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MUMBAI

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A seminar on

Managing E-waste

Challenges and Opportunities



27th July 2016
World Trade Centre, Mumbai

Background

Challenge of E-Waste:

Electrical and electronic products like laptops, mobile phones, air conditioners, washing machines etc. have become an integral part of our lives today. While increasing consumerism and expanding purchase capacity are indicators of rising prosperity, these factors contribute to E-waste generation from products at the end of their life. *E-waste is one of the fastest growing waste streams globally.*

In India, E-waste is increasing at a rate of 30% per annum in 2016. In Asia, E-waste generated was 16 MMT in 2014 with China generating the highest (6 MMT) followed by Japan (2.2 MMT) and India (1.7 MMT).

E-waste management is a big challenge in our country due to issues like the hazardous nature of E-waste, increasing volumes, collection inefficiency, lack of financial assistance and lack of awareness amongst stakeholders. E-Waste on the other hand is an opportunity. It contains precious metals such as gold, silver, platinum, palladium etc. that makes their

recovery from E-waste very profitable.

Current State of E-Waste in India:

Today, more than 90% of the E-waste in India is managed by the informal sector i.e. *kabadiwallas*. The informal sector uses very rudimentary methods like open burning and acid leaching to process E-waste in a hazardous and uncontrolled environment. The formalization of informal sector is gradually taking place. As of November 2014, there were 138 formally registered recyclers/ dismantlers with a handling capacity of 0.35 MMT.

What is being done?

Collaborative efforts by various groups such as Manufacturers Association of Information Technology (MAIT), Greenpeace and Toxic Links culminated in *the introduction of E-Waste (Management and Handling) Rules in 2011*. The E-waste rules recognize and define the roles and responsibilities of key stakeholders including producers, consumers, bulk consumers, collection centers, dismantlers, recyclers and also the Central and State Pollution Control Boards for effective management of E-waste. Though the E-waste rules provided for a good framework and gave a boost to the formal recycling sector in India, it did not have the anticipated impact or elicit the desired action from the stakeholders. The Rules announced in 2011 have now been amended in 2016. The new rules intend to strengthen the e-waste

management regime in India while bringing in much-needed clarity in the roles and responsibilities of various stakeholders in the e-waste management hierarchy.

About the Workshop

World Trade Centre (WTC), Mumbai in association with Ekonnnect Knowledge Foundation (Ekonnnect) organized a seminar on **'Managing E-Waste: Challenges & Opportunities'** on 27th July 2016 at **Centrum Hall, WTC, Mumbai**. The seminar was organized under WTC-Swacch Bharat Abhiyan campaign, with an aim to bring together different stakeholders and of imparting knowledge about E-Waste Management in India.

Objectives

- To provide an overview of the new E-Waste (Management & Handling) rules enforced from October, 2016.
- To share knowledge on the current recycling set ups along with perspectives from Corporates and Organizations on Extended and Producer Responsibilities (EPR).
- To provide details on Producer Responsibility Organization (PRO) model supported by international case studies.

Proceedings

The session commenced with a welcome note from Ms. Khyati Naravane of World Trade Centre, Mumbai. She invited the participants, organizers and speakers to the dais. She requested Mr. Y.R Warekar, Executive Director, World Trade Centre to give his key note address and felicitate the speakers. Following which, presentations were given by;

1. Dr. Prasad Modak, Executive President, Environment Management Centre LLP & Director, and Ekonnnect Knowledge Foundation on **An overview on E-waste (Management & Handling) rules, 2016.**
2. Mr. Satish Sinha, Associate Director, Toxics Links on **Extended Producer Responsibility at Indian Corporates**
3. Dr. Aniruddha Agnihotri, Head-Environmental Sustainability, Health & Safety, Tata Consultancy Services on **E-Waste Management Strategy**
4. Mr. B.K Soni, Chairman & Managing Director, EcoReco on **E-Waste Recycling**

- Ms. Deepali Sinha Khetriwal, Managing Director, Sofies India on **Producer Responsibility Organizations-Experience from Switzerland.**



Inaugural session of E-waste Management workshop

- Dr. Prasad Modak shared the current E-waste generation estimates in India. He explained the entire evolution of E-waste Management Policy in India. He added that “E-waste is rising due to changes in our lifestyle, everyone is using multiple electronic gadgets now. The target for 2020 will be to collect 70 percent of E-waste, which is a big challenge and needs push from all stakeholders.” He provided a comparison between the 2011 and 2016 E-waste Management Rules and informed that the 2016 rules are very comprehensive and address some of the loopholes in 2011 by introducing robust compliance, audit and monitoring mechanism.



Dr. Modak providing an overview on E-waste (Management & Handling)

- Mr. Satish Sinha explained the principles of Extended Producer Responsibility (EPR), its objectives & legal inclusions. He highlighted the criteria for EPR rating and how different brands performed in 2015. He said that the results of their surveys in terms of collection centres, buy back systems, awareness programmes have been disappointing. He lamented the fact that reputed MNCs are following EPR rules in Europe but do not want to do the same in India.



Mr. Satish Sinha presenting on Extended Producer Responsibility

- Dr. Aniruddha Agnihotri presented on the E-waste disposal policy of Tata Consultancy Services. He shared details of TCS' Green Procurement and Environment policy. He highlighted the E-waste generation statistics of TCS and also its disposal process. He said "We are implementing it in several countries where the framework does not exist. Our procurement is largely green. We have huge numbers of old products like computers that are phased out annually, which are given to charitable organizations, which we keep track of"



Dr. Aniruddha Agnihotri presenting TCS E-waste Management Strategy

- Mr. B.K. Soni showcased different techniques of recycling E-waste and shared more information about Eco-Reco's E-waste management strategies and campaigns. He shared harsh realities which recyclers face, saying that "There is no monetary support to the recyclers, no one wants to pay

best prices and still everyone wants European facilities”. Mr. Soni through his presentation stated that skilling up waste pickers and kabbadiwallas is the only way forward and EcoReco has now signed up with National Skill Development Corporation of India (NSDC) to train 300,000 *kabbadiwallas* over three years.



Mr. B.K. Soni highlighting E-waste recycling techniques

- Ms. Deepali Sinha Khetriwal through her presentation explained the model of Producer Responsibility Organizations (PROs) and explained why India must take the cue from Switzerland, which manages the finances of the entire recycling system and which are funded by the producers. She showcased the Swiss model showing ways of creating technical standards in E-waste. “They create awareness, are IT-driven and smartly run organizations with a lean employee model” she was quoted as saying.



Ms. Deepali Sinha Khetriwal presenting Swiss PRO model

The presentations were followed by Question and Answer session; many questions were addressed to the panel speakers from different stakeholders; from organizations, corporates and college students.

The session ended with vote of thanks from Capt. Somesh Batra, Vice Chairman, World Trade Centre Mumbai. He closed the session by thanking the speakers and said that “the seminar would also guide youngsters on the entrepreneurship opportunities in the E-waste sector.”



Closing session

Exchange your E-waste for a Sapling

The Seminar also provided an opportunity to the participants to drop off their E-waste in exchange for a sapling during the session. EcoReco had set up their E-waste drop off bin at the registration counter where many participants exchanged their E-waste such as mobiles, headphones, remote controls etc. for a sapling.





Exchange your E-waste for a Sapling

Resources

Presentations

All the presentations are available at the Ekonnnect website; <http://www.ekonnnect.net> under the [Resources](#) section.

Photographs and Videos

The 'one on one' speaker key note videos and photographs from the session are available at Ekonnnect You tube channel <https://www.youtube.com/user/ekonnnectEKF> and on our

Facebook page <https://www.facebook.com/EkonnnectKnowledgeFoundation>

Feedback

“It was very informative, comprehensively designed and the speakers were arranged chronologically”-
Ms. Chhaya Sehgal, The Winning Edge Organization

“The seminar was very useful for my organization as well as my society in terms of how we can manage our E-waste”- S.K Ram, The Shipping Corporation of India Ltd.

“I received good understanding of New Policy and current issues & challenges”- Pejavar SR- Eco eMarket Pvt. Ltd.

“The knowledge gained today will be used in taking it forward in pour capacity building”- Dr. SR Kashelkar- All India Institute of Local Self Government.

“I would suggest to reduce the number of speakers and give in depth information on 1 or 2 areas only”-
Ms. Srujani Shrawne, Reckitt Benckiser

Next Steps

Ekonnnect Knowledge Foundation in partnership with World Trade Centre is planning on conducting a yearlong campaign of **'Waste Stream Specific Events'** at key locations of World Trade Centre across India.

Some of the events which have been planned in the coming year are;

- 1) A programme on New Municipal Solid Waste Management & Handling Rules with Focus on Decentralized Community Driven Solutions.
- 2) A programme on Construction & Demolition Waste – A huge menace given the rising infrastructure development in Urban Areas
- 3) A programme on Plastic Waste.
- 4) A programme on Hazardous Waste Management

List of Participants

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53	Punam Singh	IIT Bombay	-
54	Kashish Pal	Sampurn Earth Environment Solution Pvt. Ltd.	-

Speaker Profiles

1. Dr. Prasad Modak: Prasad Modak holds B Tech (Civil Engg), M Tech (Environmental Science and Engg) from IIT Bombay and Doctor of Engg (Environmental Engg) from Asian Institute of Technology, Bangkok. Prasad's career has spread across a wide spectrum of agencies across the World with diverse portfolios in the arena of environmental management. He is currently Dean at IL&FS Academy for Applied Development and Chief Sustainability Officer at IL&FS Ltd. In addition, he runs a strategic consulting company - Environmental Management Centre LLP and directs a not for profit NGO Ekonnnect Knowledge Foundation. Prasad was a Professor at Centre for Environmental Science & Engineering at IIT Bombay and currently back to IIT Bombay as Professor (Adjunct) at the Center for Technology Alternatives in Rural Areas (CTARA).



2. Dr. Aniruddha Agnihotri: Dr. Aniruddha Agnihotri has a Ph. D and M. Tech. in Environmental Science and Engineering from the Indian Institute of Technology, Mumbai and also a M.S. in Environmental Engineering from The Johns Hopkins University, U.S.A. He has around 23 years of research and professional experience in Environment, Health and Safety (EHS) and sustainability management. His past work experience includes the state environmental regulatory agency, Jacobs Engineering, Ernst & Young, Tata AIG Risk Management, Cholamandalam MS Risk Services and Standard Chartered Bank. Currently, Aniruddha leads EHS globally at Tata Consultancy Services Ltd. and is responsible for developing strategy and objectives on sustainability, climate change, and health & safety. He plays a key role in external reporting like Carbon Disclosure Project (CDP), Corporate Sustainability Report (CSR) as per GRI reporting guidelines, Corporate Responsibility (CR) Index by BitC (Business in the Community), UK, Business Responsibility Report (BRR) as per SEBI regulations India, etc



3. Mr. B.K Soni: Mr. B K Soni, Cost & Management Accountant, is a first generation entrepreneur who founded Eco Recycling Ltd. in 1994, a company listed on the BSE since 1995.

Mr. Soni started his journey of e-waste in 2004 to understand & implement technically feasible, commercially viable and environment friendly solution for the growing problem of e-waste recycling, an off shoot of socio-economic development. He was a member of the Expert Group on E-waste Management constituted by the Maharashtra Pollution Control Board and is a regular invitee of Government agencies & other organisations for evolving strategies for e-waste management. Based on the knowledge gathered and looking at the socio environmental gap in e-waste handling in India, Ecoreco set up India's first authorised and registered e-waste recycling facility near Mumbai, providing nationwide reverse logistic support to the generators of e-waste, collection, warehousing, asset recovery, data destruction, dismantling, recycling and recovery of all the plastics, glass and metals. Ecoreco is the pioneer organisation in India to provide Recycling on Wheels, Data Destruction on Wheels, and Lamp Recycling on Wheels. Ecoreco, an ISO 9001, 14001 & 18001 certified company and have won several awards which includes the latest 'The Best Recycler of the year' award.



4. Mr. Satish Sinha: Satish is Associate Director at Toxics Link, a leading environmental group working on issues of waste and chemicals. He has been responsible for several researches and campaigns on environmental toxicity issues and has contributed extensively to finalization of some of the new waste rules. Authored several reports and publications on E waste and mercury. He has been actively engaged in the global negotiations on Mercury "The Minamata Convention". Member of the UNEP Advisory group on Mercury.



5. Ms. Deepali Sinha Khetriwal: Deepali Sinha is an expert on the management of e-waste, with over 12 years of experience in Europe, India and Africa. She has published several papers in peer-reviewed journals on the topic and regularly presents at international conferences. A researcher with the Sustainable Cycles team at the United Nations University, she has been instrumental in setting up the capacity development activities of the StEP Initiative, a UN supported forum on the e-waste problem. She is also a senior consultant with Sofies, working with on multiple projects including setting up Producer Responsibility Organisations (PROs), supporting compliance and audit activities, conceptualising and running pilot projects as well as policy and technology support. Previously, she has worked as an expert consultant on internationally funded development projects for UNEP, World Bank & EMPA



Programme Agenda



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Agenda

10:00 am - 10:40 am	Registration & Tea Coffee	
10:40 am - 11:00 am	Welcome Address and Felicitation of Guests, WTC Mumbai	
11:00 m - 11: 20 am	An Overview on E-Waste (Management & Handling) rules, 2016 Dr. Prasad Modak <i>Executive President, Environmental Management Centre LLP Director, Ekonnnect Knowledge Foundation</i>	
	TOPIC	SPEAKER
11:20 am - 11: 40 am	Extended Producer Responsibility at Indian Corporates	Mr. Satish Sinha, <i>Associate Director, Toxics Links</i>
11:40 am - 12:00 pm	E-Waste Management Strategy	Dr. Aniruddha Agnihotri <i>Head-Environmental Sustainability, Health & Safety, Tata Consultancy Services</i>
12:00 pm - 12:20 pm	E-Waste Recycling	Mr. B. K. Soni <i>Chairman & Managing Director, EcoReco</i>
12:20 pm - 12:35 pm	Producer Responsibility Organizations– Experience from Switzerland	Ms. Deepali Sinha Khetriwal, <i>Managing Director, Sofies India</i>
12:35 pm - 12:50pm	Open House	Q&A
12:50 pm - 13:00 pm	Vote of Thanks, WTC Mumbai	
13:00 pm	Networking and Lunch	
Token of Appreciation	Our first Step towards Managing E-waste Donate your E-Waste and while going back take away a sapling	



Young Life Insurance policy holders benefit the most

It is always said that starting early always help in life and this is applicable to buying life insurance products also. Starting a life insurance policy provides a great advantage in terms of premium, savings and policy benefits. Life Insurance product is an integral share of successful and strategic personal financial planning. The premium paid on a life insurance policy depends on many factors, including the type of policy, the death benefit amount, age and health at the time when the customer takes out a policy and this is applicable pure term policies as well as savings policies.

In respect of pure term plans, the premium is always less for the younger age groups as compared to higher ages for the same term and sum assured. The advantage of lower premium is available to the younger policy holder is available all through the term of the policy. More over as age increases, with the probability of health being affected by life style diseases are higher and then getting a life insurance premium at normal rates is also difficult. By buying life insurance at a young age, it ensures that even if something happens to someone's health in the future, that person's rates will always be based on his or her health at the time the policy was purchased. The key mantra in taking pure term plan is to take the product earlier and for the maximum possible term possible.

For a example for a life cover of Rs.50 lakhs with a maturity age of



Age at entry	30	35	40	45	50	55
Term of Life insurance	30	25	20	15	10	5
Premium Per Annum	8135	8272	10975	14449	18972	35641

60, a sample premium payable by customers at different age groups is presented below and it can be observed that the premium payable per annum increases with age and the increase is sharp after the age of 40.



Secondly, in both traditional as well unit linked savings plans, taking policy at younger age group provides distinctive advantage to the policy holder. In respect of traditional savings policies, taking policy at younger age means lower premium and this combined with longer term of the policy provides for higher maturity value.

In unit linked products, younger customers need to take longer term

policies and if they exercise the option to invest the money in equities, they are certainly in vantage point in accumulating wealth by beating inflation. In Unit linked since the mortality charges are deducted from the total premium, while arriving at the investible funds, only lower mortality charges will be deducted for younger age customers leading to higher investible funds for longer duration. As against this, for a customer taking a ULIP at the age of 45, a substantial portion of the total premium paid will be deducted and only less money is available as investible fund. Moreover, the time period available for investment is also less, based on the market scenario the return to the customer will be affected.

The writer is MD, Shriram Life Insurance



E-commerce could create 12 mn jobs over 10 years: HSBC

E-commerce in India is expected to see a significant uptrend in the coming days and could lend a helping hand to the country's job landscape, which needs as many as 80 million new jobs in the next decade, says a report. "Already employing just under a million Indians, e-commerce could be a new source of service sector jobs," global financial services major HSBC has said.

Young population, rapid smartphone adoption and a digital payments revolution could support the rise of e-commerce. Moreover, India is lagging behind China by more than seven years, in terms of Internet penetration and online purchases, e-commerce could experience a similar takeoff. "We find that e-commerce jobs are more productive than the kind India is currently creating. They could also be an easy fit, matching India's skills and entrepreneurial profile," HSBC said in a research note.

With the rise of online purchases, e-commerce could create 20 million 'gross' jobs across logistics & delivery (70%), and customer care, IT & management

(30%), however, some jobs will be lost in bricks-and-mortar stores. "We model this carefully and find that, on net, e-commerce could create 12 million 'new' jobs. According to the report, "business-as-usual estimates suggest India could have a shortfall of 24 million jobs over the next decade. E-commerce could fill half that gap."

The report noted that with the formation of Taobao villages (digital market places where villagers can set up digital shops), e-commerce in China has spread to rural areas. "A similar revolution in India could engage five million village merchants and create many livelihood opportunities over 10 years," it said. India's current job profile is lopsided as low productivity sectors employ the vast majority. Agriculture is very low productivity, but employs half the labour force.

On the other hand, sectors such as financial services are highly productive, but employ a modicum of the labour force. "As a result, India's overall labour productivity is at very low levels," HSBC said.

Recycling needs to be recognised as an industry in India

E-waste management serves nature as well as the nation, say experts

With the Environment ministry notifying the new E-Waste Management Rules, 2016 that will bring the producers under Extended Producer Responsibility (EPR), along with targets and requirements to collect e-waste, experts feel that time has come to take the second big step - infuse capital and recognise recycling as an industry. Technology and financial incentives would encourage entrepreneurs entering this field.

The experts were speaking at a seminar organised jointly by the World Trade Centre Mumbai and Eknect Knowledge Foundation on 'Managing E-waste - Challenges and Opportunities' at the WTC complex in Mumbai.

E-waste is increasing at a rate of 30% per annum, which is a big concern and at present, more than 90 per cent of E-waste is managed by the informal sector - ie kabadiwallas. "The 2016 rules are very comprehensive and it addresses some of the loopholes in the 2011 act by introducing robust compliance, audit and monitoring mechanism. The 2016



(L-R): Satish Sinha, Associate Director, Toxics Links, Dr. Aniruddha Agnihotri, Head-Environmental Sustainability, Health & Safety, Tata Consultancy Services, Rupa Nalk, Director (Projects), World Trade Centre Mumbai, Dr. Prasad Modak, Executive President, Environmental Management Centre LLP & Director, Eknect Knowledge Foundation, Y. R. Warerkar, Executive Director, World Trade Centre Mumbai, B.K.Soni, CMD, EcoReco and Deepali Sinha Khetriwal, MD, Sofies India.

act also brought in Compact Fluorescent Lamp (CFL) and other electronic products under its ambit," informed Dr Prasad Modak, Executive President, Environmental Management Centre LLP and Director Eknect Knowledge Foundation. "E-waste is rising due to changes in our lifestyle, everyone is using multiple electronic gadgets now. The target for 2020 will be to collect 70 per cent of E-waste, which is a big challenge and needs push from all stakeholders," added Dr Modak.

The new rules make the manufacturer responsible to collect e-waste generated during the manufacture

of any electrical and electronic equipment and channelise it for recycling or disposal and seek authorisation from State Pollution Control Boards (SPCBs). "We have been rating companies on EPR in terms of collection centres, buy back systems, awareness programmes and the results have been disappointing. Even the SPCBs do not mention E-waste rules on their website. We had no option but to move to court on this," pointed out Satish Sinha, Associate Director, Toxics Links.

Tata Consultancy Services (TCS), India's biggest IT company, is known for its first mover advantage for

implementing E-waste disposal policy in 2008. "We are implementing it in several countries we work where the framework does not exist. Our procurement is largely green. We have huge size of old products like computers phased out annually, which are given to charitable organisations, which we keep track," explained Dr. Aniruddha Agnihotri, Head, Environmental Sustainability, Health and Safety, TCS.

TCS' internal IT team has the mandate of EPR and also has a transparent process to identify and work with recyclers. "We have a bidding process, destruction certificates are

obtained from vendors on data and are maintained at locations. We also do surprise inspections at our recyclers," added Agnihotri.

Recycling is all about transforming, transport and technology and it is time we look at it as a business opportunity. "There is no monetary support to the recyclers, no one wants to pay best prices and still everyone wants European facilities," opined B K Soni, CMD, EcoReco. Soni stated that skilling up is the only way forward and EcoReco has now signed up with National Skill Development Corporation of India (NSDC) to train 300,000 kabadiwallas over three years. This will improve their health. Also, we would install ecobins at spiritual and educational centres to increase collection," he added.

Capt. Somesh Batra, Vice chairman, World Trade Centre Mumbai stated that the 2016 E-Waste rules are very comprehensive and it is time that EPR is taken seriously. "India is producing very high quantity of E-Waste and it is time for us to act under the new framework or else we are inviting a major health and environmental hazard. This seminar would also guide youngsters on the entrepreneurship opportunities in the E-Waste sector."

EPR rules must include guidelines for sound disposal of E-waste: **Experts**

● **STAFF REPORTER**
Mumbai

With the environment ministry notifying the new E-Waste Management Rules 2016, that would bring the producers under Extended Producer Responsibility (EPR), experts feel the need to infuse capital and recognise recycling as an industry. The new rules would make the manufacturer responsible to collect e-waste generated during the manufacture of any electrical and electronic equipment and also seek authorisation from State Pollution Control Boards (SPCBs).

Satish Sinha, Associate Director, Toxics Links, said "We have been rating companies on EPR in terms of collection centres; buy back systems, awareness programmes and the results have been disappointing. Even the SPCBs do not mention E-waste rules on their website. We had no option but to move to court on



this."

According to the experts, the new EPR rule would help the manufacture themselves take the responsibility of disposing the electronic waste. It would also help to create an organisation wherein people can come to dispose off their waste and also manage them.

"EPR would also help in reducing the cost for management of waste. At present, the waste management involves a lot of money for transporting the electronic waste and identifying the dumping sites," added Sinha.

Experts also say that the new EPR rule must also carry guidelines on disintegrating a particular electronic or electrical waste for its sound disposal.

Lusille Andrade, Associate Vice President, Environmental Management Centre said, "It is very important that guidelines must be included in the new EPR rules since there is a lack of recycling centres in the state."

"There must be a proper E-waste management strategy in the state with proper resources in place to manage E-waste", added Sinha.



केंद्रीय पर्यावरण मंत्रालयाने ई-कचरा व्यवस्थापनाची नियमावली लागू केली आहे. त्यामुळे अशा प्रकारचे कचरा निर्मिती करणारे 'एक्सपेंडेड प्रोड्युसर रिस्पॉन्सिबिलिटी' (ईपीआर)च्या अंतर्गत वेणार आहेत. त्यामुळे कचरा तयार करणाऱ्यांना ई-कचरा गोळा करणे आणि त्याचा पुनर्वापर करणे याबद्दलचा निर्णय घ्यावा लागणार असल्याचे तज्ज्ञांचे मत आहे. ई-कचर्याला हद्दपार करण्यासाठी ई-कचरा व्यवस्थापनाला उद्योगाचा दर्जा देण्याची आजता गरज निर्माण झाली आहे. तंत्रज्ञान आणि आर्थिक सहकार्यामुळे विविध उद्योजक कचर्याची विल्हेवाट करण्याच्या प्रक्रियेत आता मोठ्या संख्येने सहभागी होण्याची चिन्हे आहेत.

जागतिक व्यापार केंद्र आणि इकनेक्ट नॉलेज फाऊंडेशन यांच्या संयुक्त विद्यमानाने नुकतेच एक चर्चासत्र आयोजित करण्यात आले होते. जागतिक व्यापार केंद्राच्या संकलनात आयोजित करण्यात आलेल्या या चर्चासत्रामध्ये सहभागी झालेल्या विविध मान्यवरांनी 'ई-

ई-कचरा व्यवस्थापनाला उद्योगाचा दर्जा?

कचर्याचे व्यवस्थापन आढावे आणि संधी या विषयावर आपली मते मांडली.

भारतामध्ये दर वर्षी ई-कचर्यामध्ये ३० टक्क्यांनी भर पडत आहे. ही सर्वाधिक चिंतेची बाब असून भारतामध्ये

तयार होणाऱ्या ९० टक्के कचर्याची विल्हेवाट सद्यवाल्यांकडून केली जाते. याबाबत इकनेक्ट नॉलेज फाऊंडेशनचे संचालक आणि पर्यावरण व्यवस्थापन केंद्राचे कार्यकारी अध्यक्ष डॉ. प्रसाद मोडक म्हणाले, ई-कचर्याची विल्हेवाट करण्यासाठी २०१६ मध्ये जी नियमावली करण्यात आली आहे ती २०११ च्या तुलनेत अधिक योग्य आहे. या नियमावलीमुळे कचर्याची विल्हेवाट करण्याच्या क्षेत्रावर तसेच त्याचे योग्य ऑडिट करणे शक्य झाले आहे. आपली जीवनाशैली दररोज बदलत असल्यामुळे प्रत्येक जण अनेक इलेक्ट्रॉनिक उपकरणे वापरत आहेत. त्यामुळे ई-कचर्याचे प्रमाणही दिवसेंदिवस वाढत चालले आहे. पुढील पाच वर्षांमध्ये म्हणजेच २०२२ पर्यंत ७० टक्के ई-कचरा गोळा केला जाणार आहे. वास्तविक हे मोठे आव्हान असून ते पार करण्यासाठी सर्वांनीच भरपूर काट घेणे गरजेचे आहे.

२०१६ मधील नवीन नियमावलीनुसार इलेक्ट्रॉनिक वस्तू तसेच उपकरणांची निर्मिती करणाऱ्यांना निर्मिती वेळीच ई-कचरा गोळा करावा लागणार आहे. तसेच त्याची विल्हेवाट करण्याची प्रक्रिया सुरू करावी लागणार आहे. यासाठी संबंधितांना राज्य प्रदूषण नियंत्रण मंडळ्यांची परवानगी घ्यावी लागणार आहे. ई-कचर्याची विल्हेवाट करणाऱ्या कंपन्यांना आम्ही 'ईपीआर'नुसार दर्जा देत आहोत. ई-कचरा गोळा करणे, ई-कचर्याबद्दल जागरूकता निर्माण करणे अशा दोन बाबी आम्ही सध्या तपासत आहोत. मात्र त्यातून वेगारे परिणाम निरशाजनक आहेत. आश्चर्याची बाब म्हणजे राज्य प्रदूषण नियंत्रण मंडळ्याने आपल्या वेबसाईटवर ई-

कचर्याबद्दलची नियमावली दिलेली नाही. त्यामुळे न्यायालयात जाण्याशिवाय आम्हाला दुसरा पर्याय रहिलेला नाही. अशी माहिती 'टीक्सक लिक्स'चे सहसंचालक सतीश सिन्हा यांनी दिली नसल्यामुळे त्यांच्याकडून अशा प्रकारची चालढकल केली जाते. अशा प्रकारची वेगळा राबतणाऱ्यांना आर्थिक प्रोत्साहनांनी आपल्याकडे दिले जात नाही. ई-कचर्याची विल्हेवाट करणाऱ्या क्षेत्रामध्ये सर्व खर्चाचा जोपर्यंत समावेश होत नाही, तोपर्यंत तिची प्रभावीपणे अंमलबजावणी होणे कठीण आहे.