

RSTV

E-WASTE



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Context

- According to an **ASSOCHAM-EY report** on electronic waste management, **India** is estimated to have generated five million tonnes of e-waste in 2021, ranking behind China and the USA.
- India is now planning a shift to two **standard chargers** across mobile phone brands and portable-electronic devices.
- Recently, the **Consumer Affairs Ministry** discussed this with stakeholders on this aspect and an expert committee will be set up to finalise norms. This shift towards common chargers will not only simplify things for consumers but also cut down on massive **amounts of e-waste** generated in the country.
- Many advanced economies are already moving toward standard charging devices. The **European Union (EU)** has ordered the USB-C port as the standard charger for all devices by mid-2021, including Apple's iPhone, which at present uses its standard.

E-Waste (Management) Rules, 2016

- E-Waste (Management & Handling) Rules, 2011 were **notified in 2011** and had come into force on 1st May 2012. To ensure effective **implementation of E-Waste Rules** and to delineate the role of producers in EPR, the Ministry of Environment Forest and Climate Change (MoEFCC), the Government of India in supersession of E-Waste (Management and Handling) Rules, 2011 has notified the E-Waste (Management) Rules, 2016.
- These rules apply to every producer, consumer or bulk consumer, collection centre, dismantler and recycler of e-waste involved in the manufacture, sale, and purchase and processing of electrical and electronic equipment or components specified in Schedule – I of these Rules.
- **Two categories** of electrical and electronic equipment namely (i) IT and Telecommunication Equipment and (ii.) Consumer Electricals and Electronics such as TVs, Washing Machines, Refrigerators Air Conditioners including fluorescent and other mercury-containing lamps are covered under these Rules. The main feature, of these rules, is Extended Producer Responsibility (EPR).
- **Target-based approach** for implementation of EPR has been adopted in the E-Waste (Management) Rules, 2016, which stipulate phase-wise collection target to producers for the collection of e-waste, either in number or weight, which shall be 30% of the estimated quantity of waste generated during first two years of implementation of rules followed by 40% during third and fourth years, 50% during fifth and sixth years and 70% during seventh year onwards.
- The E-Waste (Management) Rules, 2016 **mandate CPCB to prepare guidelines** on the implementation of E-Waste Rules, which include specific guidelines for extended producer responsibility, channelisation, collection centres, storage, transportation, environmentally sound dismantling and recycling, refurbishment, and random sampling of EEE for testing of RoHS parameters.

Ranking 3rd in terms of e-waste generation is a cause of concern for a country like India. Hence, the major problem here is not manufacturing but the management of electronic waste.

How big this problem is?

- The problem of e-waste is **global**. In the Indian context, due to the big market, the problem magnifies in many different ways.
 - For example, as per the ASSOCHAM-EY report, India produces 5 million tonnes of e-waste and less than 1 million tonnes are being recovered or recycled by the formal sector.
- The above example highlights **two main issues**; the first is the management of e-waste and the second is the informality in the management of e-waste. The gap between the generation and recovery of e-waste is a cause of concern.
- The **problem of e-waste is huge in India** for several reasons:
 - First, the amount of e-waste India produce is an **estimation** which means that the actual number might be higher.
 - Second, the management, only a small portion of the total waste generation goes into the **formal sector** where there can be proper recovery and recycling.
 - Third, a large amount of e-waste either never gets collected or in essence just lies as **waste in households**.
 - Fourth, the sizeable and the biggest chunk of waste goes to the **informal sector** which is not being treated or stored appropriately. The metals and chemicals thus pollute the environment.
 - Fifth, with such a huge quantity, India still lacks the **technical know-how to reuse** e-waste as a source of material.

In terms of the challenges posed by electronic waste a lot needs to be done

- Out of the total e-waste generated not even 10% of it gets recycled.
- Many **Indians are not aware** that the generated e-waste can be recycled rather Indians give such e-waste like laptops to either 'kabadiwala' or someone from the economically weaker section. They may sell it to the informal sector or recycle it in a crude way, which is the worst possible way because there are so many hazardous materials which will come out of such wastes.
- Another point here to discuss is **extended producer responsibility**. Many mobile companies in India won't upgrade their phone and which force consumers to buy or look for a new phone. This generates more e-waste and companies are not taking this responsibility.
- Hence, other than reform in extended producer responsibility, the government should work towards upskilling the informal sector. The collection and segregation can be done by the informal sector and metal extraction and recycling should be done by the organised sector.

What's the ground situation concerning e-waste in India?

- Apart from being hazardous, e-waste is also a huge **source of precious and semi-precious metals** that has a huge value that can be extracted.
- Even though the lack of infrastructure for collecting e-waste in India, the number of private **e-waste collectors has increased by 3 times** in the last five years. This shows that this is an emerging sector which has shown huge potential in India.
- The formal e-waste recycling concept came to India only after 2013-14. Before this, e-waste was managed by the informal sector only. Now, India wants to incorporate them into the collection network just to collect such waste from door-to-door and bring it to the authorised recycler. This has been the most suggested and sustainable model.

The government is planning to come up with norms to have common chargers for electronic devices like mobile phones.

How significant this new standard charger could be?

- The government is planning to move towards **two types of design**:
 - One for **smartphones** & other portable devices like laptops
 - Other for the **feature phones** which is still a very big of the Indian market.
- **It will drastically reduce the amount of e-waste generated** in India. As only the first-time buyer will opt for also buying the charger and the second-time buyer may or may not.
- From a **recycler perspective**, at present there are several types of products and each product has got different chemistry and elements. Hence, it will be easier to recycle the common charger point or the uniform material.
- The common chargers will save money for the consumers, will reduce e-waste and will also demand less effort in terms of management.
- India was one of the first countries in Asia to give **Waste Rules & Regulation in 2011**. However, with problems in implementation, the informal sector becomes critical.
- Though the informal sector has handled the waste in the past but they are in dire **need of an upgrade**. Another set of problems here is that the 'kabadiwala' will make more money if they go bring the e-waste to the informal sector as compared to the formal sector.

How do make consumers and waste collectors more aware?

- India has a tradition where Indians believe in the concept of getting things repaired but this has been lost in recent times. Hence, the government should focus on the **right to repair**.
 - Right to repair is a growing movement across the world that tries to ensure that users have the right to repair the products that they own, ranging from smartphones to automobiles to home appliances.
- Awareness of 'do's' and 'don'ts' along the lines of the **nudge theory** used in the Swachh Bharat Mission (SBM).

E-waste is a rising issue for the environment as a whole due to the presence of hazardous waste. Apart from the government, it is the end consumer who should be more aware and concerned about this. The consumer should be a bit more vigilant and contribute towards ensuring that India must reduce its electronic waste and also help in the management of electronic waste.

<https://sansadtv.nic.in/episode/perspective-tackling-e-waste-18-august-2022>



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