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COLLEGE OF LAW AND GOVERNANCE STUDIES

SCHOOL OF LAW

LLM PROGRAM ON PUBLIC INTERNATIONAL LAW

REGULATION OF MOVEMENT AND DISPOSAL OF HAZARDOUS WASTE IN ETHIOPIA: A CRITICAL ANALYSIS OF THE LEGAL AND INSTITUTIONAL FRAMEWORKS.

By:

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List of Abbreviations and Acronyms

AU	Africa union
DDT	Dichloro Diphenyl Trichloroethane
EAP	Environmental Action Programme
EPA	Environmental protection authority
FAO	Food and Agriculture organization
ESM	Environmentally Sound Management
FDRE	Federal Democratic Republic of Ethiopia
EFDCA	Ethiopian Food and Drug Control Authority
MOH	Ministry of Health
MoTI	Ministry of Trade and Industry
NGO	Non-governmental organization
OAU	organization of African Unity
PCB	polychlorinated biphenyls
POP	persistent organic pollutant
PIC	prior informed consent
REA	Regional Environmental Authority
TFS	Trans-frontier Shipments of Waste
UNEP	United Nations Environment Program
UA	Urban Administration

Abstract

The movement of hazardous wastes for disposal in underdeveloped nations has been characterized as a global kind of environmental injustice and toxic colonization. This practice has been met with opposition from the public.¹ In response to public outcry and criticism from environmentalists against the practice of utilizing underdeveloped nations as waste dumping sites, the Basel convention has been adopted in 1989 to control the movement of dangerous waste.² African countries ratified the Bamako convention in 1991 with several fundamental modifications to the Basel convention because they were dissatisfied with the former. Ethiopia has ratified both conventions, and also adopted different national legislations and established institutions to control movement of dangerous waste and its disposal. Hence, the purpose of this research is to critically analysis the legal and institutional frameworks of Ethiopia to control movement of hazardous waste and its disposal.

Key words: *Environment, Ethiopia, Movement, Hazardous Waste.*

¹ Dr. Zada Lipman, Trade in Hazardous Waste: Environmental Justice Versus Economic Growth Environmental Justice and Legal Process Macquarie University, Australia. (Can be accessed at https://edisciplinas.usp.br/pluginfile.php/4060252/mod_resource/content/1/AULA%208%20-%20DEBATE%20Trade%20in%20Hazardous%20Waste.pdf last accessed on April 18, 2024)

² *ibid*

CHAPTER ONE

Introduction

1.1. Background of the Study

Waste is an unavoidable by-product of most human activity and may sometimes contain hazardous and unwanted materials that can harm the environment or human health.³ Those hazardous wastes, by reason of their characteristics, are toxic, flammable, explosive, or corrosive and cause danger to health or the environment.⁴ Very sadly, this dangerous hazardous waste has been increasing rapidly from time to time across the globe due to socio-economic development competition and new technologies.

From the total hazardous waste released into our environment, the developed world generates more than 80% of it.⁵ As developing countries are the recipients of the harm, developed countries did not give as much consideration to other global problems like terrorism. Surprisingly, of the total generated hazardous waste substances, at least 10% enter international trade.⁶ Because of this, developing countries are becoming increasingly targeted and vulnerable destinations for the export of hazardous waste through transfer of dangerous waste across borders, either with the consent of the states or through illegal trading activities.

A lot of reasons can be mentioned for developed countries preference for exporting hazardous waste to less developed countries rather than recycling it. Some of those reasons include the growth of stringent administrative and legal regulations, which will increase the cost of

³ Cletus Famous, impediments and desirability of complete ban on international movement of toxic waste, open political science research article, 2018 (can be accessed at <https://doi.org/10.1515/openps-2018-0010> accessed on 18, April, 2024)

⁴ Decision of the Council on the Control of Transboundary Movements of Wastes Destined for Recovery Operations, OECD Legal Instruments (can be accessed at ([http:// legalinstruments.oecd.org](http://legalinstruments.oecd.org)). accessed on April 18, 2024)

⁵ Mary E. Kelly, Comment, International Regulation of Trans frontier Hazardous Waste Shipments: A New Environmental Directive.

⁶ David. Hackett, An Assessment of the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal, American university international law review article, volume 5, issue 2, 1990.

economic activities related to the disposal and management of hazardous waste in industrialized countries, Shrinking of geographical space for the installation of waste facilities in many developed countries like western Europe and raising of public awareness in those industrialized countries could be mentioned.⁷

Due to the excessive dumping of hazardous waste in impoverished developing nations, such as those in Africa, the international community has begun to pay less attention to this harmful practice of using developing countries as dumping grounds for waste. Instead, international treaties like the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal have been adopted.⁸ Ethiopia ratified this Convention on April 12, 2000, marking a significant step in regulating the movement and disposal of hazardous waste globally. Nearly two decades later, in 2018, Ethiopia passed separate legislation (Proclamation No 1090/2018) to prevent the negative impacts on human and animal health, as well as the environment, caused by transportation and disposal of hazardous waste.

However, even after the adoption of this international convention and other regional and national laws on the restriction of movement of hazardous wastes and their disposal, the quantities of hazardous waste have been increasing, and environmental pollution is getting worse from time to time. The fast-growing world population and the rapid increase in demand for raw materials at a faster rate with world population growth will also lead to the release of more hazardous waste, and environmental pollution will get worse for the coming generation too, unless serious measures are taken both in framing strict policies and more restrictive laws as well as implementing those laws and policies. Currently, in addition to the waste products from industries and other human activities, technological advancement also brings countless electronic and electronic equipment wastes.⁹

Therefore, as hazardous waste has enormous impacts on the environment, air, soil, water, and wildlife health across the world in general and in Ethiopia in particular, it is very crucial to adopt more detailed and restrictive laws and policies for the movement of hazardous waste. It is also the right time to establish a strong system of hazardous waste management and disposal control,

⁷ Sean D. Murphy, Prospective Liability Regimes for the Transboundary Movement of Hazardous Wastes, Political science Journal, vol. 24, page 30-36, 1988.

⁸ ibid

⁹ ibid

and the purpose of this study is therefore to examine the legal and institutional frameworks of Ethiopia in regulating movements and disposal systems of hazardous waste, which is an imminent threat to the environment and human wellbeing.

1.2. Statement of the Problem

Movement of hazardous waste is very dangerous and should be an intolerable practice because of its long-term negative impacts, even on generations, and risks to the environment, human life, and well-being. Because of the rapidly expanding population, illegal trade and smuggling of hazardous wastes, and the growing trend of industrial development, problems related to waste management, especially in metropolitan cities, have become a serious problem in Ethiopia. Because of this trend, and its long term dangerous effect, movement of hazardous waste has been on international agenda since 1980s when it was included as one of the three priority areas in the United Nations Environment Programme. Following this attention by UN, in March 1988, UNEP sponsored the establishment of the Basel conference, consisting of 116 nations, to engage in negotiations on the control of Transboundary movement of such wastes and the Basel convention was adopted in 1989.¹⁰ During the Basel conference, the developed and developing countries had opposite stands. The former were focused on waste management, while the latter, with the support of the then OAU argued for total ban of hazardous waste importation. With the support of OAU, African states were able to totally ban import and export activities of hazardous waste in Africa and the Control of Movements of Such Wastes generated in Africa.¹¹ Because of illicit markets, smuggling, and occasionally financial incentives, the amounts of hazardous waste have been rising periodically in developing nations like Ethiopia, even after the adoption of international and regional agreements. The total amount of hazardous waste being sent to developing countries has not been accurately documented, as these waste streams are often mismanaged, leading to more significant environmental impacts than officially reported. Consequently, due to the serious movement of hazardous waste and its inadequate management

¹⁰ Patricia Nemeth, PhD Candidate Sergeant, Safety and Security Service Department of Safety and Security, Why has the Basel Convention not adequately addressed the transboundary movements of hazardous waste to the developing world, Report on UN Sabbatical Leave, December 2014.

¹¹ Valentina Okaru, The Basel Convention: Controlling the movement of Hazardous Wastes to Developing Countries, Fordham Environmental Law Review, Article 6, Volume 4, Number 2, 2011, page 26-34.

in recipient developing nations, accurately estimating the volume of hazardous waste is a challenging endeavor.¹²

Due to the inadequate handling of hazardous wastes in countries such as Ethiopia, the waste may become mixed with regular household or commercial items, or disposed of in an unregulated manner through methods like burning, burying, or being released into sewers, water bodies, or the ground surface. This will directly lead for an adverse impact on human health and the environment. The health related effects range from acute poisoning to long term effects, such as cancers, birth defects, neurological disorders, respiratory problems, and hormone-disruption.¹³

In order to avoid the long-term worst consequences of hazardous wastes, effective control in hazardous waste movement and waste management is very critical in Ethiopia. Because only a small percentage of the country's inhabitants are aware of the worst health impacts of hazardous wastes, there is very limited access to safe drinking water, no habit to identify poisoned and non-poisoned consumption goods, and no habit to claim a healthy and clean environment in Ethiopia.¹⁴

Therefore, with poor infrastructure and health insurance in Ethiopia, it is very crucial to have clear policies, very restrictive laws, well-organized institutions to prevent and regulate movement of hazardous wastes, and its proper disposal so as to safeguard the environment, and wellbeing of the people. That is why the researcher wants to critically examine legal and institutional frameworks of Ethiopia to control movement of hazardous waste and its proper disposal.

1.3. Objective of the Study

1.3.1. General Objective of the Study

The general objective of the study is to examine legal and institutional frameworks of Ethiopia to regulate movement of hazardous waste and its disposal.

¹² *ibid*

¹³ Yitages Alamaw, "Hazardous wastes and state obligations under the global and African conventions to regulate transboundary movement of same", Jimma University Journal of Law, Vol. I, No.1, page 86-92.

¹⁴ *ibid*

1.3.2. Specific Objectives of the Study

The specific Objectives of the Study are:-

- ❖ To scrutinize existing laws and institutions in Ethiopia for controlling movement of hazardous waste and its disposal.
- ❖ To inspect sufficiency of existing laws and institutions in Ethiopia for preventing illegal movement and improper disposal of hazardous waste.
- ❖ To evaluate institutional coordination mechanisms for preventing illegal trafficking of hazardous waste to Ethiopia.
- ❖ To identify critical problems which justify the necessity of having stringent laws and well organized institutions in Ethiopia to regulate movement of hazardous waste and its proper disposal.
- ❖ To examine the extent to which existing international, regional and national laws address the problem of movement and disposal of hazardous waste
- ❖ To find out legal and institutional gaps, if any, and their impediment for proper control of trading and disposal of hazardous waste in Ethiopia.

1.4. Research Questions

1.4.1. General Question of the Study

The general question of the study is:-

Whether Ethiopia have adequate legal and institutional framework to regulate movement and disposal of hazardous waste?

1.4.2. Specific Questions of the Study

Specific questions of the study are:-

- What legal frameworks and institutional structures are currently in place in Ethiopia to regulate movement and disposal of hazardous waste?
- Whether the existing laws and institutions adequate to prevent illegal movement and improper disposal of hazardous waste in Ethiopia?
- Whether the concerned institutions work in close collaboration and coordination?

- Whether Ethiopia needs to adopt more stringent laws and viable institutions to regulate illegal movement and improper disposal of hazardous waste in Ethiopia?

1.5 Methodology of the Study

1.5.1 Study design (Method)

This research methodology is doctrinal legal research type. Doctrinal research type will be employed for the extensive exploration and deep enquiry of legal rules. Therefore, the researcher has critically analyzed legal rules in the FDRE constitution, proclamation No 1090/2018, 299/2002, 1075/2018, the Basel and Bamako Conventions and other relevant global, regional and national laws concerning regulation of movement and disposal of hazardous waste. Doctrinal research focuses more on laws as written in books rather than laws in practice. In this context, the researcher has conducted a thorough examination of legal and institutional frameworks aimed at regulating transportation and disposal of hazardous waste.

The researcher, in addition to investigating existed legal rules on the title, has also assessed institutional frameworks in Ethiopia to control movement of hazardous waste and its disposal. Further to this, roughly assessed institutional coordination and cooperation to prevent illegal movement of hazardous waste to Ethiopia.

1.5.2 Types of Data Sources

In this study, the researcher used both primary and secondary data sources. With regard to primary data sources, for the doctrinal qualitative part, the researcher used relevant national, international, and regional laws which have direct and indirect link with movement and disposal of hazardous waste. This primary data sources which have been used for this study includes; international and regional treaties on environmental protection, and regulation of movement of hazardous waste, national legislations; including FDRE constitution, statutes and administrative rules and regulations and directives have been used. The researcher has also used secondary data sources like; Law journals, encyclopedia, Articles, treaties, text books, dissertations, commentaries, and other relevant scholarly writings.

Therefore, in this study, the researcher used both primary and secondary data sources to collect the required data. But due to their validity and proximity to the truth, much emphasis was given for primary data sources.

1.5.3 Data Collection Tools

1.5.3.1. Document Analysis

As long as this study is purely doctrinal legal research, the researcher used document analysis as the primary data collection tool. Accordingly, the researcher has discussed different international, regional, and national laws dealing with the control of hazardous wastes movement and disposal in Ethiopia. Deep investigation and in depth discussion was made regarding international and regional agreements concerning the movement of hazardous waste, FDRE constitution, proclamation No 1090/2018 and other relevant laws (proclamations, regulations and directives).

1.6. Scope of the Study

The scope of this study is confined to legal and institutional framework assessment on the regulation of movement and disposal of hazardous waste in Ethiopia. To this end, all relevant international, regional and national laws have been discussed.

1.7. Ethical Considerations

In this study, the researcher gave the appropriate emphasis for ethical consideration. The work of others introduced to this paper for further explanation has been fully authorized in footnotes.

1.8. Organization of the Paper

This research paper has five chapters. The first chapter provides an introduction to the study, which includes background of the study, statement of the problem, objective of the study, research methodology, data collection tools, and ethical consideration.

In chapter two, the conceptual frame work on hazardous waste have been disused. Under this part, definition, type, nature and health and environmental impacts of hazardous waste have been discussed. Under the third chapter, the researcher has deeply discussed and analyzed international, regional and national legal frameworks on the regulation of movement and disposal of hazardous waste.

Chapter four dealt with assessments of legal and institutional frameworks to control illegal movement and disposal of hazardous waste in Ethiopia and how they are functioning.

The final chapter dealt with conclusion of the research and recommendations.

CHAPTER TWO

CONCEPTUAL FRAMWORKS OF MOVEMENT AND DISPOSAL OF HAZARDOUS WASTE

2.1 Hazardous Waste Definition, Type and Disposal

2.1.1 Definition of Hazardous Waste

According to the Basel Convention, Hazardous wastes are any wastes that possess any of the following characteristics. Those are; Explosive, Flammable, combustible, oxidizing wastes or wastes containing organic peroxides, poisonous, infectious substances, toxic or Eco-toxic and corrosive.¹⁵ The Convention did not take this definition and list of hazardous wastes are exhaustive. It rather gives the room for state parties to define and include additional lists of hazardous wastes as per their national law. In other words, the convention has also states that wastes that are defined as hazardous in the domestic legislation of a country should also be considered as hazardous.¹⁶

As per Proclamation No 1090/2010, hazardous waste is prescribe as waste falling under any category listed in Annex One of this Proclamation and exhibiting any of the characteristics outlined in Annex Two. This definition also encompasses wastes that could be classified as hazardous waste according to the directive to be issued by the Ministry.¹⁷ (It is possible to refer Proclamation No 1090/2010 annex 1 and 2 to see lists of hazardous waste). This Proclamation has also gives the right to the minister to put its own definition and lists of hazardous waste.

Therefore, hazardous waste is any solid or liquid substances that results from human activity and that, if not properly stored or disposed of, can present a serious danger to the life and health of people and the environment because they are toxic, chemically reactive, flammable or

¹⁵ Basel convention on the control of transboundary movements of hazardous wastes and their disposal, Annex III, adopted and opened for signature mar. 22, 1989, reprinted in united nations environmental program , Basel convention on the control of transboundary movements of hazardous wastes and their disposal: final act , annex III, [hereinafter Basel convention],

¹⁶ Ibid Art 1(1)(b)

¹⁷ Federal Negarit Gazette of the Federal Democratic Republic of Ethiopia, Proclamation No.1090/2018, Hazardous Waste Management and Disposal (See also annex 1 and 2 of this proclamation).

corrosive.¹⁸ Hazardous wastes can be used or come from both domestic and industrial activities. It has substantial or potential threats to public health or the environment. To classify them, experts base their criteria on the type of potential damage they can cause to people or the environment when they come into contact with them. Some wastes have the potential to cause disease to varying degrees, while others can cause serious accident or undesired changes in the composition of air, water, and soil, affecting both humans and other living things.¹⁹

Electronic waste, such as old computers, televisions, and mobile phones, often contains hazardous materials like lead, mercury, and cadmium. It is frequently shipped from developed countries to developing countries for recycling or disposal. Hazardous chemicals, such as pesticides, industrial solvents, and heavy metals, can be transported across borders for disposal or treatment. Improper handling or disposal of these chemicals can have severe environmental and health impacts.²⁰

2.1.2 Types of Hazardous Waste

There are different ways to classify hazardous waste. But in general, we can classify them in to five based on the characteristic of the waste it contain.²¹ Those are;

- ❖ Ignitability: Waste that can easily catch fire under certain conditions, such as flammable liquids or solids.
- ❖ Corrosively: Waste that is capable of corroding metals or causing damage to living tissues upon contact, such as acids or alkaline substances.
- ❖ Reactivity: Waste that is unstable and can undergo violent reactions when exposed to heat, pressure, or water, such as explosives or reactive metals.

¹⁸ Supra note 15

¹⁹ David Hackett, An Assessment of the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal, American university of international law review, volume 5, issue 2, page 24-30, 1990.

²⁰ Ibid

²¹ Hazardous waste classification, Amendments to the European Waste Classification regulation – what do they mean and what are the consequences? Nordic council, 2016 pdf

<https://norden.diva-portal.org/smash/get/diva2:927423/FULLTEXT01.pdf> last accessed on April 10 2024. Page 60-64

- ❖ Toxicity: Waste that contains harmful substances at levels that pose a threat to human health or the environment, such as heavy metals or pesticides.
- ❖ Infectious: Waste that contains pathogens or other biological agents that can cause disease in humans or animals, such as medical waste contaminated with infectious materials.²²

It is also possible to classify hazardous waste as industrial hazardous waste, medical hazardous waste and house hold hazardous wastes. Industrial hazardous waste is waste produced by industrial sectors and presents an immediate threat to both the environment and the public. They are characterized as being toxic (acute, chronic, and extrinsic), inflammable, reactive, and corrosive.²³ The main sources of industrial hazardous wastes are mining, chemical and mechanical pulp and paper industries, cement production facilities, wood remanufacturing facilities, etc.²⁴

Medical waste originates from healthcare facilities like hospitals, clinics, health centers, and research institutes. It comprises toxic chemicals, heavy metals, and potentially genotoxic or radioactive substances, as well as pathological waste, sharps (e.g., needles, syringes, scalpels, knives, broken glass, etc.), infectious waste, bulk human blood and blood products.²⁵ On the other hand, hazardous waste encompasses items from household activities like paints, cleaners, stains and varnishes, car batteries, motor oil, and pesticides.²⁶

2.1.3. Management of Hazardous Waste

Because of their dangerous nature, hazardous waste should be managed properly. If those hazardous wastes are not managed properly, they will cause a serious problem to human health and the environment. Therefore, in order to minimize the adverse impact of hazardous waste on human health and the environment, it is mandatory to properly collect, store, package, transport, and treat hazardous waste in an environmentally sound manner. In order to achieve this goal, it is essential for policy makers, regulators, product manufacturers, waste generators, and waste

²² *ibid*

²³ *Supra* note 15

²⁴ Stephen Johnson, *the Basel Convention: The Shape of Things to Come for United States Waste Exports*, (1991).

²⁵ *Ibid*

²⁶ *Ibid*

holders to actively participate in preventing, reducing, collecting, and appropriately treating hazardous materials in alignment with the waste hierarchy.

There are various ways of waste management practice. Those are the following.

1. Source reduction

Source reduction, also known as waste prevention or pollution prevention, is the elimination of waste before it is created. It involves the design, manufacturing, purchase or use of materials and products to reduce the amount or toxicity of what is thrown away. It is stopping waste before it happens. It is the reduction of the generation and toxicity of hazardous waste materials before disposal or storage. Source reduction is the highest goal in the solid waste management hierarchy.²⁷

2. Collection

Waste collection is a part of the process of waste management. It is the transfer of solid waste from the point of use and disposal to the point of treatment or landfill.²⁸ Waste collection is a fundamental element of a municipal solid waste management system. The main goal of a waste collection strategy is to collect in a timely and economical manner, as much correctly sources separate waste as possible, in order to ease the subsequent waste sorting and/or treatment stage with the aim to maximize re-use and recycling.²⁹

3. Recycling

Recycling involves the separation, recovery, and reuse of solid waste components that retain economic value. This process includes the recycling of heat energy and composting, which reclaims organic materials from solid waste for reuse. Materials such as paper, metal, glass, plastic, and rubber are commonly recycled.³⁰

²⁷ Alireza Masoumi and Reza Jalilzadeh Yengejeh, Study of chemical wastes in the Iranian petroleum industry and feasibility of hazardous waste disposal, *Journal of Environmental Health Science and Engineering*, (2020), (can be accessed at <https://doi.org/10.1007/s40201-020-00525-5>), accessed on March 21/2024.

²⁸ Ibid

²⁹ Ibid

³⁰ Britannic Acuates, the role of recycling in solid-waste disposal, history and society article, volume 14, 2006, page 21-27.

Prior to recycling, materials must be separated from raw waste and sorted, a process that can occur either at the waste source or at a central processing facility. Once the waste is collected and separated, it will be prepared for recycling process. Hence, the basic phase in recycling are the collection of waste materials, their processing or manufacture into new products, which may then themselves be recycled. Typical materials that are recycled include iron scrap, aluminum cans, glass bottles, paper, wood and plastics.³¹

4. Composting

Composting is a great way to recycle the organic waste we generate at home. It is a process by which organic wastes are Broken down by microorganisms, generally bacteria and fungi, into simpler forms. Composting provides a way to process and recycle both waste and sewage sludge simultaneously in a single operation. It is the controlled conversion of degradable organic products and wastes into stable products with the aid of microorganism.³².

5. Landfilling

Landfilling is the final placement of waste into or onto the land in a controlled way. It is an engineered pit, in which layers of solid waste are filled, compacted and covered for final disposal. It is still the most widespread and cheapest waste management method to dispose of solid waste in the world and is also major contamination source.³³ The most commonly utilized types of landfills include municipal solid waste landfill, industrial waste landfill, and hazardous waste landfill.³⁴ Landfills are typically controlled and planned facilities that must adhere to specific regulations regarding the quality and quantity of waste.³⁵

Unfortunately, illegal and uncontrolled landfills, such as open dumpsites, are prevalent in many developing countries. It is crucial to address any environmental and health issues associated with landfilling, as it can lead to problems like underground water pollution from leaching substances, air pollution from suspended particles, odor pollution from waste deposition, and even marine

³¹ Ibid

³² Modupe Stela, waste management through composting: challenges and potentials, sustainability journals, volume 12, issue 11, accessed on 31, March 2024.

³³ Luca Alibardi, solid waste management, encyclopedia of environmental health , second edition, 2011

³⁴ Tariq Mehamood, toxicity and related engineering and biological controls, research article, volume 11, 2018.

³⁵ Ibid

pollution from run-offs.³⁶ Additionally, health impacts may arise from contaminated water and gas emissions, potentially causing carcinogenic and non-carcinogenic effects on nearby populations.³⁷

2.2. Movement of Hazardous Waste

2.2.1. What is Transboundary Movement?

According to the Basel Convention, Transboundary Movement is defined as "any movement of hazardous wastes or other wastes from an area under the national jurisdiction of one State to or through another State's national jurisdiction or to or through an area not under any State's national jurisdiction, provided that the movement involves at least two States."³⁸

The Bamako convention has used exactly similar definition for the term transboundary movement. It seems that; the Bamako convention took the definition from the Basel convention as it is. Under article 1(4) of the convention, it has stated the definition as " Any transfer of hazardous waste from one area under the national jurisdiction of one State to another, or through one area not under the national jurisdiction of another State, is referred to as a "transboundary movement" as long as at least two States are involved in the transfer."³⁹

From those two definitions, we can understand that there is no difference between the “Basel” and “Bamako” Conventions with regard to defining the term “Transboundary Movement of Hazardous Waste”.

Coming to FDRE proclamation No. 1090/2010, it does not define what transboundary movement of hazardous waste mean? Nothing has been said about the term “transboundary movement”. The Proclamation has rather preferred to use terms like; “Exporter”, “Importer” and “Transporter”. As per this proclamation, the term "importer" refers to any individual bringing

³⁶ Ibid

³⁷ Ibid

³⁸ Supra note 15. Art 2(3)

³⁹ the Bamako Convention on the Ban of the import into Africa and the Control of Transboundary movements and management of Hazardous Wastes Within Africa, Adopted by the conference of environment ministers at Bamako Mali January 30,1991, last accessed on April 01,2024 <https://www.peaceau.org/uploads/convention-en-bamako-ban-import-into-africa-and-transboundary-movement-hazardouswastes.pdf> Art 1(4)

hazardous waste into Ethiopia.⁴⁰ Similarly, "exporter" denotes any individual sending hazardous waste out of Ethiopia, and "transporter" signifies a person engaged in transporting hazardous waste.⁴¹

Therefore, for this study, I will use the “Basel Convention’s Definition “for term transboundary movement of hazardous waste, and from this definition we can understand that, in order to consider there is a transboundary movement of hazardous waste, some criteria must be fulfilled. The first one is; there must be a “sending state”. This state is a sovereign state in which the hazardous waste is produced. The second criteria is there must be an accepting state. This is a sovereign state at which the hazardous waste will be arrived for disposal purpose. The third criteria is there will be a state through which the hazardous waste will be transferred from sending to accepting state. However, the third criteria is not mandatory. As per the “Basel Convention’s Definition” there always must be at least two states which are sending and accepting state. Because, sending states will directly send the hazardous waste to accepting states and having third state is not a mandatory requirement.

⁴⁰ Federal negarit gazette of the federal democratic republic of Ethiopia, Proclamation No.1090/2018, Hazardous Waste Management and Disposal proclamation (See also annex 1 and 2 of this proclamation).

⁴¹ Ibid

CHAPTER THREE

ANALYSIS OF LEGAL FRAME WORKS

Introduction

As nations have progressed industrially over time, they have encountered a surge in waste generation, particularly hazardous waste, paralleled by a heightened environmental consciousness. Consequently, regulations governing waste management, especially hazardous waste, have become more stringent. This regulatory tightening, coupled with dwindling landfill options, has led to escalating waste disposal costs. Additionally, during the 1980s, industrialized nations implemented extensive environmental regulations, further driving up the expenses associated with waste disposal, particularly hazardous waste.⁴²

Consequently, there was a quest for more economical waste disposal approaches, leading to the consideration of transporting waste to nations with less stringent regulations than the originating countries, or those that might be influenced to accept hazardous waste for economic or other incentives. This continued on for many years before accepting states increased public notice, and after that, public pressure focused attention on the issue, making it a global concern.⁴³

Following this public awareness and pressure, the cross-border transportation of hazardous waste began to provoke varied responses from different factions.⁴⁴ This resulted in widespread anger, prompting international organizations to commence the establishment of legislative mechanisms to govern cross-border movement of hazardous waste.⁴⁵ Subsequently, legal frameworks at the international, regional, and national levels have been established to regulate the transboundary movement of hazardous waste. The following sections outline the respective international, regional, and national legal instruments.

⁴² Maureen T. Walsh, *The Global Trade in Hazardous Wastes: Domestic and International Attempts to cope with a Growing Crisis in Waste Management*, volume 42, page 103-196, (1992).

⁴³ Ibid

⁴⁴ Sean D. Murphy, *The Prospective Liability Regimes for the Transboundary Movement of Hazardous Waste*, research article, volume 30, page 80-116, (1994).

⁴⁵ Ibid

3.1. INTERNATIONAL LEGAL FRAMEWORKS

3.1.1. The Basel Convention

Under the auspices of the United Nations Environment Programme (UNEP), on March 22, 1989, over 116 nations endorsed the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal⁴⁶ The Basel Convention is the first comprehensive regulatory framework for the management of hazardous waste. It was designed to provide a global framework for regulating the movement of hazardous waste across international borders and specifically to prevent the transfer of hazardous waste from developed countries to less developed countries.⁴⁷

Following several incidents and continuous public pressure, The Conference to adopt this convention has been held in Basel, Switzerland from March 20-22, 1989, which was convened by the Executive Director of UNEP. The Basel Convention was adopted on June 17, 1987 and opened for signature on Mar. 22, 1989 with the objective of restricting transboundary movement of hazardous waste to protect human health and the environment⁴⁸. The Convention became in force in 1992. Currently, the Convention has 182 member states. Haiti, United States of America, East Timor, Fiji and south Sudan have signed the convention but not ratified it yet.

3.1.1.2. Controversial Issues of the Convention

During the Basel conference, there were controversies between states, particularly developed and developing states, regarding the definition and transboundary movement of hazardous wastes, specifically the movement of hazardous wastes from developed to developing countries.

To begin with its definitional controversies, the Convention defines "wastes" as substances or objects that are required to be disposed of, as well as the means of their disposal.⁴⁹ Moreover, it

⁴⁶ United Nations Conference On Environmental and Development (UNCED), The Global Partnership for Environment and Development, **A Guide to Agenda 21**, (Rio de Janeiro, Brazil, 1992), pp. 241-245

⁴⁷ Ibid

⁴⁸ The Basel Convention, accessed via the link

<http://www.basel.int/Countries/StatusofRatifications/PartiesSignatories/tabid/4499/Default.aspx>, was last visited on March 26, 2024.

⁴⁹ Ibid, page 6.

specifies that wastes undergoing transboundary movements are classified as "hazardous wastes" if they: a) correspond to the waste categories outlined in Annex I; b) exhibit hazardous properties as outlined in Annex III; c) are designated as hazardous wastes by the national laws of a member state; and d) constitute "other wastes" (such as household wastes and residues from incineration) listed in Annex II, necessitating special attention.⁵⁰

However, controversies among member states; especially between developed and less developed states was the need of developed countries to focus on waste management rather than total ban of transboundary movement. This controversies was based on article 6 and 7 of the Convention which are a key provisions that talk about "prior informed consent" The core concept of Article 6 is that exporting nations are required to formally inform the importing Member States in writing about any planned transboundary movements of hazardous wastes. Additionally, the exporting country is prohibited from initiating the transboundary movement of hazardous waste until the importing state verifies that the waste will be disposed of in an environmentally sound manner.⁵¹ This provision was the most criticized and it was also a center of diverse opinions between industrialized and less industrialized countries. Because, as stated above, the focus of developed states regarding hazardous waste was on the proper management of the hazardous waste and not on its absolute prohibition of transboundary movement. While developing countries, specifically African countries, with the support of the then OAU, stood for the total prevention of hazardous waste importation to developing states, particularly African countries.

In this context, certain academics endorse the stance of developing nations, contending that these countries frequently lack the technical and administrative capability to thoroughly evaluate the ramifications, recognize the potential hazards of a specific waste shipment, or execute suitable measures.⁵² The scholars additionally highlighted that the importing country might also lack or withhold sufficient information about the disposal facility, hindering the exporting country's ability to make an informed decision regarding the suitability of the facility for disposal.

⁵⁰ Ibid, page 5

⁵¹ Orloff, K. & Falk, H, An international perspective on hazardous waste practices. International Journal of Hygiene and Environmental Health Article, volume 06, pp 291-302,(2003).

⁵² Liddick Deolong, The traffic in garbage and hazardous wastes: an overview on Trends in Organized Crime, volume 13, page 134-146, 2010.

Consequently, without this crucial information, the importing nation might grant approval for the importation of a shipment, under the impression that they have a suitable facility to handle the waste, even if the facility is inadequately equipped for the task.⁵³ They also reinforced their argument by suggesting that the wording of the notifications could be ambiguous, causing importing countries to feel pressured when deciding whether to accept or refuse a shipment. This could potentially lead to the exploitation of the prior informed consent process.⁵⁴

Because of all the above reasons and strong arguments, with the support of the OAU, African states were kept in their strong position to totally ban import and export activities of hazardous waste in Africa and the control of transboundary movements of such waste generated within Africa. However, in order to maintain the balance between the two stands (controversies between developed and developing states), the convention has finally incorporated the issue of prior informed consent in relation to transboundary movement of hazardous waste, which indicates that the convention prefers to manage or regulate transboundary movement of hazardous waste rather than its total prohibition. This shows that the stand of the developed states finally got acceptance, and this was the major source of developing state dissatisfaction with the Basel Convention. This dissatisfaction, though it was predicted to be like this because of several circumstances, pushed Africa to adopt its own convention, called the Bamako Convention.

This prior informed consent becomes also an issue for some environmental groups, including green space and certain states, in support of African states. The environmental groups have been criticizing the Basel convention's incorporation of the "prior informed consent" clause. They blamed the convention for allowing or promoting the international trade of hazardous waste rather than working to eliminate it. Particularly, Africa and the island nations of the Caribbean were more insistent in their demands for greater protection of their territorial waters from indiscriminate dumping. Some other groups, especially the developed nations, argued that the mere existence of a "prior informed consent" clause in the convention would not undermine the objective of this convention to control the transboundary movement of hazardous waste. They justify this argument with the right of developing nations not to agree or not to give their consent for the transboundary movement of hazardous waste if they don't want this. They further argued

⁵³ Ibid

⁵⁴ Ibid

that the insertion of this exception is only for those who prefer to agree and is not obligatory, as the name “prior informed consent itself denotes”.⁵⁵

However, even though the former groups, including green space, keep arguing that incorporating this provision in the Basel Convention will promote and permit countries to enter into bilateral agreements outside the general aim of the Convention due to various reasons, including economic reasons, and this will impair the main objective of the convention in controlling transboundary movement of hazardous waste, specifically, prohibiting the transfer of hazardous waste from developed to less developed nations, Finally, the convention has adopted provisions that allow transboundary movement of hazardous waste if there is prior consent from the state to which the hazardous waste is going to be imported.⁵⁶

Hence, under Article 6 of the Convention, it has been mentioned that, in the case of transboundary movement of hazardous waste among state parties to this treaty, the State of Export shall notify, or shall require the generator or exporter to notify, in writing that there is a plan to export hazardous waste to a state from which the prior consent to accept the hazardous waste will be secured.⁵⁷

Article 6(2) of the Convention gives the state of import the right to allow the movement of hazardous waste or its transfer to its state, deny the movement, or also request additional information as to the type, nature, and amount of the hazardous waste.

Article 6(2) of the Convention has also imposed duty on the state of import. The duty is to give its response to the request. As stated above, the response could be either of the three: accept, deny, or request additional information. But whatever the nature of the response, it should be given in written form. From this clause, we can understand two things. Those are: the state of import must always respond to the request, and its response should be in written form.

Therefore, as per Article 6(2) and other provisions of the Basel Convention, if there is any request for the transboundary movement of hazardous waste among member states, the state of import cannot ignore the request with “mere silence.” In other words, the request should always

⁵⁵ Ibid

⁵⁶ Maureen T. Walsh, *The Global Trade in Hazardous Wastes: Domestic and International Attempts to cope with a Growing Crisis in Waste Management*, volume 42, page 103-196, (1992).

⁵⁷ Supra note 15 Article 6

be backed up by a written response, though the response could be either positive or negative or a request for further additional information about the hazardous waste to be transferred to the state of import.

Based on Article 6(3) of this Convention, the state of export should not allow movement of the hazardous waste until consent of the state of import is secured.

Here the question is; what if the state of import not respond for the request or prefer silence contrary to this Convention? Would the state of export allow movement of the hazardous waste in believing that, the state of import breach its duty of giving written response for the request and considering silence as acceptance? Or would the state of export deny the transboundary movement of hazardous waste by interpreting silence of the state of import as acceptance for the request?

I did not find any provision that would give a response to this question. However, in order to answer this question and the possible consequences of “silence” in this case, we can infer the essence of the convention from other provisions. For instance, under Article 6(3), the Conventions say that the state of export shall not allow movement of hazardous waste until it has received confirmation of the state of import from the notifier (exporter or generator) stating that importing the hazardous waste to the state of import is allowed or there is an agreement between the exporter and the disposer (state of import) specifying environmentally sound management of the wastes in question. From this provision, we can understand that the state of export should retain or not allow movement of the hazardous waste until the confirmation letter to accept the hazardous waste is delivered to the state of export. Meaning, silence of the state of export for the exporter or generators question would not entitle the state of export to give permission for the movement of the hazardous waste, even though the Convention does not allow silence for the request.

In addition to not determining the consequences of silence in a clear manner, the convention also did not specify the time through which the state of import would respond to the request. The convention again prefers to keep silent. How long will the question be answered?

However, with regard to the state of transit, both issues (the issue of silence and time) were made clear. With regard to silence, save the general principle of silence as stated above (meaning, silence does not amount to acceptance of the movement of hazardous waste), exceptions to this

are included. The first exception is if parties have decided in general that they will not request prior consent for the transit of hazardous waste. The second exception is if there is a waiver of prior written consent in specific circumstances. In those cases, once the state of export does not receive a response for the transit of hazardous waste within 60 days of the request, the state of export may allow the export to proceed through the state of transit. Here, silence amounts to acceptance or giving permission for the transit of hazardous waste unless a negative response is given within 60 days. Article 6(8) of the convention says that both the written consent and the general notification referred to above can allow multiple shipments within 12 months.

Paragraph 1 of Article 6 of the Convention must apply *mutatis mutandis* to the transboundary movement of hazardous wastes or other wastes from a party through a state or states that are not parties, according to Article 7 of the convention.⁵⁸

3.1.1.3. The Obligation of State Parties Concerning Movement of Hazardous Waste

The two major obligations of the state of export and the state of import in the transboundary movement of hazardous waste are securing the written consent of the state of import to accept the hazardous waste and giving a written response (the response could be positive or negative) to the request provided either by the exporter or generator for the import of hazardous waste to the requested state, respectively. However, the convention has imposed further obligations on concerned member states, both in the case of acceptance or denial of the movement of hazardous waste. Some of the obligations are discussed below.

1. Member states must ensure that the cross-border transportation of hazardous wastes is minimized while adhering to environmentally sound management practices.
2. The importing state, upon consenting to receive hazardous waste, is responsible for its proper disposal and management. If the importing state lacks the necessary resources or capabilities to handle the waste appropriately, it should refrain from accepting it.
3. States are required to prohibit the export or import of hazardous wastes to or from non-party states.

⁵⁸ Supra note 15 Article 7

4. If the importing state fails to manage hazardous waste according to the Basel Convention, exporting state must take back the waste within 90 days if alternative disposal arrangements cannot be made. The exporting state and any transit parties should not impede the return of the waste.
5. Member states are obligated to collaborate with each other to enhance the environmentally sound management of hazardous wastes and other types of waste.
6. Waste movement should only be permitted if the exporting state lacks the technical capacity or facilities for environmentally sound disposal, except when the waste is needed for recycling in the importing state.
7. Member states must implement measures to minimize the generation of hazardous and other waste, considering social, technological, and economic factors.
8. Member states should prohibit the export or import of hazardous wastes if there are concerns that they will not be managed in an environmentally sound manner.
9. Member states should establish adequate disposal facilities for the environmentally sound management of hazardous and other wastes.
10. Member states must ensure that individuals involved in the management of hazardous and other wastes take necessary steps to prevent pollution and minimize its impact on human health and the environment.
11. If the importing country is unable to dispose of hazardous waste in an environmentally sound manner, it should either re-import the waste or find an alternative disposal method.
12. Member states should strive to minimize the transboundary movement of hazardous and other wastes while still ensuring environmentally sound and efficient management.
13. If illegal trafficking of hazardous waste is linked to the exporter or generator's actions, the exporting state must take back the waste or ensure its proper disposal according to the Convention's provisions.
14. Member states should impose criminal penalties for the illegal trafficking of hazardous wastes.

3.1.1.4 Illegal Movement of Hazardous Waste

The illegal movement of hazardous waste is commonly referred to as "toxic colonialism," especially when waste is shipped from a developed country where it was generated to a less developed country for disposal, potentially causing environmental issues. This phenomenon highlights the concept of "not in my backyard,"⁵⁹ where nations benefiting from scientific and technological advancements are reluctant to deal with the environmental consequences of their economic activities and instead attempt to transfer these burdens to countries that do not share in the benefits.⁶⁰

To avoid the problem, the Basel Convention prohibited the illegal movement of hazardous waste. Under Article 9, the Convention considers some types of transboundary movements of hazardous waste unacceptable and illegal. The convention stated the following types of transboundary movement of hazardous waste as being illegal and not acceptable. Those are;

- a. Any movement of hazardous waste across borders without notifying all relevant states (importing and transit states) in accordance with the provisions of the Basel Convention.
- b. Movement of hazardous waste across borders without obtaining the consent of all relevant states as required by the convention.
- c. Transporting hazardous waste with the consent of concerned states obtained through falsification, misrepresentation, or fraud.
- d. Moving hazardous waste that significantly deviates from the provided documents.
- e. Deliberate disposal (such as dumping) of hazardous waste or other wastes in violation of this Convention and general principles of international law.

In cases where the Basel Convention deems the cross-border transport of hazardous waste to be illegal trafficking, it places certain responsibilities on the exporting, importing, and disposing states. The primary obligation placed on the exporting state is to facilitate the return of the hazardous waste by the exporter or generator, or if necessary, by the state itself, to the exporting country. If repatriating the hazardous waste is not feasible, the exporting

⁵⁹ Ibid

⁶⁰ John Ovink's research article, titled "Transboundary Shipments of Toxic Waste: the Basel and Bamako Conventions: Do Third World Countries Have a Choice?" published in volume 13, pages 281-284 in 1994,

state must explore alternative solutions, such as disposing of the waste in compliance with the guidelines outlined in the Convention. The convention has been criticized for not imposing strict penalties, such as compensation for affected states or communities. However, if the cross-border transport of hazardous wastes is determined to be illegal trafficking due to the actions of the importer or disposer, the importing state must ensure that the wastes are disposed of in an environmentally sound manner within 30 days of discovering the illegal activity. If necessary, the importing state may take responsibility for the disposal, and the concerned parties must collaborate as needed to ensure environmentally sound waste management.⁶¹

Critics have pointed out that the Convention lacks stringent penalties, such as providing compensation to impacted states or communities. Nevertheless, in cases where the cross-border transportation of hazardous wastes is deemed illegal trafficking due to the actions of the importer or disposer, the importing state is obligated to ensure that the wastes are disposed of in an environmentally responsible manner within 30 days of uncovering the illicit activity. If required, the importing state can assume responsibility for the disposal, and all relevant parties must work together to guarantee proper waste management practices.⁶²

3.1.1.5. Draw Backs of the Basel Convention

1. Several major industrialized nations, such as the USA, are not signatories to this convention. Consequently, these non-member industrialized countries are not obligated by the convention and will adhere solely to their own national regulations when it comes to exporting and importing hazardous waste.
2. Article 4(9, b) of the Convention permits the transboundary transportation of hazardous waste for recycling purposes. However, this clause does not clearly outline which specific

⁶¹ Patricia Nemeth, PhD Candidate, Why has the Basel Convention not adequately addressed the transboundary movements of hazardous waste to the developing world? Report on UN Sabbatical Leave 2014.

⁶² Ibid

types of hazardous waste can be imported for recycling without facing objections, based solely on the definition of the recycling process.⁶³

3. The prior informed consent clause of the convention has failed to adequately ensure that the facilities in the recipient country, which accept the waste, can manage it in an environmentally responsible manner.

4. The Convention's requirement for member states to establish technical guidelines for the environmentally sound management of hazardous waste is not binding. Instead, the decision to adhere to these technical guidelines is left to the discretion of each country domestically. Consequently, exporting states encounter numerous challenges in verifying domestic technical standards and determining their environmental soundness. Additionally, the classification of hazardous waste varies at the national level because member state classify waste at national level in different ways and regulate it in different ways.⁶⁴

5. The Convention lacks provisions for addressing liability and compensation in case of violations of the obligations set forth within its framework.

6. The Basel Convention also does not address the movement of radioactive waste. Radioactive waste movement is out of the ambit of this Basel convention, which this makes the scope of the Basel convention very narrow.

7. The general and often ambiguous definitions of fundamental terms, eg. 'Hazardous waste' and 'environmentally sound management';

8. The adoption of a limited ban, rather than a total ban on hazardous waste exports; and

9. The provision for separate agreements under Article 11 and the loopholes which it provides to permit hazardous waste exports for recycling are some of the weakness of the Basel Convention.

⁶³ Maureen T. Walsh, The Global Trade in Hazardous Wastes: Domestic and International Attempts to Cope with a Growing Crisis in Waste Management, Catholic University Law Review, Volume 42, Article 4, (1992).

⁶⁴ Ibid

3.1.1.6. The Protocol on Liability and Compensation

The Basel Protocol, adopted in 1999 as an extension of the Basel Convention, aims to hold parties responsible for damage caused by movements of hazardous wastes. It establishes civil liability regardless of fault, applies to both exporting and importing states, provides compensation mechanisms for affected parties, encourages criminal liability for illegal activities, and mandates implementation and enforcement cooperation among member states.⁶⁵

3.2. Regional Legal Frameworks

3.2.1. The Bamako Convention

As explained before, due to the increasing trend of using Africa as a dumping site of hazardous waste by industrialized countries, the issue of regulating movement of hazardous waste across national boundaries becomes a serious concern for African leaders since the early of 1980s or even before the Basel Convention was adopted. Because of this great concern, the then OAU has adopted a resolution which confirmed the UNEP assertion that importing hazardous waste into Africa is tantamount to committing a crime against the continent.⁶⁶ The coming of the Basel Convention and its failure to completely address the existing concern of African nations has also lead for African states to keep working on their own side and feel the gaps of the Basel convention.

As a response to the grievance that African states have on the Basel Convention, African states have adopted resolution 1199 to implement a complete ban on all kinds of hazardous materials, for which the Basel convention prefers to manage and regulate rather than complete ban. This resolution later evolved into the Bamako Convention, formally titled as the "Bamako Convention on the Ban of the Import into Africa and the Control of Transboundary Movement and Management of Hazardous Wastes within Africa."⁶⁷ It was adopted in January 1991 during a

⁶⁵ Zada Lipman, *Trade in Hazardous Waste* in *International Environmental Law and the Global South*, Alam et al, Cambridge University Press, 2015, p 254-256.

⁶⁶ Marguerite M. Cusack, 'International law and the transboundary shipment of hazardous waste to the third world: will the Basel Convention make a difference?' *international legal and policy review*, volume 05, pp 393-420, (1989).

⁶⁷ David J. Abrams, Note, *Regulating the International Hazardous Waste Trade: A Proposed Global Solution*, law journal, volume 28, pp. 81- 85, (1990).

meeting of the OAU Pan-African Coordinating Conference held in Bamako, Mali. The convention came into effect in 1998 and has been signed by 29 countries and ratified by 25 parties.⁶⁸

The Convention has defined hazardous wastes in the same manner as defined in the Basle Convention. However, it added an additional base of definition with ‘banned, cancelled, or refused registration’. Unlike the Basel Convention, the Bamako Convention explicitly bans the transfer of all forms of hazardous waste to Africa, including radioactive waste, which was not addressed in the Basel Convention and it also prohibits the transfer of waste that is restricted by the national laws of one of the member states. The Convention has also provides a compressive list of waste streams considered or defined as hazardous waste and radioactive, which are restricted from dumping, incineration, or importation into the African continent.⁶⁹

In contrast to the Basel Convention, the Bamako Convention enforces a complete prohibition on the importation of hazardous wastes into Africa from non-member countries. Any such imports are deemed illegal under the terms of the Bamako Convention. With regard to the issue of “prior informed consent” which is very controversial issue in the Basel Convention and which will work for all states, the Bamako Convention limits the scope of “prior informed consent” for member states or only within Africa. This can be taken as best achievement of the Bamako Convention.

In terms of its coverage, the Bamako Convention extends its reach more extensively compared to the Basel Convention. Specifically, Article 2 of the Bamako Convention includes radioactive wastes within its scope, whereas the Basel Convention does not. Additionally, while the Basel Convention does not encompass household wastes, the Bamako Convention does.

Under Article 9, the Bamako Convention has also clearly stated illegal trafficking of hazardous waste as a criminal act. But the Basel Convention does not explicitly stated illegal trafficking of hazardous waste as a criminal act.

⁶⁸ Ibid

⁶⁹ Russell Shearer, Comparative Analysis of the Basel and Bamako Conventions on Hazardous Waste, volume 14, 1993

3.3 Other International Regulations

In addition to the Basel and Bamako Conventions, there are numerous international agreements that address the issue of waste shipment and management. One significant treaty is the Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter, which came into effect in 1975, predating the Basel and Bamako Conventions. While this convention does not specifically address the cross-border transport of wastes, it focuses on the disposal of waste at sea.⁷⁰

The Rotterdam Convention was adopted in 1998. It focuses on the international trade of hazardous chemicals and pesticides. It aims to promote shared responsibilities and information exchange about hazardous chemicals to ensure informed decision-making in their import and export.⁷¹

The Stockholm Convention was adopted in 2001. It targets persistent organic pollutants (POPs), which are chemicals that persist in the environment, bioaccumulate in living organisms, and pose risks to human health and the environment. The Convention aims to eliminate or restrict the production, use, and release of POPs.⁷²

The Minamata Convention addresses mercury, a highly toxic metal that poses significant health and environmental risks. It aims to protect human health and the environment from anthropogenic emissions and releases of mercury and mercury compounds through various measures, including controlling mercury emissions from industrial processes and promoting environmentally sound management of mercury-containing waste.

70 Kassahun, T. and Birara, E. "Evaluating Solid Waste Management Practices in Bahir Dar City, Ethiopia." *Review of Pollution Journal*, Volume 4, Pages 251–261, (2018).

⁷¹ The Rotterdam *Convention* on prior informed consent procedure for certain hazardous chemicals and pesticides in international trade was adopted on 10 September 1998 by the Conference of Plenipotentiaries in *Rotterdam*, the Netherlands. The convention entered into force on February 24, 2004. Art 1

⁷² The Stockholm Convention on Persistent Organic Pollutants was adopted at a Conference of Plenipotentiaries on 22 May 2001 in Stockholm, Sweden. The Convention entered into force on 17 May 2004.pdf

CHAPTER FOUR

ASSESSMENT OF LEGAL AND INSTITUTIONAL FRAMEWORKS AND THEIR OPERATION IN ETHIOPIA TO REGULATE MOVEMENT AND DISPOSAL OF HAZARDOUS WASTE

4.1. Legal Frame Works

4.1.1. The FDRE Constitution

The Federal Democratic Republic of Ethiopia Constitution contain several provisions relevant to the protection, sustainable use, and improvement of the country's environment which has direct and indirect health impact on the people. For instance, Article 44 of the constitution guarantees "the right to a clean and healthy environment.

As per Article 44(1) of the constitution,

"all persons have the right to a clean and healthy environment", and according to Article 44 (2) "all persons who have been displaced or whose livelihoods have been adversely affected as a result of State programs have the right to commensurate monetary or alternative means of compensation, including relocation with adequate State assistance".⁷³

Article 43 guarantees the entitlement to sustainable development. Moreover, Articles 89 and 92 mandate that national policies and governmental endeavors align with environmental well-being. Article 89 additionally mandates the government to guarantee sustainable development, strive for the collective welfare of the society, and encourage public involvement, including that of women, in shaping national development policies and initiatives.⁷⁴ Article 92 of the constitution has also indicated government responsibility to attain environmental objectives. According to

⁷³ Federal negarit gazet of the federal democratic republic of Ethiopia, Proclamation No. 1/1995, Proclamation of the Constitution of the Federal Democratic Republic of Ethiopia, Addis Abeba, Ethiopia, 21st August, 1995, Article 44(2).(here after the FDRE constitution)

⁷⁴ Mulugeta Getu, the Ethiopian environmental regime versus international standards: policy, legal, and institutional frameworks, Haremaya law review, volume 11, pp 54-57, (2012)

Article 92 (1) of the FDRE constitution, the Government is tasked with making utmost efforts to ensure that all Ethiopians reside in a pristine and healthful environment.⁷⁵

As long as it is the constitutional right of all person in Ethiopia to live in a clean and healthy environment, Article 92(3) of the constitution also give right for the People to get full consultation and to raise their expression and views in the planning and implementations of environmental policies and projects that will affect them directly.⁷⁶ Sub 2 of this provision has also clearly asserted that; the design and implementation of programs and projects of development shall not cause damage or destroy to the environment⁷⁷ this provision, under sub 4, has also imposed duty both on government and Ethiopian citizens to protect the environment.⁷⁸ The incorporation of these important provisions into the supreme law of the land has raised environmental issues to the level of fundamental human rights.

Moreover, under article 9(4), the FDRE constitution has denoted that; “All international agreements ratified by Ethiopia are an integral part of the law of the land”.⁷⁹ Therefore, while the constitution of the FDRE may not directly address the transboundary transportation of hazardous waste, it suggests that all international and regional agreements concerning the regulation of such waste transport and disposal, along with environmental protection treaties ratified by Ethiopia, are regarded as Ethiopian laws. These treaties must be upheld and enforced in the same manner as domestically enacted laws by the representatives of the Ethiopian people. Consequently, the Basel Convention, Bamako Convention, Rotterdam Convention, and other relevant agreements concerning the control and management of hazardous waste transportation across borders, along with environmental protection, are considered legally binding in the country.

⁷⁵ Supra note 73 , Article 92(1)

⁷⁶ Ibid

⁷⁷ Ibid

⁷⁸ Ibid

⁷⁹ Ibid Article 9(4)

4.1.2. Hazardous Waste Management and Disposal Control Proclamation No. 1090/2018

Ethiopia has enacted the Hazardous Waste Management and Disposal Control Proclamation on September 7, 2018, aimed at regulating the management and disposal of hazardous waste. The primary goal of this proclamation is to establish a framework for the environmentally safe handling and disposal of hazardous waste, aiming to prevent harm to human or animal health, environmental degradation, loss of biodiversity, and damage to property resulting from mismanagement of such waste.⁸⁰ The proclamation specifies that hazardous waste comprises any waste listed in annex one of the proclamation and displaying characteristics outlined in annex two. This includes wastes that may be deemed hazardous according to the directive to be issued by the Ministry. Serving as the primary national regulation for hazardous waste management and disposal, it outlines the categories of waste to be controlled, their chemical constituents, and hazardous characteristics. The proclamation consists of 24 fundamental articles covering principles of clean production, the obligations of hazardous waste generators, labeling, storage, reuse, treatment, and recycling of hazardous waste. Additionally, it addresses matters such as the handling and disposal of hazardous waste, movement, illegal transactions, and interstate transportation of hazardous waste.

Under Article 4(2), the Proclamation has defined the scope of application to “any person who generates, reuses, recycles, stores, transports and disposes hazardous waste in all parts of Ethiopia. To encourage the adoption of clean production practices, this proclamation mandates producers to minimize the release of hazardous waste, ultimately aiming to eliminate hazardous substances from raw materials during the production process.

Article 6 of the Proclamation unequivocally outlines that the collection, segregation, and disposal of hazardous waste fall under the responsibility of waste generators. Additionally, according to Article 6(3), generators are obliged to maintain records documenting hazardous waste transactions. The generators or anyone who want to participate in storing hazardous waste must

⁸⁰ Article 3 of proclamation number 1090/2010, hazardous waste management and disposal control proclamation, Federal Negarit Gazette of the Federal Democratic Republic of Ethiopia, 24th Year No.58 Addis Ababa 7th September, 2018, (here after called proclamation number 1090/2010).

always have adequate security, health and safety equipment and other facilities for the safe storage of hazardous wastes. Furthermore, they must refrain from storing hazardous waste at temporary storage facilities for more than one month.⁸¹ As per article 16 of this proclamation, use and recycling of hazardous waste takes precedence over disposal of it.

Article 7 of the Proclamation mandates that the generator, collector, transporter, and importer of hazardous waste must consistently label the hazardous waste with complete and accurate information. This includes detailing the type, quantity, and characteristics of the hazardous waste, displaying warning signs in both Amharic and English, and specifying the intended disposal method.⁸² As per this proclamation, anyone who want to engage in the transportation of hazardous waste must get license from the relevant authority, must be capable of doing this business in terms of resource (both human and financial resource), experience, skill and commitment that will enable the person to transport the hazardous waste without causing harm to human health and the environment. The transporter should also need to take any appropriate Precautionary measures during transportation, and must also be liable for compensation if any damage is occurred.⁸³ It is also a mandatory requirement to make sure that; hazardous wastes are appropriately labeled and packed during transaction.

Concerning movement of hazardous waste, Article 17(6) of the proclamation explicitly states that any transportation of hazardous waste from Ethiopia across borders must adhere to the principles of prior informed consent as outlined in either the Basel or Bamako Conventions. This proclamation, under article 17 (4) clearly stated that; the importation of any hazardous wastes to Ethiopia is totally prohibited.⁸⁴ If there is any illegal trafficking or unauthorized importation of hazardous waste to Ethiopia, the importer of hazardous waste is responsible for arranging and covering the costs of re-exporting the hazardous waste within ninety days from its arrival date.

In addition to the obligation to re-export the illegally imported hazardous waste to Ethiopia, the illegal importer will be liable for criminal punishment (fine and imprisonment). The imprisonment will be up to 20 years of rigorous imprisonment depending on the nature and consequence of the illegal importation, and the fine punishment ranges up to ten million birr

⁸¹ Ibid Article 12 (imposed several obligations on depositors of hazardous waste.)

⁸² Ibid

⁸³ Ibid Article 7,8,9 and 10

⁸⁴ Ibid Article 17

based on the circumstance.⁸⁵ However, if the punishment is stated to be higher in the criminal law, the criminal law provisions will be applicable.

4.1.3. Environmental Impact Assessment Proclamation No. 299/2002

This Proclamation imposes duty on project owners to undertake an environmental impact assessment before a certain project is implemented if the project is considered to have significant environmental and social impacts. In accordance with Article 12 of this proclamation, the results of environmental impact assessments must be made public, allowing for public commentary on the study and the project's effects on public health and the environment. Furthermore, the proclamation mandates that waste disposal facilities, including waste incineration and landfill sites, undergo environmental impact assessments before implementation. Further to this, under Article 16, this proclamation provided incentives for those who want to participate in any environmental rehabilitation or pollution prevention or cleanup project. The proclamation includes provisions addressing penalties for actions by project owners that contravene its regulations. Article 18 of this proclamation stipulates that, in addition to the Penal Code, individuals who breach the provisions of this proclamation or any other applicable laws or directives will be considered to have committed an offense and will be subject to appropriate liability.⁸⁶ The punishment ranges up to one hundred thousand birr including restoring the damage or compensate for the damage inflicted.⁸⁷ The proclamation also imposes duty on any person (both physical and legal persons) to cooperate for effective implementation of this proclamation.⁸⁸

4.1.4. Proclamation for Environmental Pollution Control (Pro No. 300/2002)

Pollution control proclamation contains six parts which deal with definition, pollution control mechanisms, environmental standards, environmental inspection, offences and liabilities and miscellaneous provisions). Under article 3, the proclamation prohibits any person from polluting

⁸⁵ Ibid Article 21

⁸⁶ Federal Ngarit Gazeta of the Federal Democratic Republic of Ethiopia, Proclamation No. 299/2002 Environmental Impact Assessment Proclamation, 9th Year No. 11 ADDIS ABABA-3rd December, 2002 (here after called proclamation no 299/2002)

⁸⁷ Ibid Article 18

⁸⁸ ibid Article 21

or cause another person to pollute the environment and also impose obligation to clean up or pay the cost of cleaning the polluted environment.⁸⁹ This proclamation also places responsibility on any individual involved in the collection, recycling, transportation, treatment, or disposal of hazardous waste, chemicals, and radioactive substances to guarantee the preservation of the environment and the health and welfare of humans, ensuring no harm is inflicted.

Regarding municipal wastes, Sub-Article 1 of Article 5 specifies that "all urban administrations must establish an integrated municipal waste management system to ensure the collection, transportation, recycling, treatment, or safe disposal of municipal waste."⁹⁰ The proclamation also emphasizes the significance of collaboration between municipal solid waste management entities and relevant environmental authorities. This collaboration is aimed at monitoring and evaluating municipal solid waste management systems to ensure their effective implementation. The proclamation imposes several punishments including fine, imprisonment and confiscation of the property used in the commission of the offence.⁹¹

4.1.5. Proclamation for Protection of Public Health (Pro No. 200/2000)

While not explicitly addressing the movement of hazardous waste, contains provisions aimed at safeguarding the environment and public health. Article 12 stipulates that individuals must collect waste at designated locations and in a manner that does not jeopardize public health.⁹² Furthermore, the proclamation prohibits the disposal of solid, liquid, or any other waste in a manner that negatively impacts the environment and public health. Additionally, it mandates that waste generated from hospitals be managed using disposal procedures that adhere to public health and environmental standards.

⁸⁹ Supra Note 86 Article 3 and 4

⁹⁰ Ibid

⁹¹ ibid Article 12-17.

⁹² Federal negarit gazeta of the federal democratic republic of Ethiopia, Proclamation No. 513/2007 Solid waste management Proclamation, 13th Year No. 13 ADDIS ABABA-3rd 12 February , 2007 (here after called proclamation no 513/2007)

4.1.6. Solid Waste Management Proclamation No. 513/2007

The primary aim of this proclamation is to strengthen the capacity to mitigate the negative effects of solid waste across various societal strata, while also leveraging solid waste to create economic and social assets.⁹³ Comprising five sections and 19 articles, it primarily addresses the overarching responsibilities of urban administrations, solid waste management planning, inter-regional waste movement, household solid waste management, waste collection and storage, transportation, recycling, incineration, disposal, auditing of waste disposal sites, and penalties for violations of the proclamation.

The proclamation outlines comprehensive mechanisms for solid waste management and underscores the importance of community involvement in its objectives. It emphasizes the development and implementation of solid waste management action plans at the local urban administrative level to facilitate community participation. Furthermore, concerning the transportation of solid waste, the proclamation mandates the annual registration and technical inspection of motor vehicles or equipment according to specifications set by the relevant environmental agency. This ensures the safe transport of hazardous solid waste without posing risks to the environment and human health.

3.4.7. Regulation for Electrical and Electronic Waste Management and Disposal (Regulation No. 425/2018)

The scope of this regulation covers “all producers, distributors, retailers, importers, transporters, collection centers, refurbishers, dismantlers, recyclers, and consumers of electrical and electronic equipment listed under anyone of this regulation and any other appliance that needs to be added to the list by the ministry in a directive issued under this regulation”⁹⁴. In order to minimize environmental impact of electrical and electronic waste, this regulation sets hierarchy of waste management under article 4. Based on this hierarchy, reduction of waste generation is given

⁹³ Ibid

⁹⁴ Regulation on the management and disposal of electrical and electronic waste, 2018, council of ministers regulation number 425 [herein after, Regulation .no. 425/2018, Article 3

priority. Refurnishing and reuse of waste, recycling of waste, and disposal of waste have been given following hierarchy respectively.⁹⁵

It also enforces the principle of extended producer responsibility for the management of electrical and electronic waste, marking the first implementation of its kind in Ethiopia. This regulation has set civil and criminal liability which will be implemented through provisions of the pollution control proclamation and other laws.

4.1.8 Proclamation for Industrial Chemical Registration and Administration (Pro No. 1075/2018)

This proclamation imposes obligations on individuals involved in the importation, exportation, transportation, and storage of industrial chemicals restricted by the Rotterdam Convention and directives issued by the ministry.⁹⁶ In terms of its scope, this proclamation will apply to any individual involved in the trade of industrial chemicals.⁹⁷ The objective of this proclamation is to establish a national system for the registration and management of industrial chemicals, with the aim of preventing and controlling the negative impacts that may arise from their mismanagement on human and animal health, as well as environmental safety.”⁹⁸

This proclamation has imposed some obligations on any person who engages in the importation, exportation, transportation and storage of industrial chemicals that has been restricted by Rotterdam convention and directives issued by the ministry.⁹⁹ According to this proclamation, any individual seeking to engage in the production, importation, exportation, transportation, or storage of industrial chemicals must possess a certificate of competence. They are also required to maintain records containing information such as the type and quantity of industrial chemicals to be produced, distributed, stored, and transported. Additionally, they must submit an annual report to the ministry detailing the production, importation, exportation, transportation, and

⁹⁵ Ibid Article 4

⁹⁶ Federal Negarit Gazeta of the Federal Democratic Republic of Ethiopia, Proclamation No. 1075/2018 industrial chemical registration and administration Proclamation, 24th " Year No. 40 ADDIS ABABA-3' 5 April , 2018 (here after called proclamation no 1075/2018)

⁹⁷ Ibid , article 2

⁹⁸ Ibid , Article 4(1 &2)

⁹⁹ Ibid, Article 5

storage of industrial chemicals. Furthermore, industrial chemicals must be packaged and labeled with comprehensive information regarding their nature, quantity, type, shelf life, use, and origin. Importation of industrial chemicals with a shelf life of less than 18 months is prohibited under this proclamation unless exceptional authorization is granted by the ministry.¹⁰⁰

According to Article 15 of this proclamation, individuals involved in the production, importation, exportation, transportation, and storage of industrial chemicals in contravention of the regulations outlined in this proclamation will face penalties. These penalties may include rigorous imprisonment for a period not less than two years and not exceeding five years, as well as fines ranging from 100,000 birr to 500,000 birr, depending on the circumstances or the severity of the violation of the proclamation.

4.1.9. Proclamation for Registration and Control of Pesticide (Pro No. 674/2010)

The proclamation defines "pesticide" as any substance or combination of substances or living organism designed to prevent, destroy, or control pests, including human or animal diseases, unwanted animal or plant species harmful to food, agricultural products, wood products, animal feed, and insects or other pests on animal bodies. This definition also encompasses substances intended for use as plant growth regulators, defoliants, desiccants, or agents for fruit thinning, as well as substances applied to crops before or after harvest to prevent deterioration during storage and transportation.¹⁰¹ The proclamation prohibits the formulation, importation, manufacturing, transportation, labeling, distribution, storage, sale, or use of any pesticide not registered by the ministry or used in contravention of its registration conditions. However, if a registered pesticide violates the provisions of this proclamation, poses risks to human and animal health or the environment, proves ineffective for its intended purpose, is withdrawn from the market, violates conditions attached to its registration, or if the ministry becomes aware of new information

¹⁰⁰ Ibid, Article 9 and 3

¹⁰¹ Federal Negarit Gazeta of the Federal Democratic Republic of Ethiopia, Proclamation No. 674/2010 Proclamation for Registration and Control of Pesticide " Year No. 40 ADDIS ABABA-3' 5 April , 2010[herein after, Proclamation .no. 674/2010

necessitating cancellation, the ministry will revoke its registration and mandate the recall of the pesticide to prevent harm to human and animal health and the environment.

Regarding the disposal of pesticides, this proclamation prohibits the disposal of pesticides or pesticide waste in a manner that could harm human and animal health or the environment. Importers and sellers of pesticides are also obligated by the proclamation to dispose of them at their own cost and under their own supervision.¹⁰²

4.1.10. Regulation for Prevention of Industrial Pollution (Council of Ministers Regulation No. 159/2008)

According to this regulation, pollution is defined as any situation that poses, or has the potential to pose, a threat to human health, safety, welfare, or living organisms by altering the physical, radioactive, thermal, chemical, biological, or other properties of any part of the environment in violation of conditions, limitations, or restrictions specified under this regulation, relevant environmental standards, or any other applicable laws.¹⁰³

The regulation will apply to industrial factories specified in the directive issued under this regulation or those notified by the competent environmental authority until they cease operations or until the end of any additional time extension granted by the competent authority.¹⁰⁴

According to this regulation, industrial factories are required to take measures to prevent or reduce the generation of pollution, handle equipment, inputs, and products in a way that avoids harm to the environment, human health, and animal health, establish and implement an emergency response system, and notify the competent environmental authority of the possession of pollutant substances or the loss of pollutant products or inputs. Even if an industrial factory fulfills all obligations outlined in this regulation, its license will be revoked if it continues to discharge significant pollution into the environment, posing risks to human and animal health. Regarding enforcement and penalties for violating the provisions of this

¹⁰² Ibid, Article 21(1 and 2)

¹⁰³ Federal Negarit Gazeta of the federal democratic republic of Ethiopia, Prevention of Industrial Pollution council of Ministers Regulation No. 159/2008, 15th Year No. 14 Addis Ababa, Ethiopia, (here in after referred us regulation no. 159/2008).

¹⁰⁴ Ibid, Article 3

regulation, the regulation defers to the provisions of the criminal code concerning environmental pollution.

4.1.11. Medicines Waste Management and Disposal Directive No. 337/2020

This directive is enacted with an objective of protecting the public and the environment from health risks and hazards of medicines waste by ensuring safe management and disposal practice of medicine wastes. The scope is limited to disposal of all governmental, non-governmental and private institution medicine wastes. The scope does not include disposal of medical equipment and the management of other health care wastes generated by health institutions.¹⁰⁵

According to this directive, any licensed disposal firm must seek and obtain approval from the relevant authority prior to disposing of medical waste. The selection of disposal methods and the actual disposal process of medical waste must also be overseen by an inspector from the appropriate authority. The disposal firm is required to take measures to prevent diversion and scavenging during the sorting, transportation, and disposal phases. Additionally, medical waste must be disposed of based on its nature. For instance, waste from antineoplastic medicines requires special care. It must be segregated from other medical waste and stored separately in clearly labeled containers with rigid walls.

In addition to the environmental laws mentioned above, Ethiopia has numerous other laws directly and indirectly related to environmental protection. These include:- Institute of Biodiversity Conservation and Research Establishment Proclamation No. 120/1998 (later renamed the Institute of Biodiversity Conservation by Proclamation No. 381/2004); Water Resource Management Proclamation No. 197/2000; Federal Rural Land Administration and Land Use Proclamation No. 456/2005; Access to Genetic Resources and Community Knowledge, and Community Rights Proclamation No. 482/2006; Development Conservation and Utilization of Wildlife Proclamation No. 541/2007, Forest Conservation, Development, and Utilization Proclamation No. 542/2007 Radiation and Nuclear Protection Proclamation No. 1025/2017; Ethiopian Wildlife Development and Conservation Authority Establishment Proclamation No. 575/2008; Biosafety Proclamation No. 655/2009; Awash National Park

¹⁰⁵ Directive on the Management and Disposal of Medical Waste, issued by the Food, Medicine, and Healthcare Administration and Control Authority of Ethiopia, August 2011, Addis Ababa.

Designation Regulation No. 329/2014; Simien National Park Designation Regulation No. 337/2014. These laws and similar establishment documents play crucial roles in environmental conservation and management in Ethiopia.¹⁰⁶

However, because of time and space limitation, the researcher cannot discuss all of the environmental laws one by one separately here, and preferred to discuss only those laws which have direct relation with movement of hazardous waste and its disposal as I did above. Hence, with regard to other detail environmental laws, the researcher prefer to indicate the existed laws as highlight so that readers will take a reference from this, and go for their in depth discussion and reading to each specific laws separately.

4.2. Institutional Frame Works and Their Operation

4.2.1. Environmental Protection Authority (EPA)

Article 5/1/b of the federal environmental policy emphasizes the need for coordinated efforts among relevant management bodies at different levels to facilitate both sector-specific and inter-sectorial planning and implementation activities. Consequently, Proclamation No. 295/2002 reinstated the Environmental Protection Authority (EPA) with the objective of developing policies, strategies, laws, and standards that promote social and economic development while prioritizing human welfare and environmental sustainability.

EPA was replaced by Ministry of Environment and Forest through Proclamation No 803/ 2013. Afterward, it was changed to Ministry of Environment Forest and Climate Change through Proclamation No 916/2015. In 2021, the Environment and Forest and Climate Change Commission was renamed and restructured to the Ethiopian Environmental Protection Authority by Proclamation No 263/2021. Since then, the Ethiopian Environmental Protection Authority is an organ governing environmental issues in Ethiopia.¹⁰⁷

¹⁰⁶ Mulugeta Getu, the Ethiopian environmental regime versus international standards: policy, legal, and institutional frameworks, Haremaya law review, volume 11, (2012)

¹⁰⁷ Environmental Protection Organs Establishment proclamation number 295/2002, Addis Abeba-Ethiopia, 3rt October, 2002,

The decree that brought forth the EPA also mandates regional states to set up or assign their own Regional Environmental Agencies (REAs). These REAs bear the responsibility of orchestrating the development, execution, assessment, and updating of regional conservation plans. They also oversee environmental surveillance, safeguarding, and regulation. Additionally, designated individuals ensure the enforcement and execution of every international and regional pact concerning environmental preservation, encompassing the management of hazardous waste movement across borders and its proper disposal.

The Environmental Protection Authority (EPA) serves as the central governing body for environmental oversight and conservation in Ethiopia. Its responsibilities extend to regulating the cross-border movement and safe disposal of hazardous waste, which involves issuing guidelines, regulations, and standards in collaboration with other ministries. Additionally, the EPA compiles both annual and long-term waste management plans, formulates pertinent policies and strategies, and allocates budgets for research and development in waste treatment initiatives. It also evaluates and approves Environmental Impact Assessment reports for such projects, conducts inspections of waste treatment facilities, supervises waste management operations, and fosters public awareness on environmental issues. Moreover, the EPA sanctions recycling and treatment technologies, oversees the import and export of hazardous wastes in accordance with international treaties, and devises strategies and operational procedures to safeguard the environment and human health. Furthermore, the authority monitors and enforces legislation and policies geared towards environmental protection, striving to mitigate significant risks to both people and ecosystems. It engages in research endeavors and supports environmental protection studies, all while developing and enforcing environmental regulations to uphold its mission.

Among the powers and duties of the authority, as mentioned under Article 6(10) of the proclamation, the authority can, in consultation with competent agencies, formulate environmental safety policies and laws on the production, importation, management and utilization of hazardous substances or wastes.

Based on this mandate, EPA is working on the control of transfer of dangerous waste across borders and their management. For example, EPA has made an inventory on DDT, and PVC (waste from electric transformers) recently and working for disposal of the wastes.

In order to export DDT for disposal, EPA has concluded an agreement with a company situated in Spain, and requested prior consent for 8 Countries through which the waste will be crossed. More than 450 tones (38 containers) from Adami Tulu are made ready for disposal through this company.

Apart from this, EPA has arranged a six month advocacy campaign by 2024 on plastic pollution, air pollution, water pollution, soil pollution, and sound pollution to raise awareness about environmental issues in Ethiopia and encourage individual action and behavior change on environmental protection.

The authority is also controlling wastes that will be imported to Ethiopia even though there is very poor coordination between EPA and Ethiopian custom and revenue authority, which is a big challenge to control illegal importation of hazardous waste to Ethiopia. Because of this poor coordination and cooperation between EPA and Ethiopian custom and revenue authority, prohibited hazardous waste are being imported to Ethiopia due to false documents, absence of environmental expert at custom duty check points, negligence of stake holders, corruption and other reasons. Majority of that hazardous waste are being imported to Ethiopia through donation and price discount schemes.

4.2.2. Ministry of Trade and Industry (MoTI)

Due to the swift expansion of the industrial sector, Ethiopia is experiencing a steady rise in the production of hazardous industrial waste. Consequently, it has become imperative to effectively manage this waste to safeguard both the environment and human well-being.

The Ministry of Trade and Industry bears the responsibility for overseeing the proper handling of industrial waste. Its duties encompass directing, inspecting, supervising, and enforcing compliance with regulations regarding industrial waste management among businesses and establishments. Moreover, the ministry collaborates with waste disposal units to ensure the safe disposal of industrial waste. Additionally, it maintains an industrial chemical registry containing comprehensive information on industrial chemicals.

In accordance with Article 6(4) of Proclamation No 1075/2018, the Ministry of Industry is obligated to submit an annual chemical information report to the Environmental Protection

Authority (EPA), thus ensuring transparency and accountability in chemical management practices.¹⁰⁸ As per this report and information, EPA will take the responsibility of disposing the chemicals. To this end, All Industries have an obligation to submit periodical report to ministry of trade and industry. The ministry needs also to provide support to industries so as to ensure compliance with environmental protection requirements.

4.2.3. Ministry of Health

The ministry of health (MOH) is responsible for providing guidance to local governments for the formulation of waste management plans and regular monitoring to protect public health. In other words MoH involves in waste management only from a public health perspective. It deal with hospital and other health center waste management basically by assessing the impacts of hazardous waste on human health, inspecting and supervising hospital waste Treatment activities, ensure the proper management of health care waste, allocate human and financial resource to regulate healthcare waste disposal, and to develop legal and regulatory frameworks for the proper management of health care waste.

4.2.4. Ethiopian Food and Drug Control Authority (EFCD)

Ethiopian food and drug control authority is responsible to ensure the quality, safety and efficacy of medicines, food, cosmetics and medical device. As per the health care waste management directive, food and medicine control authority has been mandated to ensure the safe disposal of medicines waste. Among all its mandates, the authority can seize, collect sample, investigate; order for recall or return to the country imported from, the product to be kept separately; based on type of violation, confiscate and order disposal food and drug when it suspects that the product is non-compliant to the criteria or standard set by the authority. The authority promotes health care waste minimization, and control health facilities to ensure that health care wastes are properly segregated, collected, packed, safely transported or transferred, stored only in the designated storage room, and properly disposed.

¹⁰⁸ Industrial chemical registration and administration proclamation number 1075/2018, Addis Abeba, Ethiopia, 5th April, 2018, 24th year, number 40.

Further to this, the authority has assigned an expert at custom and revenue authority check points to prevent illegal importation of hazardous medicines, food, medical device and cosmetics to Ethiopia.

4.2.5. Ministry of Agriculture

4.2.5. Ministry of Agriculture

As per Article 18(1, q) of Proclamation No 1097/2018, Ministry of Agriculture is given the power to ensure the proper execution of pesticide and animal feed quality control, and veterinary administration and regulatory activities. The ministry shall maintain a pesticide register which shall contain a list and information on all registered pesticides in the country. It also shall maintain a separate central database containing the inventory of all pesticides in order to track the movement and use of pesticides according to each stage of the pesticide life cycle within the country and containing other relevant information. After the ministry of agriculture gave center of competency for a person to manufacture, formulate, pack, repack, label, import, export, store, sell, distribute or transport, the ministry of trade and industry will take the responsibility to determine on giving business license for the person who want to participate on the above listed activities.

The Ministry needs to issue directives on pesticide disposal issue and procedures. It also shall monitor and control implementation of the directive to ensure that the pesticide is disposed properly. Based on the information the researcher got from EPA, currently, ministry of agriculture is working with EPA to dispose pesticide, and to this end, the inventory is already done.

4.2.6. Urban Administrations

Based on Proclamation 513/2007, urban administrations are responsible for the collection, transportation, treatment, and disposal of city or province waste. This proclamation stipulates that the collection, transportation, recycling, minimization, and disposal of waste in municipalities and cities are the responsibility of municipal and city authorities. It is also prohibited to grant permits for the manufacture and importation of any non-biodegradable plastic bags with a wall thickness of 0.03 millimeters or less.

Nevertheless, Ethiopia grapples with several challenges in waste management, including rising waste generation, financial constraints, insufficient cross-sectoral coordination, inadequate waste handling infrastructure, low public awareness, and limited investment from both the public and private sectors.

Summary of Findings

The legal frameworks for preventing illegal movements of hazardous waste and its management in Ethiopia have been gradually improved. In addition to ratifying international and regional treaties on environmental protection and control of movement of dangerous waste, Ethiopia has also adopted several laws to protect the environment and human health from poison, as well as to prevent the illegal importation of toxic waste into Ethiopia. The FDRE constitution, which clearly affirmed the right to live in a healthy and clear environment as a constitutional right, can be mentioned as a founding stone for the development of other environmental laws and policies so as to control environmental pollution and the illegal movement of hazardous waste to and from Ethiopia.

In addition to the constitutional recognition of having a clean and healthy environment, other specific laws focusing on environmental protection have been enacted consecutively. Those laws that have been enacted in order to safeguard the environment and human well-being, as well as the wellbeing of the people, and the prevention of illegal movement of toxic waste include the Hazardous Waste Management and Disposal Control Proclamation, Environmental Impact Assessment Proclamation, Environmental Pollution Control Proclamation, Public Health Protection Proclamation, Solid Waste Management Proclamation, Electrical and Electronic Waste Management and Disposal Regulation, Industrial Chemical Registration and Administration Proclamation, Pesticide Registration and Control Proclamation, Medicines Waste Management and Disposal Directive, etc.

It is also important to understand that; as per Proclamation Number 1090/2018, it is clearly prohibited to import hazardous waste to Ethiopia.¹⁰⁹ Importation of industrial chemicals below 18 months of shelf life is also prohibited. Further to this, while the researcher conducting this

¹⁰⁹Supra note 80 Article 17(4)

study, a movement named “Clean Ethiopia” has also launched by the prime minister with the aim of making cities clean and enhancing public health. This program includes fund raising schemes via social media to construct public toilets and other environmental friendly activities.

All this indicates that Ethiopia gave good attention to environmental protection and human health. One can also understand that there is no much or considerable legal gap in relation to environmental protection and human health and preventing the illegal movement of hazardous waste and its disposal.

However, this does not mean that, the existing laws are adequate to prevent environmental pollution and illegal trafficking of hazardous waste. In order to avoid any legal gap in preventing environmental pollution because of illegal trafficking and poor management of hazardous waste, Ethiopia still requires the implementation of more stringent legislation, particularly laws mandating sectoral, industrial, and financial institutions to collaborate with the Environmental Protection Authority (EPA) and obtain environmental clearance before providing relevant services, laws that impose periodic or per pollution amount based compulsory financial contributions on high polluters to use this finance for environmental medication, the pesticide directive, domestic disposal companies establishing incentive legislation, and other laws.

The existing laws have not provided clear-cut competence in waste management for certain authorities. This leads to the situation where regulating the movement of hazardous waste and its management are under the control of many different institutions. As a result of this, hazardous waste may be insufficiently managed by different agencies with overlapping authority. It is also difficult to take into account the responsibility and accountability among the various authorities regarding controlling the movement of hazardous waste and its proper management. The other problem regarding to legal frameworks is lack of clear standards for waste emissions by factories and cars.

In addition to the legal frameworks, Ethiopia has also established or assigned several institutions for the protection of the environment and to control movement of dangerous and its disposal. Among the different institutions established for this function, the Ethiopian Environmental Protection Authority (EPA) is the leading institution for the safeguard of the environment, as well as for controlling transfer of dangerous waste. As explained in detail in the institutional

framework work analysis part of this study, the institutions working on health and environmental protection as well as controlling waste management include the Ethiopian Food and Drug Authority (EFDCA), the Ministry of Trade and Industry (MoTI), and Urban Administrations (UA).

As long as the duty to properly dispose of hazardous waste is imposed on the producer of the waste, the role of the majority of the institutions in Ethiopia regarding hazardous waste management is to enact laws and regulations, frame policies and working guidelines, supervise, control, and take measures against waste-producing organizations. These organizations must be sufficiently empowered with extended mandates, experts, and resources to effectively coordinate and supervise activities at the community level.

Pertaining to transfer of dangerous waste across borders, there is no visible problem concerning on export of the hazardous waste except getting response for prior informed consent as per the Basel convention. Because, sometimes, states will keep silent for the request of their consent to transport the hazardous waste or dispose it. Once the concerning states give their consent, Ethiopia will export the hazardous waste for disposal.

However, concerning the prevention and regulation of importing hazardous waste to Ethiopia, there are a lot of problems. The first and major problem is poor coordination and cooperation among concerned institutions and stakeholder groups to prevent the illegal importation of hazardous waste. For example, there is very poor coordination and cooperation among the EPA, customs and revenue authority, and ministry of trade industry to properly identify hazardous waste that is allowed to be imported into Ethiopia. Because, even though Proclamation No 1090/2018 prohibits the importation of hazardous waste to Ethiopia under Article 17(4), the proclamation also contains exception clauses for hazardous waste and chemicals that will be imported through an exceptional permit by the ministry. In this case, here are challenges in verifying the accuracy of documents and conducting chemical analysis to determine the shelf life and authenticity of imported items. This includes confirming whether the item described in the import documents matches the actual product being imported. There is also no environmental expert assigned to the customs and revenue check points. Hazardous wastes and chemicals are imported due to inadequate understanding of the nature of the items or the presence of false

documents. This is further aggravated by a lack of coordination and cooperation among various stakeholder groups, as well as the absence of environmental protection experts at customs and revenue checkpoints.

The Ethiopian Food and Drug Control Authority (EFDC) is the sole institution that deploys an expert to customs and revenue checkpoints. Other agencies, including the EPA, have not assigned personnel to these checkpoints to identify, inspect, and regulate hazardous wastes and chemicals being imported into Ethiopia, which is in violation of legal requirements and contrary to the specifications outlined in license documents.

Problems with institutional capacity, high turnover, absence of a laboratory to make laboratory analyses, human resource problems, absence of disposal facilities for hazardous waste, absence of domestic companies involved in hazardous waste disposal, absence of hotspot areas for disposing of hazardous waste, Shortage of budget, equipment, and skill, absence of incentives for domestic-based waste disposal investments, deliberate or accidental misleading, mixing legal and illegal goods, and corruption are some of the challenges contributing to the illegal transboundary movement of hazardous waste and its poor management in Ethiopia.

As a result of these challenges, poor coordination among institutions, and the absence of experts in customs and revenue check points, the environmental protection authority has alleged that prohibited goods and chemicals are being imported to Ethiopia in violation of the existing laws of the country. Most of the hazardous waste is being imported to Ethiopia via donation, price discount, false documents, and poor knowledge of the nature of the item by customs and revenue checkpoint staff. To avoid this problem, all concerned organizations (both government and NGO) and stakeholders need to create strategic alliances and involve themselves actively at the grassroots level.

Regarding the disposal of hazardous waste in Ethiopia, there has been minimal effort by local disposal entities to manage these materials. Currently, only a handful of companies—approximately two or three—are engaged in the disposal of medical and medical equipment waste. Additionally, some university lecturers are attempting to manage easily disposable hazardous waste through chemical reactions on a personal basis. However, when considering the volume of hazardous waste present in the country, it is evident that the disposal of dangerous wastes remains insufficient. This shortfall can be attributed to a lack of community awareness

about the nature of hazardous waste and the limited number of domestic disposal companies available to address the issue.

Therefore, a huge amount of hazardous waste is found in the hands of government institutions (ministry of education, ministry of agriculture, etc.), public enterprises (sugar industries, ELPA, Ethio telecom, etc.), and private companies. Hazardous waste is being mismanaged in Ethiopia (either being disposed of in a dangerous manner or still being stored in different areas, on the ground, inside homes, stores, and shelves). As a result of this, urgent intervention in disposing of this mismanaged and stored waste is needed to protect the environment, health, and wellbeing of the people. The urgent intervention needed the involvement of all stakeholders and the political commitment of the government.

CHAPTER FIVE

COCLUSION AND RECOMMENDATIONS

5.1. Conclusion

Due to a rapid increase in global industrialization, waste is stacking up faster than the available places for disposal, particularly in industrialized countries. Because of this lack of disposal space in the developed countries and other multiple cases of hazardous waste dumping from developed to list developed countries, in the 1980s, it was started to give attention to transboundary movement of hazardous waste and its management. Using developing states like Africa as waste dumping sites faced strong public resistance. This clear violation of environmental justice, together with public resistance and environmentalist critics of using developing states as waste dumping sites, led to the adoption of the Basel Convention, which was designed to control the movement of hazardous waste between nations, particularly from developed to developing nations. Ethiopia ratified this convention on April 4, 2000.

As per this Convention, states cannot transport and dispose of hazardous waste in other states without getting the prior consent of the transit and importing states. However, this Convention has not been welcomed by many developed nations as long as it imposes a duty on them not to transport and dump hazardous waste on any countries without securing the prior consent of the importing states.

Even developing states, especially African states, were not satisfied by this convention, as they had been expecting it to totally ban movement of hazardous waste; in fact, it preferred to regulate hazardous waste movement with prior informed consent, contrary to the expectation of African states for a total ban. Following this dissatisfaction with the Basel Convention, Africa adopted another regional convention, the Bamako Convention that banned the importation of hazardous waste to Africa on January 30, 1991. Ethiopia also ratified this convention on November 26, 2003.

In addition to ratifying international and regional treaties on the protection of the environment, Ethiopia has also adopted different national laws to protect the environment, human health, and wellbeing. Among all, Proclamation No 1090/2018 was adopted to control the movement of hazardous waste and disposal of it in Ethiopia. Based on this Proclamation, it is prohibited to

import chemicals and other hazardous waste to Ethiopia unless the relevant ministry allows it to do so with an exception.

Apart from the legal frameworks, Ethiopia has established different institutions to prevent and control movement of hazardous waste and its disposal. The Environmental Protection Authority (EPA) is the foremost institution established for this function (protection of the environment and human health from hazardous waste nuisances). The authority is working to control the movement of hazardous waste and its disposal. It controls both the importing and exporting activities of those toxic wastes to and from Ethiopia. However, a large amount of hazardous waste is still being imported to Ethiopia due to several reasons. Some of the reasons are: poor coordination among various institutions and stakeholders; absence of environmental experts at customs and revenue check points; false documents; lack of awareness among the community as to the nature and consequences of hazardous waste; and other reasons.

Legal gaps, lack of domestic disposal firms, as well as the neglect of government institutions, public corporations, and private organizations in managing hazardous waste, could be cited as impediments to appropriate hazardous waste disposal in Ethiopia. As a result, there is a massive accumulation of hazardous garbage throughout the country, particularly in Addis Ababa. To appropriately dispose of the waste, all stakeholders must act quickly and with care. Otherwise, it will cause significant damage to the environment, health, and well-being of the population.

5.2. Recommendations

Based on the above mentioned findings from legal and institutional frame work analysis, the writer forwards the following points as recommendations.

- There must be strong coordination, strategic alliances, and partnerships among concerned institutions and stakeholder groups to prevent and properly control the movement of hazardous waste as well as its management.
- While the federal and Addis Ababa Environmental Protection Authorities have made some progress, greater efforts are necessary. It is crucial to implement environmental education and awareness campaigns to educate both relevant authorities and the general public about the nature of hazardous waste and the serious consequences of environmental pollution caused by illegal trafficking and improper management practices.
- The government must strengthen institutions working on environmental protection, prevention of illegal movement of toxic wastes, and its management in terms of human and financial resources so that they will be able to properly disseminate environmental education, conduct research, follow up, and take measures on illegal movement of toxic waste and its poor management, as well as other environmental pollution activities both at the federal and regional level..
- Guidelines for implementation, accountability procedures, and coordination mechanisms need to be clearly designed to prevent gaps and overlaps as well as duplication of effort in the preventing and controlling activities of movement of hazardous waste and its disposal.
- By adopting new legislations like; laws that can compel sectorial and financial institutions to coordinate with the EPA and obtain environmental clearance before rendering relevant services, the pesticide directive, laws that impose periodic or per pollution amount based compulsory financial contributions on high polluters for environmental medication, domestic disposal companies establishing incentive legislation, and other laws so as to avoid any legal gaps on the area.
- Having clear standards for waste emissions by factories, like industrial corporations, cement and sugar factories is also recommended.

- In order to properly avoid environmental risk factors, policy directions and framework plans should be adequately translated and integrated to inter-sectoral programs of joint actions.
- Relevant experts and laboratory tests should be available at customs duty checkpoints to prevent illegal movement of hazardous waste, either due to poor knowledge of the nature of the item or false documents.

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