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E-WASTE MANAGEMENT AWARENESS AND PRACTICES AMONG URBAN CONSUMERS

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ABSTRACT

Technology's rapid growth has enhanced human lives in many ways. In many ways, it has also caused a massive increase in electronic garbage, also known as electronic waste. **Urban consumers**, who are the main device users, have a significant role to play. In how the waste is managed. This study examines the degree of awareness within the community about how waste is managed. **Urban consumers** about the disposal of e-waste, their practices, and the difficulties the challenges they face when implementing sustainable strategies. It also examines the effectiveness of awareness programs and initiatives of the government awareness programs and **government initiatives** in India. The research shows that While many consumers know about the negative impacts of e-waste are not aware of the negative effects that e-waste can have on their bodies. To be reliant on dangerous disposal methods due to the limited access to official recycling Systems, no **incentives**, and a reliance on scrap dealers who are not regulated. The Study concludes with suggestions to intensify awareness campaigns, increase recycling facilities, enforce existing regulations, and promote incentive-based consumer participation.

Keyword: Urban consumers, E-Waste Management, government initiatives Etc.

INTRODUCTION

In our digital world, electronic devices have evolved into an integral part of urban life. From laptops and smartphones to appliances for the home and technology influences the way people can work, communicate, and live. However, the speed of technology advancement and demand for consumer goods has also triggered an alarming increase in demand for Electronic waste is commonly referred to as e-waste. E-waste is the term used to describe electronic waste that has been discarded. Electronic and electrical products that are often contaminated with hazardous substances, such as Mercury, lead, and cadmium pose serious environmental risks as well as to human health.

The health of the human being is not taken care of correctly. Urban areas, as the hubs of high consumption, are a significant contributor to the growing volume of e-waste. But, consumers are becoming more aware of the safe disposal Methods and sustainable practices typically aren't widely used. However, certain households Recycling or reusing devices is a good idea, but most people negligently dispose of devices, adding to waste, or sell the waste to informal recyclers. This underscores the urgent need to examine not just the degree of awareness, but also the actual urban practices.

Customers on the subject of managing **e-waste**. This article examines the degree of **consumer awareness** and examines the most common **disposal practices**, analyses the

effectiveness of awareness and policies, and offers suggestions for ways to encourage responsible behaviour when managing e- waste better effective

OBJECTIVES OF THE STUDY

The principal goals of this research are:

1. To determine the degree of awareness among **urban consumers** about the concept of electronic waste as well as its health and **environmental impact** on health and the environment.
2. To study the **disposal practices** that are commonly used by **urban consumers**.
3. To assess the efficacy of initiatives by the government and to increase awareness campaigns focusing on the management of electronic waste.
4. To determine the obstacles that hinder consumers from embracing responsible disposal methods.
5. In this paper, we propose strategies for encouraging sustainable consumption behaviour among consumers of electronic waste management.

REVIEW OF LITERATURE

Research across the world highlights the growing scale of the e-waste crisis. Baldé et al. (2020) reported that only 17.4% of global e-waste is formally recycled, with the rest ending up in landfills or informal channels. In India, Dwivedy and Mittal (2013) found that most households prefer to store old electronics rather than recycle them, mainly due to uncertainty about disposal options.

To address this, the Government of India introduced the E-Waste (Management) Rules 2016, later amended in 2022, which place responsibility on producers under the **Extended Producer Responsibility (EPR)** framework. However, reports from the Central Pollution Control Board (2023) show limited enforcement and poor **consumer awareness** of these rules.

Behavioural studies also suggest that convenience and **incentives** strongly influence recycling practices. Saphores et al. (2012) demonstrated that consumers are more likely to recycle if collection centers are easily accessible and if monetary rewards are provided. In India, however, informal scrap dealers dominate due to convenience and immediate cash benefits, overshadowing **formal recyclers**.

METHODOLOGY

This study adopts a descriptive research design to evaluate **consumer awareness** and practices related to **e-waste**.

Data Collection:

- Primary data: collected through questionnaires and interviews with **urban consumers**, including students, professionals, and households.
- Secondary data: obtained from government reports, journal articles, and international studies.

Sample:

A total of 200 **urban consumers** from metropolitan cities (Delhi, Mumbai, Bengaluru, Hyderabad, and Chennai) were surveyed using stratified random sampling to capture diversity in age, education, and income.

Tools for Analysis:

The responses were analysed using percentages, comparative charts, and graphical representations to identify patterns in awareness, disposal behaviour, and challenges faced.

ANALYSIS & INTERPRETATION

The survey produced the following insights:

1. **Awareness Levels:**
   - 70% of respondents had heard of **e-waste**.
   - Only 35% understood its hazardous components.
   - 60% were aware of environmental risks caused by improper disposal.
2. **Disposal Practices:**
   - 40% sold old devices to informal scrap dealers.
   - 25% stored obsolete electronics at home.
   - 20% donated still-functional devices to others.
   - Only 15% used authorized recyclers or collection centers.
3. **Factors Influencing Behaviour:**
   - Education and income improved awareness, but did not necessarily lead to safer practices.
   - Convenience and immediate monetary benefit played a larger role in decision-making.
4. **Barriers Identified:**
   - Lack of easily accessible collection centers (55%).
   - Low awareness of government policies and facilities (48%).
   - Preference for informal channels offering quick cash (45%).
   - Absence of **incentives** for **formal recycling** (40%).

Overall, the study reveals that while awareness exists, responsible practices remain limited due to structural barriers and consumer behaviour patterns.

FINDINGS & SUGGESTIONS KEY FINDINGS

- Awareness of e-waste is moderate but not comprehensive.
- Informal scrap dealers remain the dominant disposal channel.
- **Formal recycling** infrastructure exists but is underutilized.
- **Government regulations** and **EPR** frameworks lack visibility and effective enforcement.
- Consumer behaviour is driven more by convenience and **incentives** than by environmental concerns.

SUGGESTIONS

- Strengthen Awareness Campaigns: Launch sustained public awareness drives through schools, universities, social media, and community programs.
- Introduce **Incentives**: Encourage recycling through discounts, vouchers, and buy-back schemes offered by manufacturers and retailers.
- Expand Recycling Infrastructure: Increase the number of accessible collection centers in urban neighbourhoods.
- Promote Public-Private Partnerships: Collaborate with ngos, corporations, and government agencies to improve collection and recycling systems.
- Leverage Digital Platforms: Create mobile apps and helplines to help consumers locate nearby authorized recyclers.
- Strict Enforcement of **EPR**: Ensure that producers are held accountable for collecting and recycling a fixed percentage of their sold products.

CONCLUSION

E-waste is a growing threat to both the environment and human health, particularly in rapidly urbanizing regions like **India**. The study shows that while **urban consumers** are increasingly aware of e-waste hazards, their **disposal practices** remain unsustainable due to convenience, lack of infrastructure, and dependence on informal recycling. Bridging the gap between awareness and practice requires a multipronged approach: stronger enforcement of regulations, widespread awareness programs, **incentives** for consumers, and improved access to **formal recycling** channels. Sustainable e-waste management can only be achieved when consumers, producers, and policymakers work together to build a circular economy that balances technology use with environmental responsibility.

REFERENCES

1. Bandyopadhyay, A. (2025). Knowledge and Practices Regarding **E-Waste** and Its Management in Siliguri, West Bengal. Indian Journal of Community Medicine.
2. "Awareness, Safety Practices and Associated Factors among Workers Regarding E-Waste in India." Munni, M. N., et al. (2024).
3. Bagwan, W. A., et al. (2024). "Electronic Waste (E-Waste) Generation and Management in India: A Scientific Data-based Assessment."
4. Dey, S., et al. (2023). "Recycling of E-Waste Materials for Controlling the Environmental Impact: Awareness Levels and Processing Practices in India."
5. Kumari, S., et al. (2021). "Exploring the Awareness Regarding E-Waste and Its Management among Repair Workers and Scrap Dealers."
6. Michael, L. K. (2024). "Factors Influencing the Behaviour in Recycling of E-Waste in the Delhi National Capital Region, India."
7. Sandwal, S. K. (2025). "E-Waste Challenges in India: Environmental and Human Health Impacts."
8. Wirtu, Y. D. (2025). "A Review of Public Perception and Awareness of ewaste Management in Developing Nations."

9. Global E-Waste Monitor 2024: Quantities, flows, and resources. United Nations University, ITU, UNITAR etc.
10. Global Transboundary E-Waste Flows Monitor 2022.
11. India's E-Waste Rules and Their Impact on E-Waste Management Practices: A Case Study (Kerala libraries).
12. "Knowledge and Practices Regarding E-Waste and Its Disposal at Households: A Cross- Sectional Study in Siliguri." Bandyopadhyay, A., et al. (2025).