



Single-use plastic refers to plastic items that are used once and discarded on use and throw principle. Single-use plastic has among the highest shares of plastic manufactured and used — from packaging of items, to bottles (shampoo, detergents, cosmetics), polythene bags, straws, face masks, coffee cups, cling film, trash bags, food packaging etc. We use about 1.2 million plastic bottles per minute in total and about 500 billion plastic cups every year. Plastic wastes release toxic chemicals into the environment and can be a serious health risk for humans and animals. Many of the most common single-use plastics polluting our environment contain toxic chemicals

pollution, such as through the disruption of the thyroid hormone axis or hormone levels. In the UK alone, more than 5 million tonnes of plastic are consumed each year, of which an estimated mere 24% makes it into recycling systems. That leaves a remaining 3.8 million tonnes of waste, destined for landfills. That is 3 trillion pieces of any sort of plastic in the oceans alone. That also affects the marine base life and studies show that 90% of sea birds have some sort of plastic in them. Plastic reduction efforts have occurred in some areas in attempts to reduce plastic consumption and pollution and promote plastic recycling.

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## Single - Use Plastic Ban in India

*Dr. Manas Ranjan Senapati*

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that harm human health. India is generating about 3.5 million tonnes of plastic waste annually and the per capita plastic waste generation has almost doubled over the last five years. If current production and plastic waste management trends continue, an estimated 12 billion tons of plastic will be in natural environment by the year 2050.

Plastic pollution can affect lands, waterways and oceans. Living organisms, particularly marine animals, can also be affected through entanglement, direct ingestion of plastic waste, or through exposure to chemicals within plastics that cause interruptions in biological functions. Humans are also affected by plastic

A 2017 study found that 83% of tap water samples taken around the world contained plastic pollutants. This was the first study to focus on global drinking water pollution with plastics and showed that with a contamination rate of 94%, tap water in the United States was the most polluted, followed by Lebanon and India. European countries such as the United Kingdom, Germany and France had the lowest contamination rate, though still as high as 72%. This means that people may be ingesting between 3,000 and 4,000 micro particles of plastic from tap water per year. The analysis found particles of more than 2.5 microns in size, which is 2500 times bigger than a nanometer.



As fish is the primary source of protein for nearly one-fifth of the human population, it is important to consider that the microplastics ingested by fish can be subsequently consumed by humans at the end of the food chain. In a study done by the State University of New York, 18 fish species were sampled and all species showed some level of plastics in their systems. Many additional researchers have found evidence that these fibers had become chemically-associated with metals, polychlorinated biphenyls, and other toxic contaminants while in water. The microplastic-metal complex can then enter humans via consumption. It remains unclear how much of an impact this has directly on the health of humans, but research on this issue continues.



Up to 12.7m tonnes of plastic enters the world's oceans every year, equivalent to dumping one garbage truck of plastic per minute into the world's oceans, according to the United Nations. Sea turtles are affected by plastic pollution. Some species are consumers of jelly fish, but often mistake plastic bags for their natural prey. This plastic debris can kill the sea turtle by obstructing the oesophagus. So too are whales; large amounts of plastics have been found in the stomachs of beached whales.

Over the years, plastic has emerged as one of the major reason behind the death of many cows and other animals in India. One of the biggest reasons behind it is the people who throw away food waste inside plastic bags (polythene bags). Ingestion of plastic materials may not result in immediate death, but there are several difficult symptoms seen in the victim animals. These

plastics are indigestible and therefore pile up in their stomachs (rumen for cattle) with time and get entangled with different materials, forming hard cement like ball. After some time, the animal shows signs of being weak and tired then goes off feed and at times experiences bloat due to stomach blockage. **From first July 2022 single-use plastic is banned in India.** The Govt of India has barred the manufacturing, distribution, importing, sale, stocking and use of all single-use plastic, comprising polystyrene and expanded polystyrene commodities (from July 1) across the country. The banned items include plastic sticks (for ear buds, balloons, candies etc), plastic plates, cups, straws, knives, spoons etc, packing/wrapping films, invitation cards, plastic banners (less than 100 microns) etc. Single-use plastic use must be avoided to curb plastic waste. Instead we should use biodegradable products. We have to change our lifestyle without using single-use plastics.

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Dr. Manas Ranjan Senapati, Dean Science, BPUT & Professor of Chemistry, Trident Academy of Technology, Bhubaneswar-751024.