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Occupational Health and Safety Rights of E-Waste Management Workers In Bangladesh

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The dissertation titled "Occupational Health and Safety Rights of E-Waste Management Workers in Bangladesh" prepared by Azfar, ID No.: 2019-2-66-012 submitted to Nabila Farhin, Senior Lecturer, Department of Law, East West University for the fulfillment of the requirements of the Course LAW-406 (Supervised Dissertation) for L.L.B. (Hons.) degree offered by the Department of Law, East West University is approved for submission.

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Signature of the Supervisor

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Declaration

I, the undersigned Azfar, hereby declare that I am the sole author of this dissertation. To the best

of my knowledge this dissertation contains no material previously published by any other person

except where due acknowledgement has been made. This dissertation contains no material which

has been accepted as part of the requirements of any other academic degree or non-degree

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Abbreviations

OSH: Occupational Safety and Health

UDHR: Universal Declaration of Human Rights

ICESCR: International Covenant for Economic and Social Rights

ILO: International Labour Organization

Occupational Health and Safety Rights of E-Waste Management Workers In Bangladesh

Abstract: Bangladesh is facing a serious crisis of huge accumulation of discarded electronic equipment (popularly referred to as 'e-wastes') owing to indiscriminate dumping, fuelled by a booming consumer demand of electronics and mounting obsolescence of products due to increasing innovation. The presence of highly toxic substances within them has begotten tremendous challenges on their handling and disposal, exposing workers in the e-waste recycling sector to various life-threatening diseases and long term damages to the body through toxic exposure. In Bangladesh, there still has not been proper classification of e-wastes according to their danger levels and there are different socio-economic impediments to implementation of the existing workplace safety protocols in our legislation. This paper focuses on eliciting the expediency of legislations in Bangladesh in safeguarding the occupational health and safety rights of e-waste management workers. It is a purely qualitative research since it is an assessment of national and international legislations and a few distinguished articles authored by dedicated researchers illustrating the e-waste scenario in Bangladesh. It has been ascertained that although there are various provisions for worker safety the matter of e-wastes remain largely unaddressed for want of proper documentation, sufficient awareness, and procedural flaws, socio-economic and practical factors prompting lax implementation of the current worker safety provisions in the e-waste recycling factories and depriving them of access to proper juridical procedures.

Keywords: E-waste, Recycling, Worker, Health, OSH.

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Chapter-1: Introduction

1.1 Introduction

The world is experiencing the 4th industrial revolution with incorporation of technology in every aspects of our life. With the evolvement of e-waste as the imminent danger for the environment, human life and health.1 E-wastes contain several hazardous elements including lead, copper, nickel, chromium, manganese, mercury, cadmium and other substances which are deadly for the biodiversity and human life due to their potential for causing life-threatening and long-term illnesses on exposure and altering the ecological balance and contaminating the food chain.² Over the years, the volume of e-wastes has skyrocketed; as people are constantly buying new and latest devices and discarding the old ones.³ The widespread dumping of e-wastes and poor awareness about their hazards is causing severe environmental degradation through soil pollution and ground water and surface water contamination.⁴ Unavailability of formal recycling facilities, lax implementation of environmental regulations and worker protection laws, the socioeconomic circumstances of employment opportunity for urban poor, unregulated material mass flow together facilitated the emergence of a burgeoning informal sector in e-waste recycling.⁵ The crude informal recycling practices are contributing to environmental pollution as well as endangering worker's lives and health from toxic exposure.⁶ The capacity of the legislations of Bangladesh to protect e-waste recycling workers from the associated hazards and addressing their grievances must be thoroughly scrutinized for identifying the anomalies and building a robust monitoring and remedial mechanism for revamping the e-waste recycling industry and

¹ Marfua Mowla, Ehsanur Rahman, Nafisa Islam, Nirupam Aich 'Assessment of heavy metal contamination and

health risk from indoor dust and air of informal E-waste recycling shops in Dhaka, Bangladesh' (2021) 4 100025

^{1,2,3,5,6} and 8 ³ Mahbub Alam,Khalid Md Bahauddin, 'E-Waste in Bangladesh: Evaluating The Situation,

Legislation And Policy And Way Forward With Strategy And Approach' (2015) 9 De Gruyter Open PESD 2,3,4,8-

⁴ Hridoy Roy, Md Shahinoor Islam, Shafaul Haque, M.H. Riyad, 'Electronic waste management scenario in Bangladesh: policies, recommendations, and case study at Dhaka and Chittagong for a sustainable solution' [2022] Sustainable Technologies and Entrepreneurship 2, 3, 5, 6, 8, 9

⁵ Alam (n 3)

⁶ ibid.

ensuring justice for workers in this sector. The second chapter of this research delineates the international legal instruments and resolutions respecting e-waste management and workplace hazard mitigation procedures; the third chapter substantiates the national legislations, rules and policies regarding workplace safety and e-waste management; the fourth chapter deals with the existing situation of occupational health and safety (OSH) rights in the e-waste recycling sector in Bangladesh, the violations of OSH rights in this sector and the implementation gaps in the legislations and policies in this regard; and finally, the fifth chapter deals with the findings, conclusion and recommendations of the research.

1.2 Literature Review

The paper authored by Islam published in 2016 discusses the present scenario of e-waste generation, disposal, recycling of the two major metropolises of Bangladesh, namely Dhaka and Chittagong city. The paper also discusses about the presence of several toxic substances in discarded electronics such as Mercury, Lead, Cadmium, Zinc, Chromium etc. and their toll on the environment and human health. These include contamination and deterioration of soil, agricultural lands, groundwater and water bodies, air pollution, water pollution and health conditions such as cancer, asthma, nerve and brain damage, hearing impairment, eye-damage, infant-mortality, birth defects, organ failure and respiratory problems. It graphically depicts a rough demographic picture of the workforce employed in this sector, encompassing about 120, 000 urban poor persons working in various informal chains starting from the collection to the final recycling process. In Incidence of child labour is rampant here, as about 50,000 children are engaged at various stages in this industry, whereas 83% of them are afflicted with various long-term diseases due to exposure to toxic substances; claiming the lives of more than 15% of child

⁷ Mohammad Nazrul Islam, 'E-waste Management of Bangladesh' (2016) 4(2): 1-12 International Journal of Innovative Human Ecology and Nature Studies 2, 3, 8, 9

⁸ ibid.

⁹ ibid.

¹⁰ ibid.

workers in this sector.¹¹ The whole recycling process is conducted by the informal sector since there is no formalised industrial participation both on the part of the public and private sector.¹² A research performed by Mowla and others in 2021 exhibited the heavy metal concentration in three e-waste recycling shops in Dhaka, two of them in Nimtoli, Old Dhaka and another of them in Elephant Road.¹³ It was purely a quantitative research where the researchers collected samples of floor dust and indoor air of these shops and measured their heavy metal content.¹⁴ It transpired that the indoor air and floor dust samples from the e-waste recycling shops constituted of several times higher heavy metal concentrations as opposed to the control samples collected from areas with no e-waste recycling activities.¹⁵ The study highlighted the dangers of heavy metal exposure

It also investigates the demographic structure of the workforce employed in the e-waste recycling shops visited by the researchers, which consists of only males aged between 10 to 60 years old; whereas more than 30% of the workers are below 20 years old and the average age is 35 years.¹⁷ It was found that there was no regard for any safety measures in the factories to protect workers from heavy metal exposure, who were deprived of access to essential protective equipment.¹⁸ It also determined that the unregulated informal e-waste recycling practices in Bangladesh jeopardized human life along with the environment and ecological balance of the nature.¹⁹

for human survival in respect of both health hazards and food chain contamination.¹⁶

The paper published by Roy and others in 2022 portrays the dilemma in the e-waste management and disposal conditions of Dhaka and Chittagong city.²⁰ It scrutinizes the lack of specific legislations, rules and policies in handling the hazardous materials and worker protection in the e-waste management process, the absence of consciousness among individuals concerning the

¹¹ ibid.

¹² ibid

¹³ Mowla (n 1)

¹⁴ ibid.

¹⁵ ibid

¹⁶ ibid

¹⁷ ibid

¹⁸ ibid.

¹⁹ ibid.

²⁰ Roy (n 4)

issue.²¹ Besides, it investigates lack of adequate formalized initiative in the e-waste recycling industry leading to the dominance of the informal sector, resulting in a haphazard state of the e-waste management in the country for want of adequate knowledge and expertise.²² Eventually, enormous amounts of toxic substances, heavy metals and noxious chemicals are released into the environment; endangering the biodiversity along with the life and health of humans.²³ The study recommends proper documentation of the e-waste handling strategy and enactment of effective legislations, rules, regulations and policies for the safety of workers from the corresponding hazards and ecological preservation.²⁴ It also exhibits the urgency of enhanced modernised e-waste recycling factories in Bangladesh in line with the stringent safety protocols adopted by the developed countries and explains the astounding economic potential of e-waste recycling.²⁵

A study by Alam and Bahauddin in 2015 deeply explored the issue of transboundary shipment of hazardous e-wastes and the 'dumping' of e-wastes from the developed countries to the developing and impoverished countries. It relied on purely qualitative data and was an analytical and deductive research whereupon it tried to link environmental degradation with human rights violation for attaining the vision of a rights based platform which prioritizes people of the disadvantaged community who bear the brunt of toxic exposure of e-waste derived contaminants. It will also enable them to access international legal redress in case the judicial and administrative organs of the state fail to sincerely tackle environmental pollution and protect the lives, health and livelihoods of the affected communities. It specifies that crude informal e-waste recycling practices in developing countries like Bangladesh greatly endangers the lives and health of workers as well as the environment and particularized the barriers of enforcing the environmental and hazard regulations owing to the socio-economic factors centering the

²¹ ibid.

²² ibid.

²³ ibid.

²⁴ Roy and others, 'Electronic waste management scenario in Bangladesh: policies,

²⁵ ibid.

²⁶ Alam (n 3)

²⁷ ibid.

²⁸ ibid.

informal recycling industry.²⁹ It insisted on bringing the informal recycling industry within governmental regulation, providing access to proper safety equipment to the workers and ensuring safe work environments for them as well as introducing the latest recycling technology of the modern recycling plants to the informal e-waste recycling factories and providing technical assistance as necessary.³⁰ Furthermore, the informal sector needs to be included in the decision-making and implementation of the environmental policies regarding e-waste management.³¹

A paper published by Feitshans in 1995 conducted a detailed analysis of the different international humanitarian legal instruments for assorting the status and recognition of the occupational health and safety rights in international perspective.³² It examined UDHR and ICESCR provisions appertaining to the human rights approach of workplace safety; ILO provisions for hazard mitigation mechanisms in the respective industries and the WHO principles for enhancing occupational health and safety.³³ It ascertained that the lack of strong drive for duly effecting the international humanitarian laws and principles caused an absence of an established jurisprudence for safeguarding the right to life and health in the workplace.³⁴

In the light of the above circumstances and available literature regarding my research topic, it is evident that although there are laws in our country regarding workplace hazard mitigation and safety measures, the issue of e-waste is not duly considered for lack of proper documentation and classification of e-wastes and their hazard potential; in addition to various practical socioeconomic hindrances to their implementation.

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²⁹ ibid.

³⁰ ibid.

³¹ ibid.

³² Ilse Levy Feitshans, 'Occupational health as a human right' [1995] whs-project.org https://whs-project.org/occupational-health-as-a-human-right/

³³ ibid.

³⁴ ibid.

1.3 Objective of the Research

The research question of this dissertation is whether the existing legislation in Bangladesh is adequate for safeguarding the occupational health and safety rights of e-waste management workers. It aims to conduct a thorough analysis of the existing legal provisions to see whether appropriate standards in respect of workplace safety and environment has been integrated to protect workers in this sector from the hazards and risks associated with their profession. It also wishes to ascertain whether appropriate forums were accommodated to alleviate worker's grievances and entrust them with proper remedial and compensatory mechanisms concerning any workplace injuries and accidents. Additionally, this paper intends to discern any loopholes or defects in the legislative and procedural mechanisms of the State along with other obstructions in implementing safe working conditions in the e-waste recycling factories in Bangladesh. It also concentrates in determining the necessary measures for the apical implementation of the provisions regarding occupational health and safety rights of workers in this field as well as achieving safe and happy work environments for a cleaner and prosperous society.

1.4 Research Question

Whether the existing legislation in Bangladesh is adequate for safeguarding the OSH rights of workers in the e-waste management system?

1.5 Scope of the Research

This research concentrates on the assessment of the worker's health and safety rights in the e-waste recycling industry of Bangladesh in respect of the legislations, policies and rules adopted by the government and its agencies for protecting them against workplace injuries and dangers such as The Labour Act, 2006, The Bangladesh Environmental Conservation Act, 1995, Hazardous Waste (e-waste) Management Rules, 2021.

1.6 Limitation of the Research

The research is gleaned from secondary data extracted chiefly from the articles written by prominent authors and the data and circumstances exhibited by them and analysis of the legislations, policies and guidelines governing the health and safety rights of e-waste management workers in Bangladesh. There was neither any field level analysis nor any face to face interaction with those associated with this industry on my part for coming up with the findings in my research. Till now, there has been no case decision in Bangladesh respecting the occupational safety and health rights of e-waste management workers; therefore, there is no case reference in my research. Besides, no scholarly excerpts are available in respect of the health and safety issues of e-waste recycling workers in areas outside of the major metropolises in Bangladesh, which does not reflect the perfect position of the workers all over the country.

1.7 Research Methodology

The methodology of this research involves qualitative process since it analyses only written and textual data. The primary sources of information here are national and international legislations and policies regarding occupational and health rights of workers in the e-waste management and secondary sources which are elicited from a few celebrated articles authored by eminent scholars regarding the broad situation of e-waste management in Bangladesh depicting the real scenario and field level analysis of the e-waste recycling industry in this country. For reinforcing my findings and building a base for my research, I have cited data and statistics presented in the secondary sources of my thesis gathered and collected by the authors of these articles.

Chapter-2: Protection of OSH Rights of E-Waste Management Workers in International Law.

2.1 General Provisions

OSH rights are addressed in the general provisions of international law by the Universal Declaration of Human Rights (UDHR) and the International Covenant on Economic, Social and Cultural Rights (ICESCR). There are multiple provisions under these two instruments that regard OSH rights as human rights. They are discussed below:

Article-3 of the UDHR states that every human being has the right to life, liberty and security of person.³⁵ Article-23 says about the right to employment for every person and equitable and auspicious workplace environment for all.³⁶ Articles-6 and 7 of the ICESCR augments the scope of Article-23 of the UDHR and reinforces its application in ensuring fair wages for the workers and combating discrimination in the workplace based on gender lines.³⁷ General Comment No. 18 of Article-6 of the ICESCR stresses on the need for stringent action against child labour for shielding children from all kinds of economic exploitation and work that can hinder their orderly physical and psychological growth and wellbeing.³⁸ Article- 12 expresses the approach of 'industrial hygiene' in ensuring access to healthcare for all; whereupon it stresses on the improvement of the workplace environment and cleanliness and combating all kinds of ailment.³⁹

General Comment No. 14 of Article-12 of the ICESCR clarifies the notion of 'right to health', which implies not only to prompt and efficient healthcare, but also to other factors such as easy access to safe and potable water, safe food, nutrition, proper housing, access to a healthy

³⁵ Universal Declaration of Human Rights (adopted 10 December 1948 UNGA Res 217 A (III) (UDHR) art 3

³⁶ ibid. art 23

³⁷ International Covenant on Economic, Social and Cultural Rights (adopted 16 December 1966, entered into force 3 January, 1976) UNGA Res 2200A (XXI) (ICESCR)

³⁸ General Comment No. 18 of Article-6 of the ICESCR (Adopted on 24 November 2005)

³⁹ ICESCR (n 37)

workplace environment and availability of adequate necessary health information, including proper sex and reproductive education. 40 It also construes Article-12.2(b) which insists on adoption of rigorous steps for the prevention of occupational accidents and diseases, and ensures appropriate workplace hygiene through access to safe and ample drinking water and sanitary facilities, reduction of exposure to hazardous elements and substances to workers and optimum minimization of workplace health hazards. 41 Paragraphs-1, 3 and 4 of the WHO's Beijing Declaration on Occupational Health For All, 1994 demonstrate the devastation caused by occupational diseases and accidents and emphasizes on instituting safe and healthy technologies for availing necessary OSH programs for combating occupational diseases and injuries. 42

2.2 ILO Provisions Governing Worker Safety

The preamble of the ILO Constitution pledges to protect workers from occupational disease and injury for fostering world peace. The ILO's Convention-155, sets out the onus of the member states for a comprehensive attainment of healthy and safe workplaces. Article-3(e) defines "health", which encompasses not only the absence of any disease or health disorder, but also implies achievement of prime physical and health conditions necessary for the elevation of workplace safety and hygiene, which is consistent with the meaning of 'right to health' provided by the General Comment No. 14 of Article-12 of the ICESCR. Articles-4, 8,9,11 and 12 mandate the member states to formulate appropriate legislative, policy initiatives and procedural mechanisms for the prevention of occupational accidents and diseases, timely and rigid inspection and assessment of workplace safety apparatus and environment, penalties for violations OSH directives of the government, training and educative facilities for the workers for

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⁴⁰ General Comment No.14 of Article-12 of the ICESCR (Adopted on 11 August 2000)

⁴¹ ibid.

⁴² WHO (Second Meeting of the WHO Collaborating Centres in Occupational Health Beijing, China) 'Declaration on Occupational Health For All' (11-14 October, 1994) WHO/OCH 94.1

⁴³ ILO Constitution

https://www.ilo.org/dvn/normlex/en/f?p=1000:62:0::NO:62:P62 LIST ENTRIE ID:2453907:NO

⁴⁴ International Labour Conference (67th Session) Occupational Safety and Health Convention, 1981 (Geneva 3 June 1981)

accident and disease prevention, evaluation of the design of the factories and machinery, hazard determination and countering policies and mechanisms.⁴⁵

Articles-5(e) and 21 expressly forbid any kind of reprisal or imposition of any cost on workers for striving to achieve the aims of Article-4 of this Convention and the standards of OSH. 46 ILO Convention-187 provides the promotional framework for the member states to promulgate adequate legislative and enforcement capacity to realize the objectives of the ILO Convention-155. 47 Articles-2, 3, 4 and 5 stresses on the enactment of an operative national OSH policy for upholding the intent of the national OSH laws and policies in the factories through the development of competent national bodies, meticulous assessment of the country's OSH situation through data collection and analysis for the effective supervision and inspection of the relative workplaces. 48 It stresses on deep partnership among the state machinery, employers, workers and their corresponding representative organizations for conducive accomplishment of safe working practices in industries. 49 It highlights the necessity of initiating strong support mechanisms for securing the OSH rights of workers in the SMEs and the informal economy; while copiously recompensing the workers injured by occupational accidents and diseases. 50

ILO's Recommendation No. 164 substantiates an exhaustive agenda for the introduction of effective tools by the government, employers and worker's representative organizations for the effective discharge of the obligations of the member states of the ILO's Convention-155.⁵¹ Articles-3 and 4 envision the member state's obligations for achieving and conducting the improvement of essential determinants for the effectual realization of the OSH rights in the workplaces; and Article-5 binds the member states to observe the principles of the Labour

⁴⁵ ibid.

⁴⁶ ibid.

⁴⁷ C187- Promotional Framework for Occupational Safety and Health Convention, 2006 (No. 187) (Adopted on 15 June 2006)

⁴⁸ ibid.

⁴⁹ ibid.

⁵⁰ ibid.

⁵¹ R164- Occupational Safety and Health Recommendation, 1981 (No. 164) (Adopted on 22 June 1981)

Inspection Convention, 1947 and Labour Inspection (Agriculture) Convention, 1969 for the formulation of applicable inspection procedures.⁵² Articles-10, 14 and 15 specify the employer's responsibilities for undertaking the required actions for achieving a safe and healthy working environment, instructing workers on quality OSH practices and genuine documentation and reporting of OSH scenario in the factories and any incident of occupational accidents or diseases to the delegated regulatory authorities.⁵³ Articles-8 and 12 asserts constructive collaboration among the public agencies, employer's and worker's representative organizations in accordance with Article-20 of the ILO's Convention-155.⁵⁴ Article-12 acknowledges the necessity of systematizing worker's safety and health committees for giving voice to the workers for advocating OSH rights in every workplace and comprehensively states the rights and duties of the aforementioned committees.⁵⁵

The above ILO legislations explicitly lays out the international rules and guidelines about steadfastly securing OSH rights in all workplaces globally. Regrettably, Bangladesh has not ratified any of these ILO legislations.

2.3 Protection of Workers from Contaminant Exposure In Light of ILO Provisions

Articles-4, 8, 9, 10, 11, 12 and 16 of the ILO Convention-148, Working Environment (Air Pollution, Noise and Vibration) Convention, 1977 instructs the governments of the member states to legislate the necessary instruments for preventing the exposure of workers to air pollutants, noise and vibration and monitor the factories and the respective industrial equipment through regular inspection and introducing guidelines for hazard reduction in the factories and imposition of penalties on employers for non-compliance of the directives in this regard.⁵⁶

53 ibid.

⁵² ibid.

⁵⁴ ibid.

⁵⁵ ibid.

⁵⁶ International Labour Conference (63rd Session) Working Environment (Air Pollution, Noise and Vibration) Convention, 1977 No-148 (Geneva 1 June 1977)

Article-15 obligates employers to appoint specialists for ameliorate the workplace safety and environment.⁵⁷ Articles-10 and 11(2) protect workers from persecution by banning employers from compelling workers to work without adequate safety equipment and imposing costs on the workers for enhancing the workplace conditions in any way.⁵⁸

Articles-4, 5, 6, 7 and 8 of the C 170- Chemicals Convention, 1990 (No. 170) requires the state parties to this convention to develop appropriate pertinent legislative and procedural mechanisms for ensuring the safe usage of chemicals and maintenance of advanced workplace safety levels, assess the hazard levels associated with chemical substances according to their classification and properties, ensuring the appropriate labeling of the materials or containers concerning the associated risk, providing the data sheets of chemicals articulating the risks posed by each of them to the employers.⁵⁹ It also safeguards workers from any act of retribution for refusal to work in unsanitary and unsafe conditions.⁶⁰ Articles-1, 2, 3, 4, 5 and 6 of the C139- Occupational Cancer Convention, 1974 (No. 139) obliges member states to promulgate the essential legal and procedural means of prevention of exposure of carcinogens, assessment and monitoring of the OSH scenario in the workplaces and its enhancement, protecting the health of the workers, inspecting and achieving strict adherence to the prescribed safety protocols of the respective government agencies.⁶¹ Unfortunately, Bangladesh is not a member of any of these conventions.

2.4 ILO Conventions for Prevention of Child Labour

Articles-2(1) and 5 of the ILO Convention-59 direct the member states to prevent the employment of children below the age of 15 years in jobs which are detrimental to their physical,

⁵⁷ ibid.

⁵⁸ ibid.

⁵⁹ International Labour Conference (77th Session) C170- Chemicals Convention, 1990 (No. 170) (Geneva 6 June 1990)

⁶⁰ ibid.

⁶¹ International Labour Conference (59th Session) C130- Occupational Cancer Convention, 1974 (Geneva 5 June 1974)

mental and moral wellbeing.⁶² Article-2 of the ILO Convention-182 imparts the applicability of the term "child" to any person aged below 18 years.⁶³ Articles-1, 3, 5 and 6 of this convention obligates the member states to uncompromisingly act on eliminating worst forms of child labour, which includes enslavement, bondage, child trafficking, child prostitution and pornography, drug trafficking and any task damaging to the health, safety and moral wellbeing of the child.⁶⁴ Paragraphs-3 and 4 of the Worst Forms of Child Labour Convention, 1999 delineates the major risks specified in Article-3(d) of the ILO Convention-182.⁶⁵ Optimistically, Bangladesh ratified these conventions.⁶⁶

2.5 ILO Provisions on Labour Inspection

Articles-3, 4, 6, 7 and 9 propagate the member state's duties for due appointment of duly qualified labour inspectors for the effective monitoring of the state of compliance of the factories and industrial establishments with the State's OSH rules and the effectual enforcement of the laws in this regard.⁶⁷ Articles-12 and 13 delineate the power of inspectors for the imposition of the OSH and other labour legislations on the industries.⁶⁸ Article-15 discloses the bindings and prohibition of inspectors as regards their duties.⁶⁹ Articles-17 and 18 contend that the member states must allocate for adequate and effective penalties for the violations of the laws enforceable by inspectors and interference in their duties by the employers.⁷⁰

https://www.ilo.org/dyn/normlex/en/f?p=1000:11200:0::NO:11200:P11200 COUNTRY ID:103500

⁶² International Labour Conference (23rd Session) Co 59- Minimum Age (Industry) Convention (Revised), 1937 (No. 59) (Geneva 3 June 1931) (Adopted on 22 June 1937)

 ⁶³ International Labour Conference (87th Session) C182- Worst Forms of Child Labour Convention, 1982 (No. 182)
 (Geneva 1 June 1999) (Adopted on 17 June 1999)
 ⁶⁴ ibid

⁶⁵ R190- Worst Forms of Child Labour Recommendation, 1999 (No. 190) (Adopted on 17 June 1999)

⁶⁶ ILO Ratifications for Bangladesh

⁶⁷ International Labour Conference (30th Session) Co81- Labour Inspection Convention, 1947 (No.81) (Geneva 19 June 1947) (Adopted on 11 July 1947)

⁶⁸ ibid.

⁶⁹ ibid.

⁷⁰ ibid.

2.6 ILO Provisions on Worker Compensation for Occupational Diseases and Accidents:

Articles-5, 6 and 7 of the ILO Convention-17 explicitly constitutes the provisions of compensation for the injured workers in an accident; whereas compensation must be paid within the 5th day of the accident along with additional payment in case of incapacity of the worker; wherefore it shall be reimbursed through periodic payments, unless the competent authority of the member states is adequately convinced that the payment of the monetary recompense through a lump sum will result in its proper utilization. ⁷¹ Articles-9 and 10 obligates the member states to bear all the medical expenses of the injured workers and ensure their efficient replacement of artificial limbs if necessary. ⁷² Article-11 requires member states to incorporate relevant provisions so that injured workers (or, in case of the injured worker's death, his/her dependents) can be duly compensated even if the employer or the insurer becomes insolvent. ⁷³ Bangladesh is not a party to this convention. Article-1 of the ILO Convention-18 asserts that workers injured by occupational diseases (in case of death, their dependents) shall not receive any less compensation than those provided for occupational accidents in the respective national legislations of the member states. ⁷⁴ Article-2 specifically provides a list of occupational diseases in the attached schedule. ⁷⁵ Bangladesh is a party to this convention. ⁷⁶

2.7 International Environmental Law Provisions For Hazardous Waste Management:

Article-4 of the Basel Convention, Articles-6 and 9 of the Stockholm Convention, Article-13 of the Rotterdam Convention and Article-5 of the Aarhus Convention presage the sturdy

⁷¹ International Labour Conference (7th Session) Co17- Workmen's Compensation (Accidents) Convention, 1925 (No.17) (Geneva 19 May 1925) (Adopted on 10 June 1925)

⁷² ibid.

⁷³ ibid.

⁷⁴ ibid.

⁷⁵ ibid.

⁷⁶ ILO Ratifications for Bangladesh https://www.ilo.org/dyn/normlex/en/f?p=1000:11200:0::NO:11200:P11200 COUNTRY ID:103500

management of hazardous wastes and their effective disposal for prevention of harm to human health and the environment and seamless communication of the interrelated hazards to empower the public for undertaking prompt and decisive action for optimum mitigation of the ensuing environmental deterioration and health disorders, as well as aversion of unchecked international movements of hazardous waste.⁷⁷

Article-10 of the Stockholm Convention, Article-15 of the Rotterdam Convention and Articles-1 and 4 of the Aarhus Convention obligate the governments of the member states to establish deep ties with the public and pursuing a democratic approach in hazard prevention and environmental preservation and assuring environmental justice.⁷⁸ The Liability Protocol of the Basel Convention seeks the formulation of a viable liability and compensatory mechanism for ensuring accountability in cross-border shipments and eradication of illegal traffic of wastes through rigorous monitoring of the international supply chains of hazardous waste.⁷⁹ Bangladesh has ratified Basel Convention and Stockholm Convention but refrained from participating in the Rotterdam Convention and the Aarhus Convention.⁸⁰

Although there are plentiful international instruments dictating OSH rights of workers globally, its jurisprudence is still at inception because of absence of dependable enforcement and

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Passel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal (Adopted on 22 March 1989): Stockholm Convention on Persistent Organic Pollutants (POPs) (Adopted on 22 May 2001) (Came into force on 17 May 2004):Rotterdam Convention on the Prior Informed Consent (PIC) Procedure for Certain Hazardous Chemicals and Pesticides in International Trade (Adopted on 10 September 1998): Aarhus Convention on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters (Adopted on 25 June 1998)

⁷⁸ Stockholm Convention on Persistent Organic Pollutants (POPs) (Adopted on 22 May 2001) (Came into force on 17 May 2004):Rotterdam Convention on the Prior Informed Consent (PIC) Procedure for Certain Hazardous Chemicals and Pesticides in International Trade (Adopted on 10 September 1998): Aarhus Convention on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters (Adopted on 25 June 1998)

⁷⁹ Basel Protocol on Liability and Compensation (Adopted at the Fifth Conference of Parties, COP-5 on 10 December 1999)

⁸⁰ Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal (Status of ratification) < https://www.basel.int/Countries/StatusofRatifications/PartiesSignatories/tabid/4499/Default.aspx>: Stockholm Convention on Persistent Organic Pollutants (POPs) (Status of ratification)

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procedural mechanisms concerning the existing legislative instruments; coupled with lack of adequate penal sanctions for violations of OSH rights and the subsequent breach of human rights and personal security of workers. Bangladesh ratifying some of the basic international humanitarian conventions and labour provisions imparted by ILO, including some key environmental provisions; it withheld its approval of some major ILO standards governing workplace safety and prevention of contaminant exposure to workers.

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⁸¹ Feitshans (n 32)

Chapter-3: National Legislations, Rules and Policies regarding OSH and Ewaste Management

3.1 Constitutional Provisions Recognizing the OSH Rights of Workers in Bangladesh

OSH rights of e-waste recycling workers are esteemed under the Part-II and Part-III of the Constitution, which affirms the Fundamental Principles of State Policy and Fundamental Rights guaranteed to the citizens, and characterizes specific provisions committed to uphold worker's interests. OSH rights are protected under Articles-32, 34 and 40 for preserving the rights to life, personal security and liberty sustained by Articles-14, 15, 18, 18A and 20 for substantiating the legitimate rights of workers and besides, the citizens by large, of their employment rights, fair and respectable remuneration, creditable standards of living and subsistence and protection of public health and the environment.⁸² Therefore, OSH rights of the e-waste workers have earned constitutional recognition in Bangladesh.

3.2 The Provisions of the Labour Act, 2006

The Labour Act, 2006 is the parent legislation for all labour guidelines and regulations of Bangladesh and it carries a comprehensive background for the OSH rights of workers here. It is divided into major sections covering various essential topics centering the worker's OSH rights, guaranteeing their safety in workplaces and better health for a prosperous society and generation. They are demonstrated hereby:

Chapter-V and VI furnishes the health preservation measures and the required workplace safety protocols for instituting cleaner and healthier working environments; besides prevention of industrial disasters and the consecutive worker deaths and injuries and property damage, laid-out by Sections-51 to 5 9 and Sections-61 to 78.83 Particularly, there are major violations of these aforesaid directives for colossal defects in the procedural aspects, causing complete neglect of

⁸² The Constitution of the People's Republic of Bangladesh, 1972

⁸³ The Labour Act, 2006

the vital safety precautions in the informal recycling factories.⁸⁴ Furthermore, widespread ignorance of the inferable health risks of the workers due to toxic exposure; exacerbated by undeveloped recycling practices and lack of access to adequate safety equipment, coupled with absence of regulatory measures has frustrated the intent of the above legislations.⁸⁵ Hence, there are sufficient laws for addressing the OSH rights of e-waste workers but compliance cannot be ensured as to the informal recycling establishments in this regard.

Chapter-XII provides compensation to workers for employment injuries encompassing Sections-150(1), (2), 155; including Section-160 outlining the medical examination of the injured workers and Section-160(11) obligates employers to initiate joint medical insurance schemes in their institutions for funding the medical expenses of the injured workers contingent upon any occupational accidents and diseases. The first, second and third schedules of the Act conspicuously enlists the incapacities and the resulting earning losses from occupational accidents and a compendious list of the occupational diseases that could be reasonably attributed to workplace accidents. The fifth schedule imparts the amount of compensation payable for any workplace injury, including death or permanent disablement; whereas the worker's dependents are to be awarded Tk./- 1,00,000 and Tk./- 1,25,000 for injury. In the realistic scenario there is no implementation of the above edicts which is evident through the absence of any case laws and research literature concerning this sector. The workers are predominantly unaware about their OSH rights and compensatory entitlements for any workplace injury embodied in our labour law.

The Labour Act, 2006 has definitive provisions regarding assignation of underage workers, cited as "adolescent workers" in the Act. Section-2(8) of The Labour Act, 2006 stipulates "adolescent" as a person who has completed the age of fourteen years but still has not attained eighteen years of age. 89 Chapter-III of the Act regulates the appointment of adolescent workers. 90

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⁸⁴ ibid.

⁸⁵ Mowla (n 1): Roy (n 4)

⁸⁶ Labour Act (n 84)

⁸⁷ The Schedules of The Labour Act,2006

https://www.lawyersnjurists.com/article/the-bangladesh-labour-act-2006-the-schedules/

⁸⁸ ibid.

⁸⁹ Labor Act (n 84)

Sections-34, 35, 37 and 38 expressly bars the employment of any person below fourteen years of age (referred to as "child"); while adolescents can be employed only after due certification by a registered physician of his/her ability to perform the particular job he/she is appointed for, or solely for training and educational purposes, save for the government suspending the enforcement of Section-34(2) on account of public necessity owing to a national emergency. Section-39 and 40 forbids the appointment of adolescents in tasks the government deems to be risky through its periodic publication of gazette notification and also in any machinery functions without rigorous training and knowledge about their correct operation and risk mitigation procedures and above all, under the supervision of a highly skilled and experienced person respecting machinery tasks. The Ministry of Labour and Employment published a circular on April 29, 2022 categorizing the "risky jobs" specified in Section-39(1) and the physical and psychological dangers associated with them. The ministry also drafted the "Proposed Worst Form of Child Labour List", which evidently distinguished the involvement of children in street based work and in informal waste management (along with other tasks) as degrading for their growth and wellbeing.

Applied field-level investigation has disclosed the stark contrast in the e-waste recycling sector, where the average workforce entails only male persons 10 to 60 years old and above 30% of them are below 20 years of age. ⁹⁵ Research has evinced the dismal account of child labour in this sector, which employs more than 50,000 children in various stages and inducing numerous long-term diseases in 83% of the child workers, killing 15% of them. ⁹⁶ Thus, despite diverse legislative and governmental safeguards for child labour prevention, the helplessness of the destitute children are being abused for profiteering in this sector.

⁹⁰ ibid.

⁹¹ ibid.

⁹² ibid.

⁹³ Schedule of The Labour Act, 2006 Section-39(1) S,R,O, No.91-Law/2022 (Dated 7 Baishakh, 1429 BS/ 20 April, 2022)

⁹⁴ Ministry of Labour and Employment, Central Monitoring Committee on Child Labour, *Worst Form of Child Labour List* (Meeting of the NPA Drafting Committee on 9th November, 2020) (Dated 30th November, 2020)

⁹⁵ Mowla (n 1)

⁹⁶ Islam (n 7)

3.3 The Provisions of the Bangladesh Environmental Conservation Act, 1995

The e-waste sector concerns the issue of environmental degradation for the existence of pernicious substances and chemicals. ⁹⁷ Section-2(D) defines "environment", Section-2(B) explains "pollution" and Section-2(AAA) connotes "hazardous waste". ⁹⁸ Section-6(C) articulates the restrictions on the manufacture, importation, storage, loading and transportation etc. of hazardous wastes and Table No. 6 of Section-15 cites the penal provisions for violations of Section-6(C). ⁹⁹ Basically the above regulations are not complied with as the non-participation of the formalized industrial sectors has expedited the dominance of the informal recycling shops, who use crude extraction methods which jeopardize the health and safety of workers as well as the environment and biodiversity through the enormous release of toxic substances and noxious chemicals in the environment. ¹⁰⁰ This has prompted contamination and deterioration of soil, agricultural lands, groundwater and water bodies, air pollution and water pollution. ¹⁰¹ Thus, environmental deterioration due to mismanagement of e-wastes remains unabated.

3.4 Provisions of Hazardous Waste (e-waste) Management Rules, 2021

The government has drafted its policy on e-waste management and disposal to manage the escalating burden of e-wastes and halt environmental destruction. Section-2(4) of the Hazardous Waste (e-waste) Management Rules, 2021 defines "e-wastes". Sections-3, 4, 5, 6, 7 and 8 portray the respective duties of the producers and wielders, storekeeper, businesspeople, shop owners, repairers, collection centers, consumers, dismantlers and recyclers as to the appropriate treatment and disposal of e-waste. Section-13 illustrates the e-waste storage method, Section-14 outlines the permissible limits of hazardous substances in producing electrical and electronic

⁹⁷ ibid.

⁹⁸ Bangladesh Environmental Conservation Act, 1995

⁹⁹ ibid.

¹⁰⁰ Roy (n 4): Alam (n 3)

¹⁰¹ Islam, (n 7)

Ministry of Environment, Forestry and Climate Change Affairs, Hazardous Waste (E-Waste) Management Rules,
 2021 (S.R.O. No. 187-Law/2021) (Dated 20 Jaishtha, 1428 BS/03 June, 2021)
 ibid.

products in view of Schedule-3 of the Rule, and Section-15 bans importing old or used electronic and electrical appliances. ¹⁰⁴ Section-21 expounds the liability of e-waste producers, collection centers, transporters, dismantlers, repairers and recyclers, while Section-23 conveys the responsibility of government institutions such as city corporations and municipalities respecting e-waste management. ¹⁰⁵ Section-24 states the penalties for violations of the directives in this rule, which is specified in Table No. 6 of Section-15(1) of the Bangladesh Environmental Conservation Act, 1995. ¹⁰⁶ Lack of access to adequate knowledge, expertise and infrastructure for the environment-friendly management of e-wastes of the informal sector has spawned extensive violations of the above directives. ¹⁰⁷ Additionally, various socio-economic barriers have facilitated the absence of rigid administrative actions for combating environmental destruction in this aspect. ¹⁰⁸ Consequently, there is total disorder in the e-waste recycling sector in Bangladesh.

3.5 Violations and Implementation Gaps of the OSH Rights of E-waste Management Workers in Bangladesh

Despite having so many laws, rules and policies for preservation of OSH rights of workers in Bangladesh, the prevailing working conditions in the e-waste sector portrays a menacing situation as regards the protection of health and lives of the workers. Excessive infringement of the existing legal framework has wrought this appalling state of affairs. We will now delve into the exact violations of the rules in this regard.

Sections-51, 52 and 53 of The Labour Act, 2006 are stridently violated since there is no cleanliness in the e-waste recycling shops with the air contaminated with heavy metals and other toxicants and faulty disposal procedures causing soil and water pollution. ¹⁰⁹ Sections-62, 77 and 78A too are widely breached as there is no knowledge about the toxic hazards of e-wastes and

105 ibid.

¹⁰⁴ ibid.

¹⁰⁶ ibid.

¹⁰⁷ Roy (n 4): Alam (n 3)

¹⁰⁸ Alam (n 3)

¹⁰⁹ Mowla (n 1)

the necessity of proper personal protective equipment, exposing workers to various long-term life-threatening illnesses. 110

Obtrusive contravention of Sections-150(1), (2), 155; including the fifth schedule of The Labour Act, 2006 are obvious with the absence of any compensatory proceedings or judicial awards for any occupational injuries or diseases thus far. Sections-160 and 160(11) are also not observed, which is pictured by the lack of any documentation by the government alongside any author or researcher respecting any medical examination for workplace injury or medical insurance schemes in the e-waste recycling factories.

Sections-34, 35, 37, 38, 39 and 40 are egregiously contravened as children from 10 years of age are engaged in e-waste recycling operations alongside adults involving life-threatening health risks and without any safety precautions. There is no medical assessment as to their fitness for work in this sector. It

Non implementation has rendered the domestic environmental legislations and policies to be futile; wherein there is no enforcement of the material provisions of the Bangladesh Environmental Conservation Act, 1995 and the Hazardous Waste (e-waste) Management Rules, 2021. There is no field-based applicability of Section-6(C) of the Bangladesh Environmental Conservation Act, 1995 and Sections-3, 4, 5, 6, 7, 8, 13, 14, 21 and 23 as the informal sector symbolizes employers and workers lacking in consciousness about the toxic hazards in e-wastes and their environmentally sound handling. Resultantly, worker's health and lives and the environment suffer greatly from the discharge of toxic pollutants.

There is no updated information on the implementation of Section-15 of the Hazardous Waste (e-waste) Management Rules, 2021; since Bangladesh used to be a leading importer of discarded electronics and there is no literature regarding the scenario of e-waste importation after the commencing of this rule.¹¹⁵

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¹¹⁰ Mowla (n 1): Roy (n 4)

¹¹¹ Mowla (n 1)

¹¹² Mowla (n 1)

¹¹³ Roy (n 4); Alam (n 3)

¹¹⁴ Mowla (n 1): Islam (n 7)

¹¹⁵ Alam (n 3)

The slackness of the state agencies, accompanied by numerous socio-economic barriers, have together contributed to non-implementation of Section-15(1), Table No. 6 of the Bangladesh Environmental Conservation Act, 1995.¹¹⁶ There has been no reported proceeding under this section.

There are plenty of legislative and policy safeguard mechanisms for salvation of OSH rights of e-waste management workers and the environment and biodiversity. But they are being unable to achieve their objectives for absence of ample awareness among the stakeholders such as workers and employers respecting the tremendous health and environmental risks stemming from the toxic elements and contaminants from the e-wastes and likewise the OSH rights and other safeguard provisions prescribed in our labour provisions and other governmental policies.

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¹¹⁶ Alam (n 3)

Chapter-4 Conclusion

4.1 Findings

Despite the adequacy of the Bangladeshi legislations to defend the OSH rights of e-waste management workers, including compensatory remedies for occupational accidents and diseases; ensuring compliance to them is a challenge. The high level of ignorance among workers about the life-threatening health risks from toxic exposure, necessity of stringent workplace safety protocols and access to crucial safety equipment, the compensatory remedies afforded to them, the inactiveness of the regulatory agencies and the dominance of the informal sector who operate in an environmentally unsafe manner, disenchanted the purpose of these law.

Unprofessional extraction methods utilized by the informal sector, lack of administrative actions and utter disregard of the domestic environmental laws have advanced deterioration of the environment and biodiversity through immense release of toxic pollutants. Stringent provisions prohibiting child labour and regulation of adolescent employment have also failed to prevent the exploitation of vulnerable and destitute children in hazardous jobs involving serious toxicants, injuring their health and endangering their lives; whilst depriving them of education and a dignified life.

OSH and other labour rights have garnered Constitutional recognition, conforming to the obligations of the international humanitarian provisions and ILO instruments governing child labour prevention, labour inspection and worker compensation. Bangladesh is also obliged to exert itself for environmental protection under the Basel Convention and Stockholm Convention, which it ratified. Nevertheless, Bangladesh has refrained its membership from key ILO legislations safeguarding OSH rights of workers and shielding them from contaminant exposure inclusive of critical environmental edicts such as the Rotterdam Convention and Aarhus Convention. Furthermore, lack of robust international enforcement procedures and penal sanctions for violations have afforded an inept jurisprudence of OSH rights globally.

4.2 Recommendation

I will here discuss the solutions of the problems affecting the e-waste sector identified in my research and also impart my propositions for the complete modernization of the e-waste sector for prioritisation of worker's lives and health and environmental protection. Thusly, they are stated as:

Bangladesh must adopt dramatic measures for the complete overhaul of the procedural mechanisms, including the relevant administrative and law-enforcement organs for the optimal application of the labour and environmental provisions for upholding the OSH rights of e-waste workers and prevention of environmental harm. The State must ensure the seamless dissemination of all the necessary knowledge and information for safety and hazard prevention to the e-waste workers and establish widespread awareness among them about the applicable OSH laws and remedies available regarding any occupational accidents and diseases; while applying the proper language and medium for accurate communication with them. The State must pledge for unrestricted access to legal aid for the e-waste workers. The State must undertake intensive programmes for redesigning and remodelling the informal sector acquiring green technology for the environmentally safe handling of e-wastes. The State must assure rigorous security for workers instituting actions and proceedings against their employers for seeking redress for workplace injuries. If necessary, the State shall grant adequate subsidies to the e-waste recycling industry for adoption of the latest and green technologies for healthy, safe and pollution free recycling operations. Bangladesh must approve the ILO legislations administering the global OSH rights of workers and their protection from toxic exposure; additionally the Rotterdam Convention and the Aarhus Convention for letting the international community to observe the country's e-waste situation and the comprehensive eco-quality. The government must initiate drastic measures to combat the violations of the labour provisions regulating the employment of adolescents and launch thorough action for elimination of child poverty, hunger and illiteracy as well as intensive prioritization of child protection.

4.3 Conclusion

The e-waste recycling workers of Bangladesh are gifted with abundant legislative and policy safeguards dedicated for establishing safe and healthy work environments and securing appropriate redress for occupational injuries and diseases. Unfortunately, lack of implementation and procedural flaws are casting doubts on their applicability, facilitated by extensive unfamiliarity of the workers with the inherent hazards of e-wastes and their safe-handling techniques, combined with the obliviousness of the legislative safeguards of their workplace safety has engendered this dire situation of OSH rights in Bangladesh. The government, private sector and the people as a whole need to harmoniously cooperate to achieve a country safe for workers and pollution-free atmosphere.

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