

Future of E-Waste Management: Challenges and Opportunities

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Abstract: *E waste management has been an urgency puzzle to many countries since they compassed of a variety of organic substances like heavy metals like cadmium, chromium, lead, mercury plastic, which a very harmful for human and environment today the millions of people working in unorganized sector of E-waste disposal consisting of a valuable materials like gold, silver, copper.. There is no awareness regarding E-waste in many of the countries. This is causing environmental degradation, public health issues, shatter factories, unskilled people, lack of knowledge and awareness is the major problem. We are not conscious about E waste and its aftermath. We should initiate a mission regarding awareness of E-waste what we can do is, online awareness campaign, hording, wall writing, advertisement. We should find solutions for E-waste project. E-waste recycling, servicing, remanufacturing, upstream reduction of E-waste generation through, green design and cleaner production is gaining much attention. E-waste production due to facility and sometimes non-existent data production in the same alert was production in the same alert was 20-25 million tons per year. A more report released by 7 the unfed. In July 2009 has show stunning global facts indicating rapidly growing generation of E-waste are of growing importance. Scholarly articles future of e waste management challenge and opportunities. An economy assignment of present and future e-waste cucchiella cited by 410. The increasing solid waste through zero waste song City by 244 and opportunity for sustainable management Cruz sotelo-citey by 18*

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I. INTRODUCTION

When the use of electronic products become useless is called e-waste in the modern world the electronic gazettes have a played a vital role in the context of communication. The world now seems a global village the electronic gazettes such as computers, laptops, motherboards', electronic tools, lighting equipment, medical devices, cell phones etc has changed the mind of every living humans. in the want of mordenisation the down trodden to bottom level everyone wants to be part of Electronics.

E-waste management is ranked 5th in India in the rest exp. 50 million tons of e waste produced every year 20% formally recycle e waste produced annually is earth everywhere dollar 625 billion Global e waste over dollar 62.5 billion e waste production likely to reach million tons per year by 2050.

E waste in India 2005-1.47Lakh tons, 2016-20lakh metric tons nearly 82% personal devices volume of e-waste growing 21 % annually. The history of electronic begin with the invention r- vacuum diode by j. A. Fleming in 1897. Since then to now it has brought a drastic change. Changed the strata of mind all over the world every electronic has a specific life span after that it becomes use less this is what we call it e-waste.

Business organization Assoc ham & NEC study India ranks fifth position in the world the state of Maharashtra ranked number one in India and Tamilnadu State& UP rank 2nd and 3rd consecutively.

II. ELECTRONIC WASTE A GLOBLE PROBLEM

1. Electronic waste a global problem while generating 50 million tons of e-waste every year but only 20% e waste recycled worldwide.
2. E-waste production likely 120 million tons by 2050.

3. E waste produced annually is worth over 60 billion. 2 million tones of e-waste generated in India annually and is likely to reach 10 million tones by next 3-4 years.
4. Huge amount of E waste is poisonous and hazardous for health
5. Unskilled and untrained people under an unorganised sector.
6. Lack of recycle factories and recycle institution
7. Health related problems and the damage of kidney liver lungs and heart
8. Child labour. Acc to survey 5 lack children works.
9. Lack of management
10. Soil degradation and environmental effect

III. CHALLENGE

E waste is creating this challenge when Government of India is facing on clean India mission and smart City every year 2 million tons of e-waste are produced in India. ACC to study 35 million tons of e waste to be produced by 2021-22 million tons of e-waste to be produced in the world every year.

In India 4.5 lakh tons of e-waste we recycle every year there is high gap. Between waste recycle it is also affecting adversely to the climate when the world is combating climate change already the emission of CO₂ in the air degradation of wastes in the field soil both effected completely in India there is a few state where the recycle plant is working like Karnataka, UP, Haryana, Tamil Nadu. Rest states are deprived.

IV. EFFECTS

E-waste contains 51 type of hazardous materials to humans & environment like lead, cadmium, arsenic people losing lives after getting contact of its adverse impact of poisonous gas on lungs and hard the cycle of e waste is more dangerous because acid and burning of e-waste stimulates PM. Land fill dumping is also done by government which is positions for soil to and can merge the human food chain.

V. MANAGEMENT

In year 2000 municipal solid waste (management and holiday) come into existence. In year 2016 e waste management rules regarding CFL Mercury came into effect. Electronic products are brought under extended producer responsibility (old e-waste to revert) to recycle e waste many plants have been installed produce electronic fertilizers the third is this plants are very less in number in the context of e waste produced every year.

The Indian regime should change their law regarding e waste to become the dumping ground of world. Governments shall work on 3R Reduce, recycle, reuse to combat e waste this can help smoothly going of different mission i.e. digital India, clean India, smart India.

It can give new job opportunity, internship Management by setup of micro factory (A factory of e waste in Australia) a perfect example of management of e waste.

People having lack of knowledge of e-waste, online program, different type of initiatives, civil society and other organization different NGO & business group should manage e-waste lots of job opportunity, business skills, can contribute in the country GDP. Can cause proper use of e- waste.

VI. OPPORTUNITIES OF E-WASTE MANAGEMENT IN INDIA

The ministry of environment rules in 2016 to reduce waste production and increase recycling e waste system is the best circular for the control on environmental and human health effect we are Organization on an awareness programmed for the development country and e waste collected. All society and public collect e waste and delivered to e-waste centre for recycling e waste. We are designed this product and process to significant reduce the environmental impact of a product being put into the market the e-waste management rules 2016 where amended by the government the amended rules by the government in March 2018 to faculty in India the amended rules revised the collection target under the provision of epr with the effect of October 1 2017 Central pollution control board of byway revised targets and the monitoring under improved is most important for development country e management in India.

VII. E-WASTE MANAGEMENT A CHALLENGE TO PUBLIC HEALTH IN INDIA

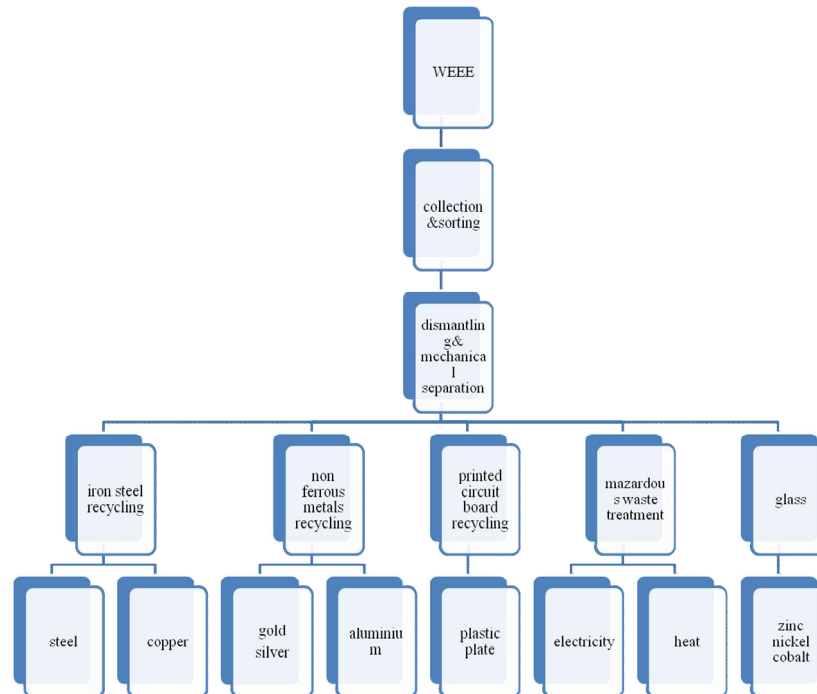
The effect of e-waste has a toxic effect on human life and have has too many troubles. Disposal electronic charges and CVD, monitor, key board, electronic watch, and cell phones can be cause of all this risk in health in India. E waste electrical WEEE is very loosely and broken in India Environment is very effect. in India the e-waste is very issue in public health and environmental this vest has become the most rapidly growing Segment of the formal Municipal waste stream in the world. For example disposal plastic electronic device phone chargers very harmful for human health risk in India today many people working in unorganized sector of e waste disposal. Consists of valuable 1. Gold 2. silver 3.copper.

Electronic waste today Become a major problem. It is necessary and growing effect for public health risk in India. Health Risk:- the accumulation of e-waste contaminating soil ,water and food which is directly effecting the health of humans & other living beings it he radiation from the mobile towers & mobile has collected the sudden death of birds and many other species.(according to the institute of physics if the high amount to lead released into the environment ,could, cause, seven damage to human blood kidney. as well as central peripheral nervous system).today looks of people working in the unorganized sector one opection exposed to toxic elements. The e-waste consists of valuable like gold, silver, copper today we are growing one of the biggest countries of electronic and the other side we are providing e-waste.

A) E- Waste Affecting Body Parts

COMPONENTS	CONSTITUENTS	AFFECTED BODY PARTS
Printed circuit boards	Lead and cadmium	Kidney damage
Mother boards	Beryllium	Chest pain
CRT Cathode ray tubes	Cadmium.	Kidney damages
Switches	Mercury	Nervous system
Computer	Cadmium	Damage to bone density

B) Careent Recycling Schemes for WEEE



VIII. CONCLUSION

The hazardous nature of E-waste is one of the rapidly growing environmental problems of the world. The effect has a toxic and adverse on human life but proper management and developed infra can leads to contribution in GDP by creating job opportunity. Every work ness public participations and we Indians new master of it. India. Has potential to manage world's e waste in its regim. Whatever the laws have been made in the international summits it should be proper implemented in the country according to the programme and policy. This may leads to well properly done govt initiatives like digital India and clean India mission. Public participation may leads to full aware digitization and of e waste and its after math. In the context to world united nation should come ahead and take for wars actions to regulate e waste, we are not only facing problem on earth in the space too we are suffering from e waste.

SUGGESTIONS

Nowadays in India facing biggest problems in E- waste .so we can contact a recycle company who work for make a new pat form discarded one. and we have to be more aware about E-waste. at our Ambikapur city have solid E-waste management in which women volunteers collect door to door waste material and used 3R (Recycle reduce reuse) which make it possible in an eco-friendly. and our government also promise to make a better future in India .

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