Environmental pollution is one of the biggest problems faced by the modern world and has become a survival threat to all living beings and the planet. According to World Economic Global Risks Report 2019, in relation to the environment, “the world is most clearly sleepwalking into catastrophe.”

- According to Air Quality and pollution city ranking 2022, Karachi ranked first ¹
- More than **5 million people** die in Pakistan each year due to waste related diseases.²

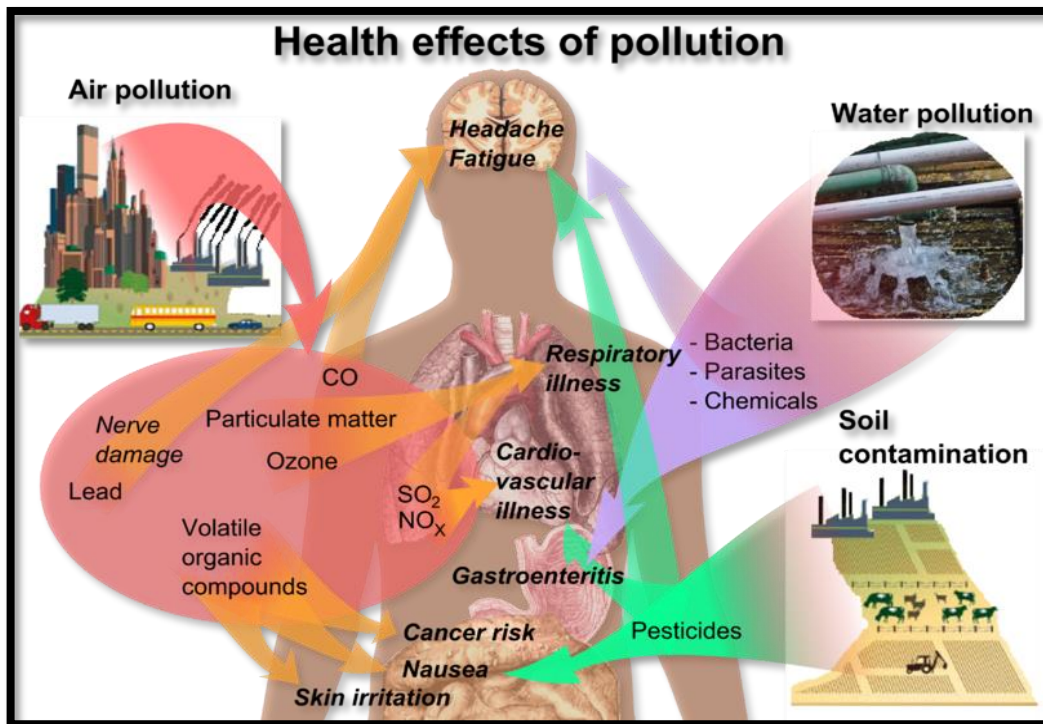


Figure 1-Overview of main health effects on humans from some common types of pollution.
<https://commons.wikimedia.org/w/index.php?curid=655558>

Some less known facts about hazards of plastic:

- Most of the plastic is not recyclable. Plastic which is recyclable can usually be recycled only once. Only 9% of the plastic the world has ever produced has been recycled. Rest of the billions of tons of plastic is lying in landfills, dumps or in the environment.³
- Plastic bags consumed by animals, birds and marine life accumulate in their gut causing disease leading to their slow and painful death. ⁴
- Humans consuming the meat or milk of animals who have ingested plastic, are also affected by various diseases including cancer.

¹ <https://www.iqair.com/world-air-quality-ranking>

² <https://www.bioenergyconsult.com/solid-waste-management-in-pakistan/>

³ <https://www.unenvironment.org/resources/report/single-use-plastics-roadmap-sustainability>

⁴ <https://www.unenvironment.org/resources/report/single-use-plastics-roadmap-sustainability>

- Plastic bags contain harmful chemicals which leach to the ground and contaminate the soil and sub-soil water.
- Time for plastic to completely degrade is from **450 to up to 1000 years**.

Microplastic- A New threat

- **Microplastics** are tiny particles of plastic that are formed when bigger pieces of plastic break down into smaller bits when exposed to sunlight.
- **Sources of microplastic:** They can break off from certain synthetic clothes when we wash them, for example **fleece**. Microplastic is also present as **microbeads** in everyday use household items like some **toothpastes, face washes, scrubs and shampoos**.
- Microplastic ingested by fish and other animals enters our food chain. It has been scientifically proven that microplastic contaminates our food and drinking water. Researchers have found microplastic in bottled water, salt, beer and recently in honey.

Hazards of Styrofoam:

- Styrofoam contains highly toxic chemicals which can leach into food and drinks and adversely affect our nervous system, lungs and reproductive organs leading to **serious health consequences**.⁵

Hazards of single use items:

The throw away culture that exists today, not only produces the waste products mentioned above, but also leads to indiscriminate wastage of valuable resources like trees, water and energy.

- It is estimated that it takes an average of 24 trees to make 1 ton of standard office paper.⁶
- **Invisible water loss.** Paper production uses a lot of water e.g an A-4 sheet of paper requires approximately 5 liters of water⁷ in its production.
- It can take upto 2,700 liters of water to produce cotton needed to make a single t-shirt.⁸

Solution:

Here are some simple steps that we can take to help conserve the environment:

1. **Say no to plastic** especially in packaging, to reduce the amount of waste being generated, ideally aiming for zero waste.
2. Replace plastic products with environmentally friendly glass and metal products as they can be recycled endlessly without any loss of quality.
3. Replace tissues and paper bags with cloth items.

⁵ <https://www.unenvironment.org/resources/report/single-use-plastics-roadmap-sustainability>

⁶ <https://www.worldatlas.com/articles/how-many-trees-does-it-take-to-make-1-ton-of-paper.html>

⁷ <http://www.theworldcounts.com/stories/Paper-Waste-Facts>

⁸ <https://www.worldwildlife.org/stories/the-impact-of-a-cotton-t-shirt>

4. **Discourage single use items** e.g plastic water bottles, straws, disposable plastic cutlery and containers, paper cups and plates, Styrofoam cups and containers etc. This will decrease the waste generated and help conserve precious resources like water and energy.
5. Avoid use of products which are a source of microplastic (fleece and products containing microbeads).
6. Avoid non-essentials. Think twice before buying anything.

We need your support and cooperation to fight against the threat of microplastic and environmental pollution. Let's act before it's too late and play our role in protecting this Earth for our children, and for the generations to come.

FOR MARKETS AND SHOPS AND FOR CUSTOMERS

Note: In the following document, we have given a list of suggested environmental friendly items which can be used as an alternative for the more commonly used plastic items. This list is not exhaustive. We request shop owners to kindly provide these environmentally friendly alternatives for customers.

List of items which are recommended in place of commonly used items which are not environmentally friendly

<u>Type of item</u>	<u>NOT Recommended items/ Material</u> ✗	<u>Recommended Items/ Material</u> ✓
Grocery Items	<ul style="list-style-type: none"> • Plastic pouches or bottles for ketchup, Mayonnaise and Achar etc 	<ul style="list-style-type: none"> • Glass Bottles or metal tins for ketchup, Mayonnaise and Achar etc.
Household items	<ul style="list-style-type: none"> • Plastic jugs or Water bottles, Plastic buckets and mugs 	<ul style="list-style-type: none"> • Stainless steel/ Glass jugs or bottles, buckets, mugs etc
	<ul style="list-style-type: none"> • Plastic containers, Plastic cutlery 	<ul style="list-style-type: none"> • Steel cooking utensils or matti ke bartan, Steel/ Enamel/ Glass food storage containers, Stainless Steel cutlery
	<ul style="list-style-type: none"> • Disposable Styrofoam, plastic, paper cups 	<ul style="list-style-type: none"> • Re-useable steel mugs, china or glass mugs
	<ul style="list-style-type: none"> • Plastic cutting board 	<ul style="list-style-type: none"> • Glass or bamboo cutting board
	<ul style="list-style-type: none"> • Plastic straws 	<ul style="list-style-type: none"> • Stainless steel or paper straws
	<ul style="list-style-type: none"> • Plastic Ice tray 	<ul style="list-style-type: none"> • Stainless steel Ice Tray

	<ul style="list-style-type: none"> • Tissue paper 	<ul style="list-style-type: none"> • Cloth dinner and tea napkins and cloth hankies
	<ul style="list-style-type: none"> • Plastic lighter 	<ul style="list-style-type: none"> • Wooden match or metal lighters
	<ul style="list-style-type: none"> • Plastic pegs 	<ul style="list-style-type: none"> • Stainless Steel Pegs
	<ul style="list-style-type: none"> • Plastic laundry basket 	<ul style="list-style-type: none"> • Jute or cloth laundry basket
	<ul style="list-style-type: none"> • Plastic or paper shopping bags 	<ul style="list-style-type: none"> • Re-useable cloth/canvas bags for shopping
	<ul style="list-style-type: none"> • Plastic/ synthetic broom 	<ul style="list-style-type: none"> • Bamboo broom
	<ul style="list-style-type: none"> • Plastic wipers 	<ul style="list-style-type: none"> • Metal wipers
Kids' corner/Stationary	<ul style="list-style-type: none"> • Ball point/ Markers/ pointers/ glitter pens etc. • Traditional highlighters 	<ul style="list-style-type: none"> • Lead pencils or Fountain pen • Pencil highlighters
	<ul style="list-style-type: none"> • Plastic geometry boxes 	<ul style="list-style-type: none"> • Metal Geometry boxes
	<ul style="list-style-type: none"> • Plastic binders 	<ul style="list-style-type: none"> • Cardboard binders
	<ul style="list-style-type: none"> • Plastic sharpeners, rulers & scissors 	<ul style="list-style-type: none"> • Steel sharpeners, rulers & scissors
	<ul style="list-style-type: none"> • Plastic lunch boxes 	<ul style="list-style-type: none"> • Enamel /Stainless Steel Lunch boxes
Hygiene Products	<ul style="list-style-type: none"> • Disposable plastic razors 	<ul style="list-style-type: none"> • Metal safety razors with replaceable metal blades
	<ul style="list-style-type: none"> • Disposable diapers 	<ul style="list-style-type: none"> • Re-useable Cloth nappies
	<ul style="list-style-type: none"> • Plastic toothbrush 	<ul style="list-style-type: none"> • Miswak or Bamboo toothbrush
	<ul style="list-style-type: none"> • Liquid soaps in plastic packaging 	<ul style="list-style-type: none"> • Soap Bars
	<ul style="list-style-type: none"> • plastic loofahs/ sponges 	<ul style="list-style-type: none"> • Real loofah
	<ul style="list-style-type: none"> • Plastic Hair brush/ comb 	<ul style="list-style-type: none"> • Bamboo or metal Hair brush/ comb
	<ul style="list-style-type: none"> • Pedicure kit 	<ul style="list-style-type: none"> • Pumice stone
Gift and Toy Shop	<ul style="list-style-type: none"> • items made of plastic and synthetic cloth 	<ul style="list-style-type: none"> • metal, wood or hardboard, cotton/cloth, glass decoration pieces and toys
	<ul style="list-style-type: none"> • plastic wrapping sheets 	<ul style="list-style-type: none"> • paper wrapping sheets
Meat/ vegetable/ milk and yogurt shop	<ul style="list-style-type: none"> • Plastic shoppers to carry items 	<ul style="list-style-type: none"> • bring containers/ cloth grocery bags from home for carrying items

