

ABSTRACT

The rapid increase and changing need of consumers for electrical devices and information technology on a global scale has resulted in a significant rise in electronic and electrical products. While the use of electronic and electrical products reflect today's lifestyle, the amount of used and end of life equipment is growing at drastic rate.

Waste Electronic and Electrical Equipment (WEEE) is of concern largely due to the toxicity of the constituent substances if not managed properly. It has been scientifically proven that these substances have a potential of creating both health hazards and environmental impacts.

Like other developing countries in Asia and Africa Sri Lanka is now confronted with the huge problem of e-waste both locally generated and internationally imported.

With the significant growth in investments, consumption and exports the generation of E waste from general consumption of the techno-products such as personal computers and mobile phones has been drastically increased within the country. According to the Annual report of Central Bank, 2009 usage of mobile phone reached up to 85% on subscriber basis.

As per a survey carried out by the Central Environmental Authority in 2008, it was revealed that the market size of PCs, refrigerators and TV sets are approximately 400,000, 275,000 and 400,000 and the annual growth rates are 8-10%, 4-6% and 6-8% respectively. Out of a total market 400,000 PCs per annum around 30% are used computers and another 50% are locally assembled. While used PCs will turn into e-waste within a short period, there is a high probability that assembled computers too are less resource efficient compared to reputed brands

According to the records of the Central Environmental Authority nearly 2500 Metric tons of Electronic waste are being managed by the formal sector E waste management establishments in general

However E waste handled by the informal sector is not yet recorded and the quantity may be several folds greater than that handle by the formal sector.

When the management of e-waste to be taken on a more serious note, there is a need for dedicated policy and legislative mechanism which should be able to offer clear guidelines for collection, transportation, storage, dismantling, material recovery pre-processing and end-processing for final metal recovery.

This is important as emerging and developing economies will continue to generate more e-waste in the next 20 years.

In Sri Lanka, the Hazardous Waste management (Scheduled Waste Management) Rules were first announced under the umbrella of Environmental in 2008 for electronic waste management under the gazette extraordinary 1534/18. As per this regulation every generator, collector, storer, transporter, recover, recycler, disposer should obtain a license from the CEA. Ministry of Environment has formulated the policy on E waste Management and yet to be finalized.

Even today, though the Central Environmental Authority has mandated that e-waste be given only to authorized collectors, most of the e waste are being disposed off through informal channel in order to earn some quick money. Therefore, it is essential that every citizen shall understand that e-waste is hazardous and it is their responsibility to get it managed in an environmentally sound manner.

Most of the electronic item vender companies do not provide take back offers through their distributors and channel partners. This also leads to improper dumping through local scrap dealers. Thus, despite having national level management mechanisms, collection of e-waste poses a big challenge, and a synergy and cohesiveness between systems has become the need of the hour.

Currently all the E waste collected within the country are being exported as the unavailability of a recycling facility for Electronic waste. Hence it is an urgent requirement to establish an environmentally sound e waste recycling facility to cater e waste generate within the country. Under this grounds inviting investors to set up such recycling facilities has been identified as the most prioritized action in stream lining the E waste management system within the country.

Generally the urban poor has engaged in the trade of waste and recycling which is a most unsafe and polluting livelihood opportunities for survival. Likewise all most all of the workers who are engaged in these recycling practices are urban poor and unaware of the hazards associated with these practices.

There is an acute need to create awareness on managing Waste Electrical and Electronic Equipments and methods to deal with it among the general public.

It is also an important factor that consumers must be aware of their responsibility of managing e-wastes that are generated due to usage of electronic goods.

There is an urgent need of availability of a comprehensive e waste management system and a strong awareness which provoke the general public on consequences of hap hazard disposal of E waste and its economical value when it manages properly. This study mainly focused on assessing the Electronic waste management system in the country and suggesting a mechanism to strengthen and streamline the system.