

Chapter 8

Plastic Pollution and Its Remedies: An Indian Scenario

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ABSTRACT

Anthropogenic activities are causing slow extinction of fauna, flora, and fungi in natural environment through toxic pollution. It is probably due to industrial and technological advancement in recent decades. This pollution may be of air, water, soil, radioactivity, or plastics. Of these, the most widely spread form is pollution by plastics. It is drastically dangerous and harmful for marine life, but it also affects human health. Since plastic is non-biodegradable, one can hardly get rid of it. The harmful chemicals get absorbed in the plastic debris, have a varied and harmful range of chronic effects like endocrine disorders. Therefore, it is high time for the government to take stringent steps to overcome the problems associated with plastic pollution. Policy makers and advisers should sternly follow the steps: never throw plastic bags on roads; always carry bags from home; and, use paper decorative items rather than of plastics as paper can be reused.

INTRODUCTION

“India is the fastest-growing economy in the world today. We are committed to realizing the standards of our people in a way that is sustainable and green,” Mr. Narendra Modi, Prime Minister, India on World Environment Day

Plastics are materials that are light in weight, strong, durable, and resistant to corrosion and are inexpensive. They also possess thermal and electrical insulation properties. Their diverse and versatile properties have made its use possible in a large variety of products for packing and storage. Plastics are materials which are not used directly but are generally mixed with resins and additives to enhance its applicability (Thompson et al., 2009).

Plastic pollution is emerging as a top threat to ocean ecosystems. By 2025, there could be 1 ton of plastics for every 3 tons of fish in the ocean. -An Earth Law Solution to Ocean Plastic Pollution by Michelle Bender

The Beginning

Age of Plastics came into existence after World War II due to reduction and shortfall in rubber and other natural materials. There was a surplus of synthetic and fossil fuels which caused companies to create market for plastic products. This led to increase in production of synthetic plastics at reduced costs, making them more competitive than natural materials. It successively entered every walk of life becoming a part and parcel of life. Figure 1 shows the rise in plastic consumption in India. Excessive use of plastics became a chaos leading to dumping of piles in grounds due to its non-biodegradable nature.

Approximately 140 million tons of plastics are produced throughout the world each year. In India also around 4-5% of municipal solid waste (MSW) material are post-consumer plastics in comparison to 6-10% in the US, Europe and other developed countries. India recycled 47% of its total plastic waste in contrast to China (11%), the US (3.5%), South Africa (15%), and UK (7%). There are around 20,000

Figure 1: Rise in Plastic Consumption (Source: CPCB, India)



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