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SOCIO-LEGAL CHALLENGES IN REGULATING E-WASTE IN INDIA

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ABSTRACT:

The twenty-first century has witnessed extraordinary technological advancements, particularly in information systems, internet connectivity, instant accessibility, and user-oriented applications. These developments have profoundly reshaped daily life through the pervasive integration of Electrical and Electronic Equipment (EEE). Devices such as smartphones, computers, televisions, air conditioners, and refrigerators now dominate both personal and professional environments. However, the rapid expansion of the electronics market, coupled with shifting consumer preferences, has accelerated product obsolescence, thereby intensifying environmental concerns. Frequent replacement and disposal of devices have rendered the management of end-of-life electronic waste a critical issue. The recycling and treatment of e-waste are especially complex due to its hazardous composition, which includes metals, plastics, chemicals, and other toxic materials. Globally, approximately 50 million metric tons of e-waste are generated annually, with a significant portion illicitly exported and discarded in developing and underdeveloped countries. This challenge is exacerbated by limited public awareness, insufficient disposal infrastructure, and restricted access to existing systems. This study examines e-waste management in India, with particular emphasis on the role of household consumers in mitigating the problem. It underscores the necessity of coordinated efforts among stakeholders and the provision of adequate infrastructure to ensure effective waste management. The research advances a sustainable development framework tailored to India's socio-economic context, aiming to reform e-waste practices at both regional and national levels. Unlike conventional solid waste, electronic waste presents distinctive difficulties due to its intricate composition,

making treatment and recycling highly demanding. Consequently, the urgency of innovative and sustainable solutions is paramount.

KEYWORDS: Environment Protection Act, 1986, Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016, E-Waste (Management) Rules, 2022, Basel Convention, WEEE.

INTRODUCTION:

Electronic waste, or “e-waste,” encompasses discarded, surplus, defective, or obsolete electrical and electronic equipment (EEE). It represents one of the most intricate categories of solid waste worldwide, posing significant risks to public health, environmental sustainability, and waste management systems. Inefficient disposal practices are often driven by unorganized collection and trading networks, where informal markets employ rudimentary recovery techniques that exacerbate environmental hazards. The absence of robust recycling infrastructure and the limited capacity of small-scale facilities further intensify the challenge.

Major contributors to e-waste include computers, televisions, mobile phones, and gaming consoles, which are frequently abandoned as consumers adopt newer technologies. This phenomenon is closely tied to planned obsolescence, wherein manufacturers deliberately design products with limited lifespans, compelling users to replace them. Sustainable e-waste management is hindered by low consumer awareness of toxic components, inadequate knowledge of safe disposal practices, insufficient treatment facilities, and weak regulatory enforcement.

Although India has introduced e-waste management rules and guidelines, leading to gradual expansion of the recycling industry and growth in registered facilities, the overall volume of waste continues to escalate. Several states now operate plants capable of environmentally sound processing, yet the number of facilities remains inadequate relative to demand. This reflects the limited priority accorded to strengthening



the sector. Despite ongoing research and pilot initiatives in collection and recycling, India's e-waste management system continues to face structural barriers, underscoring the urgent need for competitive and sustainable solutions.

IMPORTANCE:

Electronic waste (e-waste) contains hazardous substances such as lead, mercury, cadmium, and brominated flame retardants, all of which pose serious threats to environmental sustainability and human health. Improper disposal and recycling practices allow these toxic elements to leach into soil, water, and air, causing long-term ecological degradation. Human exposure, particularly among workers in informal recycling sectors, can result in severe health consequences including respiratory disorders, organ damage, and developmental impairments. On a global scale, mismanagement of e-waste undermines ecological stability and obstructs progress toward sustainable development. Addressing this issue requires the adoption of safer recycling technologies, stricter regulatory enforcement, and enhanced public awareness of the risks and responsibilities associated with e-waste management.

Vulnerable populations such as children and pregnant women face heightened risks from e-waste exposure. Documented health impacts include neurological impairment from lead and mercury, respiratory illness from toxic fumes, cardiovascular complications linked to hazardous chemicals, and reproductive health concerns such as premature birth and low birth weight. Prolonged exposure may also suppress immune function and cause dermatological conditions. These outcomes highlight the urgent need for comprehensive strategies that integrate sustainable recycling practices, regulatory oversight, and public education to mitigate risks to both human health and the environment.

MAIN FACTORS RESPONSIBLE:

Several interconnected drivers exacerbate the environmental and health impacts of electronic waste:

1. Rapid Technological Advancement:

The accelerated pace of technological innovation has shortened the lifespan of electronic devices, leading consumers to replace them frequently with newer models. This cycle significantly increases the quantity of discarded electronics.

2. Rising Consumption:

Population growth and rising income levels have expanded access to electronic products. In countries such as India, the affordability of gadgets further contributes to the rapid escalation of e-waste generation.

3. Improper Disposal Practices:

A large proportion of e-waste ends up in landfills or is incinerated, releasing hazardous pollutants. Informal recycling sectors often operate without safety measures, worsening contamination.

4. Hazardous Components in Electronics:

Electronic devices contain toxic materials such as lead, cadmium, mercury, and brominated flame retardants. Mishandling these substances leads to long-term ecological damage and health risks.

5. Insufficient Recycling Infrastructure:

The absence of formal recycling facilities and accessible collection systems results in most e-waste being processed informally or left unmanaged, exacerbating environmental degradation.

6. Transboundary Movement of E-Waste:

Developed nations often export e-waste to developing countries with weaker regulatory frameworks. These regions then bear the burden of unsafe dismantling and disposal practices.



7. Weak Enforcement of Regulations:

Even in contexts where e-waste legislation exists, enforcement is often inadequate. This allows illegal dumping and unsafe recycling activities to persist unchecked.

8. Limited Public Awareness:

Many individuals and organizations remain unaware of proper e-waste disposal methods or the consequences of irresponsible practices. This lack of awareness continues to aggravate the problem.

NEED:

The Urgency of the E-Waste Challenge

1. Environmental Consequences:

Discarded electronics contain toxic substances such as lead, mercury, cadmium, and persistent organic pollutants. When not disposed of properly, these materials seep into soil, water, and air, damaging ecosystems and threatening biodiversity with long-lasting harm.

2. Human Health Hazards:

Improper recycling practices, especially in informal sectors, expose workers and nearby communities to dangerous chemicals. This exposure can cause respiratory illnesses, neurological problems, developmental delays in children, and even increase cancer risks. Public health is directly linked to how e-waste is handled.

3. Resource Recovery Potential:

Electronic devices are rich in valuable metals like gold, silver, copper, and rare earth elements. Recycling them responsibly enables resource recovery, reduces dependence on mining, conserves limited natural reserves, and lowers the energy demands of raw material extraction.

4. Escalating E-Waste Volumes:

Rapid technological progress and shorter product life spans are driving exponential growth in e-waste. Current waste management systems often struggle to keep pace with this surge, creating mounting challenges.

5. Climate Change Implications:

Burning or otherwise mismanaging e-waste releases greenhouse gases and toxic emissions. These pollutants contribute to global warming and intensify climate-related problems.

6. Economic and Social Dimensions:

Unregulated recycling in informal sectors often leaves workers in unsafe conditions with minimal financial gain. Establishing formal e-waste management systems can generate employment, strengthen economies, and improve worker safety.

7. Global Responsibility:

E-waste is a transnational issue: devices are manufactured in one region, consumed in another and discarded elsewhere. Addressing it requires international cooperation and adherence to agreements like the Basel Convention. Tackling e-waste is not just about disposal it's about safeguarding the planet, protecting human health, and advancing sustainable development.

E-waste is a pressing global concern. Its toxic components threaten both the environment and human health, while its rapid growth outpaces current infrastructure. Sustainable management practices are essential to mitigate risks, recover valuable resources, and ensure a healthier, more sustainable future.

CHALLENGES:

Key Challenges in Managing E-Waste:

1. Inadequate Recycling Infrastructure:



India has only a limited number of certified recycling facilities approved by the government to handle electronic waste. Although the government has introduced grant schemes that cover 25% to 50% of the costs for setting up proper e-waste management systems, the number of functioning recycling centers and organized supply chains remains insufficient.

2. Low Public Awareness:

Most consumers are unaware of the harmful effects of careless e-waste disposal. The concept of sustainable waste management is poorly understood, and only a handful of cities provide designated collection points where people can responsibly drop off their discarded electronics.

3. Operational Mismanagement:

Collecting and channeling e-waste effectively is still a major hurdle. While the idea of a circular economy has been discussed for years, it is only beginning to gain traction in business practices. Companies—from start-ups to established e-waste firms—face significant information gaps, including limited knowledge of cost-efficient recycling methods and strategies to maximize the use of end-of-life products.

4. Unsustainable Disposal Practices:

Despite the pressing need for formal recycling, the amount of e-waste processed remains far below potential. Existing recycling centers often run at reduced capacity due to difficulties in sourcing waste. Meanwhile, large sections of the population continue to dispose of electronics in unsafe and environmentally damaging ways.

Additional Challenges in E-Waste Management

1. E-Waste Imports:

India has increasingly become a dumping ground for electronic waste from developed nations. In 2010, the country produced 5.9 million tons of hazardous waste domestically and imported another 6.4 million tons. Each year, India generates about 350,000 tons of e-

waste and imports an additional 50,000 tons. The US accounts for the largest share of these imports (around 42%), followed by China (30%), Europe (18%) and other countries such as Taiwan, South Korea, and Japan (10%). Weak environmental laws, low occupational standards, and cheap labor make India a preferred destination for e-waste exports, often with little regard for ecological or worker safety.

2. E-Waste in the Informal Sector:

Much of India's e-waste recycling occurs in urban slums of major cities, where unskilled workers use primitive methods to minimize costs. Studies by the Basel Action Network (BAN) and Toxic Link reveal that conditions in India are similar to, or worse than, those in China. The informal sector is made up of small, unregulated businesses that lack health and environmental safeguards. Migrant laborers from poorer states such as Uttar Pradesh, Bihar and Odisha, as well as immigrants from Bangladesh, form the bulk of this workforce. Women and children are also heavily involved. With low literacy levels and little awareness of the dangers, these workers face serious health risks while handling toxic materials.

3. E-Waste in the Formal Sector:

Organized recyclers, represented by the E-Waste Recycler's Association (ERA), control only about 10% of India's e-waste market due to stiff competition from the informal sector. Formal recyclers struggle with inadequate collection and disposal systems, as well as limited access to advanced technologies. Many households and institutions store obsolete electronics rather than channel them into recycling streams. Even when devices are sold, they are often refurbished and resold instead of being dismantled. For example, the TIC Group's dismantling unit in Noida, with a capacity of 500 tons annually, has processed only 200 tons. Similarly, Attero's facility in Roorkee, designed to handle 36,000 tons per year, currently receives only about 600 tons. This underutilization highlights the gap between potential and actual recycling in the organized sector.



LEGISLATIVE APPROACH IN E-WASTE:

The rapid industrial and commercial expansion over recent decades has significantly disrupted ecosystems. Today, pollution has spread across all aspects of the environment, with toxic substances contaminating the air, groundwater, drinking water, oceans, soil, and even agricultural produce. This growing crisis has drawn the attention of environmentalists, policymakers, and the global public to the dangers posed by improper disposal of hazardous waste. The scale and complexity of the problem have become critical issues demanding urgent focus. Numerous incidents highlight how careless waste management harms both the environment and human health, undermining the fundamental right to a safe and healthy life. In response, the idea of sustainable development has emerged as a vital approach to curb environmental degradation. Rising international concern over ecological damage and the challenges of unchecked economic growth have further strengthened the push toward sustainability as a global priority.

1. The Environment Protection Act, 1986:

The Environment Protection Act (EPA), 1986 was the first comprehensive environmental legislation in India, granting the government extensive powers to frame rules and regulations for achieving its objectives. It is regarded as a pioneering law in the management and disposal of toxic wastes that pose serious risks to both human health and the environment.

Under **Section 2(e)**, the Act defines hazardous substances as those whose chemical composition can harm humans, plants, microorganisms, other living beings, property, or the environment.

Section 3 authorizes the Central Government to take necessary measures to protect and improve environmental quality.

Specifically, Section 3(vii) empowers the government to establish procedures and safeguards for handling hazardous wastes.

Section 6 further enables the government to set rules on matters such as maintaining soil, water, and air quality standards, prescribing permissible pollutant limits, regulating industrial locations, and enforcing safety measures to prevent accidents that may cause pollution.

Section 8 requires individuals and organizations dealing with hazardous substances to follow the prescribed safeguards. Additionally, the Act empowers the government to impose restrictions, prohibitions, and guidelines on handling hazardous materials, industrial operations, and accident prevention, while also mandating remedial measures in case of environmental mishaps.

2. Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016:

The Hazardous Wastes Rules, 2016, which replaced the earlier 2008 Rules, were officially notified on April 4, 2016. These updated regulations strictly prohibit the import of hazardous and other wastes, including electronic waste, into India. Electrical and Electronic Equipment (EEE), along with their components and consumables, are categorized under various schedules attached to the Rules. Import of hazardous waste is allowed only under specific conditions namely for recovery, recycling, reuse, and utilization, including co-processing ensuring that such materials are managed in a controlled and environmentally responsible manner.

Under the Hazardous Wastes Rules, the import of wastes listed in Part A of Schedule III is allowed only for actual users, provided they obtain Prior Informed Consent (PIC) from the exporting country along with approval from the Ministry of Environment, Forest and Climate Change (MoEFCC). Similarly, wastes covered under Part B of Schedule III may be imported by actual users with MoEFCC's permission.

However, the Rules impose a complete ban on the import of hazardous and other wastes specified in Schedule VI. They also lay down detailed procedures



for compliance in cases of import or transit of different categories of hazardous wastes.

To secure import permission, applicants must demonstrate the availability of environmentally sound facilities, proper arrangements for treatment and disposal of generated waste, valid authorization and consents from State Pollution Control Boards (SPCBs) and in certain cases the prior informed consent of the exporting country.

3. E-Waste (Management) Rules, 2016:

Exercising the powers granted under Sections 6, 8, and 25 of the Environment Protection Act (EPA), 1986, the Central Government introduced the E-Waste (Management) Rules, 2016, which replaced the 2011 Rules and came into effect on October 1, 2016. These Rules are far more comprehensive than their predecessors, extending their scope to anyone directly or indirectly involved in the use, handling, transport, storage, sale, purchase, production, recycling, or disposal of e-waste.

To curb the leakage of e-waste into the informal sector, the Rules apply to all stakeholders, including producers, manufacturers, bulk consumers, individual consumers, dealers, e-retailers, refurbishers, collection centers, recyclers, and dismantlers. Their ambit is not limited to Electrical and Electronic Equipment (EEE) listed in Schedule I but also covers consumables, components, and spare parts essential for product operation. Attachments and accessories such as earphones and stabilizers, when sold with EEE, are also treated as components. Additionally, Compact Fluorescent Lamps (CFLs) and other mercury-containing lamps fall under the scope of these Rules. Importantly, the Rules do not exempt small industries, which are significant generators of e-waste. Exemptions are granted only to micro enterprises, as defined under the MSMED Act, 2006. For effective enforcement, the Central Pollution Control Board (CPCB) has issued detailed guidelines applicable to all stakeholders. These guidelines clarify responsibilities in areas such as Extended Producer Responsibility (EPR), channelization, storage,

transportation, collection centers, refurbishment, environmentally sound dismantling and recycling, and random sampling to verify compliance with Restriction of Hazardous Substances (RoHS) standards.

4. Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal, 1989:

The Basel Convention was established to regulate the transboundary movement of hazardous wastes. It emerged in response to numerous incidents where developed countries were dumping toxic wastes in developing nations across Asia and Africa. The treaty was designed to prevent such harmful practices and ensure that hazardous waste is managed in a way that protects both human health and the environment.

The Basel Convention was adopted in 1989 and came into force in 1992, with India ratifying it in June of that year. Featuring a comprehensive Preamble, 129 articles, and 9 annexes, the Convention provides a detailed framework for regulating the transboundary movement and disposal of hazardous wastes. It emphasizes that such transfers should be transparent, documented, and treated as matters of public concern. Its primary objective is to safeguard human health and the environment from the risks posed by toxic wastes. The Convention is built on the principle that hazardous wastes should be managed, treated, or disposed of within the country where they are generated. By placing responsibility on the producing nation for proper handling and transport, the Convention aims to reduce the overall volume of waste produced.

The Basel Convention defines wastes as any substances or objects that are disposed of, intended for disposal, or required to be disposed of under national law. Disposal is broadly interpreted to include not only final elimination of hazardous waste but also processes such as recovery of metals, recycling, reclamation, direct reuse, or alternative applications. E-waste often contains hazardous materials identified under entry A1180 of Annex VIII. If such waste



exhibits the hazardous characteristics outlined in Annex III, it is classified as hazardous. As a precaution, e-waste is generally presumed hazardous unless proven otherwise. The Convention also affirms the sovereign right of nations to prohibit the import or disposal of hazardous wastes within their territory. Countries that exercise this right must notify other parties and share details of their national legislation defining hazardous waste. Furthermore, all parties are obligated to prevent the export of hazardous wastes to any state that has formally declared an import ban.

5. EU Directive on Waste Electrical and Electronic Equipment (WEEE), July 2012

The EU Directive 2002/96/EC on e-waste management did not achieve the expected effectiveness and was therefore revised through Directive 2012/19/EU, published on July 24, 2012 in the Official Journal of the European Union. This updated Directive introduced major changes, significantly redefining the responsibilities of stakeholders involved in e-waste management. From August 15, 2018, the Directive expanded its scope to cover all categories of Electrical and Electronic Equipment (EEE). It also set more ambitious recovery and recycling targets. During the first three years, the targets for recovery, reuse, and recycling remained at the earlier levels, but the scope was broadened to include medical equipment, with goals of 70% recovery and 50% reuse or recycling at end-of-life. By 2019, specific collection targets were established for each member state. While the 2012 Directive widened coverage and imposed stricter targets, its implementation faced a major obstacle: the absence of reliable methods to measure the volume of EEE placed on the market and the resulting generation of WEEE.

CONCLUSION:

This study explores e-waste management through legislative measures and public initiatives aimed at achieving a life free from the hazards of waste. Although waste and its management have long been issues, widespread public debate on the subject has emerged only in recent times. The complexity of

waste management is heightened by diverse cultural contexts and multiple social factors, including population growth, migration, urbanization, occupational diversity, evolving family structures, rising individual choices, and consumerism. These dynamics contribute to a fast-paced and often careless approach to waste disposal, intensifying the problem of inefficient management. Waste and its management have long been pressing concerns, though widespread public debate on the subject has emerged only in recent years. The growing complexity of waste problems is closely tied to factors such as population growth, migration, urbanization, occupational diversity, shifting family structures, rising individual choices, and consumerism. Together, these trends have fostered a fast-paced and casual attitude toward waste disposal, worsening inefficiencies in management.

Urbanization, in particular, has led to a surge in city populations, which in turn generates larger volumes of waste. When human wants begin to exceed basic needs, daily waste production increases. Lifestyle changes and rising disposable incomes have further altered social values, contributing to greater waste generation. Unfortunately, this has resulted in poor practices such as illegal disposal and failure to recognize the resource potential of waste. Public frustration has grown, with communities protesting against municipal waste management systems that lack proper scientific planning. A major challenge lies in people's unwillingness to accept responsibility for the waste they produce often resisting disposal facilities near their homes or shifting the burden onto neighbors. Addressing this issue requires stronger civic awareness and more responsible behavior aligned with sustainable waste management.

The research alerted on the e-waste management situation in India centering on the viewpoints of the domestic customer. The various structures of e-waste discarding practiced in India; the part of discarding purposely as intermediary as well the moderating cause of hurdles in the formal discarding of e-waste was measured in this research. The study has left open



numerous possibilities for upcoming researches. The upcoming researchers can center on the perceptions of mass customers and industry-specific performances in the management of e-waste. This attempt from administrative bodies could also be a momentous vicinity for do research. Additional troubles in the e-waste production at the national and state point of view such as deal and trade are also vital areas to research. Separately from performance learning of stakeholders, ecological collisions, policies in e-waste administration could also be considered. Owing to occasion restraints, only an inadequate area could be considered by the researcher. There is vast scope to study the different measurements of this rising challenge that is being tolerated the human race over.

REFERENCES:

- Baldé, C.P., Forti, V., Gray, V., Kuehr, R., & Stegmann, P. (2020). The Global E-waste Monitor 2020: Quantities, flows, and the circular economy potential. United Nations University, ITU, ISWA.
- Biswas, A., & Singh, S.G. (2020). E-waste Management in India: Challenges and Agenda. Centre for Science and Environment.
- Jyotasana. (2025). E-Waste Management in India. ISSN 2277-7911, Vol. 14, Special Issue No. 1.
- Goldar, A., Nair, K., Ali, M.S., & Verma, R. (2025). Unravelling India's E-Waste Supply Chain: A Comprehensive Analysis and Mapping of Key Actors. ICRIER Working Paper.
- Victor, S. P., & Kumar, S. S. (2025). Planned Obsolescence – Roadway to Increasing E-Waste in Indian Government Sector.
- Kaur, R., & Khanna, P. (2025). India's E-Waste Management Landscape: Emerging Paradigms, Challenges and Opportunities. International Journal of Innovative Research in Arts and Science (IJIRA), 5(1).
- Heacock, M., Kelly, C. B., Asante, K. A., Birnbaum, L. S., Bergman, A. L., Bruné, M. N., ... & Sly, P. D. (2016). E-waste and harm to vulnerable populations: A growing global problem. *Environmental Health Perspectives*, 124(5), 550–555.
- Tansel, B. (2017). From electronic consumer products to e-wastes: Global outlook, waste quantities, recycling challenges. *Environment International*, 98, 35–45.
- Kumar, A., Holuszko, M., & Espinosa, D. C. R. (2017). E-waste: An overview on generation, collection, legislation and recycling practices. *Resources, Conservation and Recycling*, 122, 32–42.
- Biswas, A., & Singh, S. G. (2020). E-waste Management in India: Challenges and Agenda. Centre for Science and Environment.
- BAN & Toxic Link. (2010). Scrapping the Hi-Tech Myth: Computer Waste in India. Basel Action Network & Toxic Link.
- Basel Convention Secretariat. (2011). Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal: Texts and Annexes. United Nations Environment Programme.
- Central Pollution Control Board (CPCB). (2016). Guidelines for Implementation of E-Waste (Management) Rules, 2016. Government of India.
- European Commission. (2012). Directive 2012/19/EU of the European Parliament and of the Council on Waste Electrical and Electronic Equipment (WEEE). Official Journal of the European Union.
- Ministry of Environment, Forest and Climate Change (MOEFCC). (2016). Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016. Government of India.
- Sharma, R. (2015). *Environmental Law in India*. New Delhi: LexisNexis.
- P. Khanna, Rakesh Kumar and Vijay Kulkarni, "Case Study 3: Hazardous Waste issues in India", Encyclopedia of life support system.
- Mahesh C. Vats, Santosh K. Singh, "Status of E-Waste in India - A Review", International Journal of Innovative Research in Science, Engineering and Technology, Vol.3, No. 10, pp. 16917-16931, October 2014.



19. Kulkarni SJ., “A Review on Studies and Research on Use of Plastic Waste”, Int. J Res Rev., Vol. 2, No.11, pp.692-696, 2015.
20. [https://www.scribd.com/doc/8466263/effect-of-e-waste-on-Environment health.](https://www.scribd.com/doc/8466263/effect-of-e-waste-on-Environment-health)
21. The Environment Protection Act, 1986.
22. The EU Directive 2002/96/EC on e-waste management.
23. Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal, 1989.
24. E-Waste (Management) Rules, 2016.
25. Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016

