


Chapter 11

The Growing Environmental Risks of E-Waste: A Review

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ABSTRACT

One of the most current problems to emerge in the rich as well as the poor globally is electronic garbage, or e-waste. Trash is one of the most challenging and quickly growing problems in the industrial world. Electronic trash, sometimes referred to as e-waste, is a sort of garbage created by electronics. Old or end-of-life electronic equipment, including computers, laptops, TVs, generators, DVD players, cell phones, refrigerators, and other devices that are usually thrown away by their original owners because of their limited lifespan are referred to as e-waste. They have several potentially harmful ingredients that, if not adequately handled, might harm human health as well as the environment. It is difficult to deal with e-waste since it contains hazardous chemicals. According to previous studies, India produced 0.4 million tons of e-waste in 2010, and by 2013–2014, that amount might rise to 0.5–0.6 million tons.

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INTRODUCTION

Trash is one of the most troublesome and growing problems in the developed world. Waste generated by electronics is known as electronic trash, or E-waste. E-waste refers to old or end-of-life electronic equipment, such as computers, laptops, TVs, generators, DVD players, cell phones, fridges and other devices that their original owners typically ditch after they reach the end of their lifespan. This contains many hazardous elements that may affect both humans and also the environment if they are not managed properly. The e-waste is a huge challenge as it includes harmful chemicals. The electronics industry is the largest and fastest growing industrial sector in the world. Just to maintain an expensive lifestyle, humans depend a great deal on modern-day technologies. Consequently, worldwide demand and consumption rate for these appliances have increased (Arya and Kumar, 2020). As billions of people use electronic gadgets, this forms the basis for the mass production of innovative and technology-based solutions that form the bedrock for the globalization of today international economy. Modern technology leads to tons of electrical waste around the globe. There are about seven billion people on the stone, according to a poll, but to five billion of the old Nori want services and access to be their basic needs. The survey shows approximately 7 billion people exist on the planet, but only 5 billion have about how to MEET their basic needs. Almost 6 billion people use mobile phones, more essential items. It is dangerous for the biosphere, due to its negative effects on human health. However, A Massive Production of E wasted by the Electronics industry is now suffering from the Negative effects. Electronic trash or E-waste is the name of discarded and obsolete devices left by consumers and includes computers, laptops, freezers, generators, televisions and other devices.

Three key factors which are making E-waste a major concern in health is mentioned below: a severe lack of awareness of how to manage E-waste (<http://www.basel.int/>), an increasing amount of electronic waste threatening the environment and humans. Direct or indirect, all forms of trash and garbage play a significant role in mental and physical health of people (Rautela et al., 2021). Thirdly automation has grown rapidly, leading to a decreasing volume of laws concerning e-waste recycling. One of the factors behind E-waste piling up as seen in Figure 1 illustrates. Various laws and regulations were put around the world regarding the importation and exportation of waste products and their related policies. Nobody has used serious measures on such a serious issue. Partly the reason for the indifference shown towards such wastes, which is increasing massively around the world, is the general notion that the electronic industry will define the future of communications, thus adding to daily economic development. Electronics is meant to be thrown away, which will allow them to maximize profits in the future and improve product performance. These are rarely novel items and for six months or a year of life, their written worth drops

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