E-Waste Generation

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Why in News

International E-Waste Day has been observed on **14th October** since 2018.

- The aim of the day is **to raise awareness** about the **millions of tonnes of e-waste generated worldwide** each year, which has a negative impact on the environment and natural resources.
- Earlier this year, the Principal Bench of **National Green Tribunal (NGT) issued directions** for the implementation of **E-Waste (Management) Rules, 2016**.

International E-Waste Day

- This year's International E-Waste Day highlights the **crucial role each of us play in making e-product circularity a reality.**
- According to the **United Nations**, by 2021, **each person on the planet would produce an average of 7.6 kg of e-waste**, resulting in a global total of 57.4 million tonnes of e-waste.
- **Only 17.4% of this electronic garbage,** which contains a combination of hazardous compounds and valuable materials, will be appropriately collected, processed, and recycled.

Key Points

- **E-Waste:**
  - E-Waste is short for **Electronic-Waste** and the term is used to describe old, end-of-life or discarded electronic appliances. It includes their components, consumables, parts and spares.
  - It is **categorised into 21 types** under two broad categories:
    - Information technology and communication equipment.
    - Consumer electrical and electronics.
  - **Laws to manage e-waste** have been in place in India since 2011, mandating that only authorised dismantlers and recyclers collect e-waste. **E-waste (Management) Rules, 2016** was enacted in 2017.
  - **India's first e-waste clinic** for segregating, processing and disposal of waste from household and commercial units has been set-up **in Bhopal, Madhya Pradesh.**
  - Originally, the **Basel Convention** (1992) did not mention e-waste but later it addressed the issues of e-waste in 2006 (COP8).
      - The **Nairobi Declaration** was adopted at COP9 of the **Basel Convention on the Control of the Trans-boundary Movement of Hazardous Waste**. It aimed at creating innovative solutions for the environmentally sound management of electronic wastes.
- **E-waste Generation:**
  - This year's **Waste Electrical and Electronic Equipment (WEEE)** will total about **57.4 million tonnes (MT) and** will be **greater than the weight of the Great Wall of China**, Earth's heaviest artificial object.
  - According to the **Central Pollution Control Board (CPCB),** India generated **more than 10 lakh tonnes of e-waste in 2019-20**, an increase from 7 lakh tonnes in 2017-18. Against this, the e-waste dismantling capacity has not been increased from 7.82 lakh tonnes since 2017-18.

- **Challenges Related to Management of E-Waste in India:**
  - **Less Involvement of People:**
    - A **key factor in used electronic devices not being given for recycling** was because consumers themselves did not do so.
      - However, in recent years, countries around the world have been attempting to pass effective '<u>right to repair</u>' laws.
  - **Involvement of Child Labor:**
    - In India, about 4.5 lakh child laborers in the age group of 10-14 are observed to be engaged in various E-waste activities and that too without adequate protection and safeguards in various yards and recycling workshops.
  - **Ineffective Legislation:**
    - There is absence of any public information on most **State Pollution Control Boards (SPCBs)/PCC** websites.
  - **Health hazards:**
    - E-waste **contains over 1,000 toxic materials**, which contaminate soil and groundwater.
  - **Lack of incentive schemes**:
    - **No clear guidelines are there** for the unorganized sector to handle E-waste.
    - Also, no incentives are mentioned to lure people engaged to adopt a formal path for handling E-waste.
  - **E-waste Imports:**
    - Cross-border flow of waste equipment into India- 80% of E-waste in developed countries meant for recycling is sent to developing countries such as India, China, Ghana and Nigeria.
  - **Reluctance of Authorities' involved:**
    - **Lack of coordination between various authorities** responsible for E-waste management and disposal including the non-involvement of municipalities.
  - **Security Implications:**
    - End of life computers often contain sensitive personal information and bank account details which, if not deleted leave opportunity for fraud.

Way Forward

- There are various startups and companies in India that have now started to collect and recycle electronic waste. We need **better implementation methodologies** and **inclusion policies** that provide accommodation and validation for the informal sector to step up and help us meet our recycling targets in an environmentally sound manner.
- Also, successfully raising collection rates required every actor to be involved, including consumers.

Source: DTE