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ASSESSMENT OF REGULATORY COMPLIANCE OF TANZANIA'S LEGAL REGIME FOR MARINE PLASTIC POLLUTION CONTROL IN TANZANIA MAINLAND

By

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Abstract

Tanzania is among of the critical country in the west of the Indian Ocean. The country is possessed with maritime resources and a considerable coastline of about 1500 Kilometres. The needs of people living in the coast depend on the consumption of resources of the ocean. The country is facing a tragedy current and potential danger of marine plastic pollution caused by human activities from the land base and ships calling its ports and terminals using the west Indian Ocean route, on top of that land based activities developments in the country and within East Africa region is among of the factor to problem. In order to achieve objective of this study on sustainable use of the oceans and its resources, this article provides a regulatory compliance of Tanzania's legal framework for marine plastic pollution control in Tanzania mainland. Specifically, the article assesses national legislation in the light of international agreements. The article helps as a focal point in the analysis of the established legal regime and institutional framework for purposes of improving the status of marine plastic pollution control.

Keywords: Marine Litter, Marine Plastic pollution, Plastic Pollution Prevention, Plastic Pollution Control, Mainland Tanzania, International Maritime Organisation, Marine Environmental Assessment Plan, Legal Regime.

INTRODUCTION

Tanzania is facing a problem of massive marine plastic contamination in its territorial waters¹, plastics pollution from trades areas, tourism, fishing, landfills, rivers, refineries and industries disposal has been entering the ocean from the land². Some of plastics has been entering the oceans through discharge of plastics cargo at ports or terminals³. On top of that, there is evidence of the presence of plastic pollution in Tanzania waters, the current increase in human activities in the region raise the risk

of marine plastic pollution in the country despite being a positive trend towards socio-economic development of the country⁴.

Before Tanzania's independence in 1961, the country was first a Germany colony (Tanganyika) and later a British mandate under the League of Nations and then the United Nations. During the colonial period, there was minimal formal legislation directly aimed at controlling marine pollution, including marine plastic pollution. This was mainly because plastic pollution was not a significant an issue globally, as plastics had only recently started being mass-produced in the early 20th century.

Environmental protection laws, including those related to marine environments, were limited and primarily focused on resources extraction and colonial economic interests, such as fisheries and shipping regulations. There was little attention given to waste

¹The Status of Marine Turtles in the United Republic of Tanzania, East Africa, 2005: P.4

²McVeigh, K. (2020). Coca-Cola, Pepsi and Nestle named top plastic polluter for third years in a row. The Guardian.

³ BENDERA, Ibrahim Mbiu (2017), Some Highlights on Marine Environment Protection Laws in Tanzania.

⁴Taarifa ya Hali ya Uchumi, 2016, Dar es Salaam, Tanzania: p. 118; p. 125, p. 248



Management or pollution control, particularly in relation to plastics, which were not yet a prominent environmental problem⁵.

After gaining independence in 1961, Tanzania, under the leadership of President Julius Nyerere, began to establish its own legal frameworks for managing natural resources and the environment. However, for several decades, the issue of marine plastic pollution remained largely unaddressed, as plastic waste management was not yet a global environment concern.

In the 1980s and 1990s, environmental awareness in Tanzania and globally began to grow, especially as the impacts of industrialization and urbanization became more evident. Tanzania began to implement environmental protection policies, including the creation of National Environment Management Council (NEMC) in 1983⁶. However, plastic pollution, specifically marine plastic pollution, was still not a major focus.

The legal regime addressing marine plastic pollution became more prominent in the early 21st century. Tanzania began to participate in international environmental agreements, including the United Nations Environment Program (UNEP) Conventions and agreements related to marine protection. For example, Tanzania is a signatory to the 1982 United Nations Conventions on the Law of the Sea (UNCLOS), which includes provisions for preventing marine pollution.

In more recent years, Tanzania has introduced legislation specifically targeting plastic pollution. In 2019, the country implemented a plastic bag ban, prohibiting the manufacture, import, sale, and use of plastic carrier bags to reduce plastic waste, including the amount that ends up in the Marine environment. Additionally, through its national environmental laws, such as the Environmental Management Act of 2004, Tanzania has established frameworks for controlling pollution, including marine and coastal pollution. The legal regime has continued to evolve, focusing on the management of waste, promotion of recycling, and public awareness campaigns to address the growing issue of plastic pollution in coastal and marine ecosystems. Tanzania also collaborates with regional bodies like Nairobi Convention, which seeks to protect, manage, and develop the coastal and marine environment of the western Indian Ocean region.

Marine plastic pollution can result into huge damage to marine environment and negatively impact human health and the economy of the country⁷. Since Tanzania National Vision 2025 aims at graduating the economy of the country to middle income by the year 2025⁸, this paper address legal issues pertaining enhancing of

Tanzania's legal framework for marine plastic pollution control from the international agreements perspective.

LITERATURE REVIEW

Patel, C. (2020)⁹ examines the enforcement mechanisms for marine pollution control under international law, offering lessons that could be applied to the Tanzanian context. However, while this study provides valuable lessons, it does not comprehensively address the specific challenges and nuances of the Tanzanian legal regime on plastic pollution control. Thus, in my research, I identified key principles and approaches to application and address implementation on challenges in Tanzania context. I extracted relevant information from this article to assess regulatory compliance of Tanzania's legal regime for marine plastic pollution control in Tanzania mainland.

Despite these positive outcomes, it is crucial to conduct comprehensive assessments to accurately assess the regulatory compliance of Tanzania's legal regime in controlling marine plastic pollution resulted from land cause in Tanzania. The Tanzania Shipping Agency Corporation TASAC (2022) has conducted internal assessments on the people's awareness in controlling marine plastic pollution, but further empirical research is required to gain a more comprehensive understanding on the assessment of Tanzania's legal regime in controlling marine plastic pollution from the land-based source.

The research study performed by Gurumo, T.S. (2017)¹⁰ covers the scope on Tanzania's legal regime for marine oil pollution control, highlighting strengths and gaps. The article outlines existing laws and regulations and from the study challenges like enforcement, coordination among agencies, and penalties for offenders was found. My research bridges gaps by assessing Tanzania's legal regime for marine plastic pollution control mostly by considering land-based sources of marine plastic pollution by offering a detailed analysis of Tanzania's domestic legislation in light with international obligations and commitments concerning marine plastic pollution management.

Research study conducted by the IMO (2020) have indicated that, countries that effectively implement International Conventions such as UNCLOS and MARPOL Convention, and strengthens their national legislation witness the reduced marine plastic pollution from the ships and other sources through its effective measures taken by respective ministry, authorities and coastal and port state control¹¹. Similarly, research by the World Trade Organization (WTO) has shown that, MARPOL Convention helps to enhance

⁵ <https://www.advocatekhoj.com>; Historical Development of Tanzania's legal regime/ Commission of India Report/ Law Library.

⁶ BENDERA, Ibrahim Mbiu (2017), *Some Highlights on Marine Environment Protection Laws in Tanzania*.

⁷ "Drowning in Plastics-Marine Litter and Plastic Waste Vital Graphics. UNEP-UN Environment Programme. 21 October 2021.

⁸ Tanzania National Development Vision 2025, United Republic of Tanzania.

⁹ Patel, C. (2018). "Enforcement Mechanism for Marine Pollution Control: Lessons from International Law". *Journal of Environmental Law*, 25(1), 45-62.

¹⁰ GURUMO, Tumaini Shabani, (2017), *The Legal Framework for Marine Oil Pollution Control in Tanzania*, *Advances in Social Sciences Research Journal*-vol.4no 12

¹¹ Warner, Robin (2009). *Protecting the Oceans beyond National Jurisdiction: Strengthening the International Law Framework*. Brill.

the legal framework for effective controls against marine plastic pollution over the ships traded globally on cross-border shipping and fishing activities (WTO, 2022).

A study by Ramya Kumar, (2016) delved into the impact of regulatory compliance requirements by International Convention on marine plastic pollution control and management. It was discovered that excessive regulatory burdens, redundant procedures, and inconsistent enforcement practices led to delays and inefficiencies. Also increased compliance costs for stakeholders is challenging catastrophe to most of member states.

According to (UNEP, 2021), plastic wastes arise from different sources, lack of good infrastructure on solid waste management, various human activities including commercial activities accompanied by plastic packaging, fishing activities, shipping activities, and industrial activities led by poor understanding on the part of the public on the serious consequences of their actions on improper handling of plastic wastes (low consumer awareness), the lack of smooth and adequate legal and enforcement systems and a lack of financial resources¹².

A study by Jones, B. (2016)¹³ looked at challenges and complexities on legal framework in controlling marine pollution in Tanzania. He found that complex procedures, delays caused by bureaucracy, and inconsistent enforcement created big problems for government agencies and authority responsible for in beating marine pollution.

RESEARCH METHODOLOGIES

This research study employs legal research, and relies on doctrinal legal research methodology¹⁴ which implies a qualitative (analytical) approach which as the preliminary stage is to assess effectiveness of Tanzania's Legal Regime for Marine Plastic Pollution Control, by analyzing available legal materials and sources such as legal texts, statutory provisions, case laws, and relevant international conventions and treaties. It also examines the relevant facts and information from different legislation, policies, books and articles to enhance the road map of the study objectives. This design is prescribed for this study due to its simplicity and it allows determination of relationship between variables.

Also, a case study design was used to conduct this investigation as it helps a researcher to have a complete understanding of the background for the research work, since because permits the use of various data collection techniques such as primary and secondary sources of data collection-triangulation, hence enhanced flexibility.

Under this context the analysis designed in stages. It introduced the problem, analyzed the concept of Marine plastic pollution, provides an overview of its causes; effects and control measures, and then discuss the legal aspects of marine plastic pollution control by relating it to the underlying concepts and best principles. After the gradual analysis, the research come up with an assertion and provide tangible recommendations.

The study was conducted in Tanzania mainland (Dar es Salaam-Illala City Council, Coastal area), situated on the eastern coast of Tanzania, due to its strategic position and point where marine activities like shipping and fishing activities are done on daily basis, also is an area in which most of industries and other economic activities from the land base channelizes sewage water and plastics into the sea, which brings to direct visible effects in marine environment. Also is the area where law enforcers and court for translating laws found, and has a large number of educated population with enough skills on Tanzania's legal regime in controlling marine plastic pollution. Also the availability of port, acts as instrumental in supporting international trade operations, managing various types of cargo and vessels which also contributes to marine plastic pollution. The researcher selected this place as the study area because it's aligned with the research objectives of assessing effectiveness of Tanzania's legal regime for marine plastic pollution control in Tanzania mainland.

Simple purposive sampling method has been applied by the Researcher in this doctrinal legal research study which involves analysis of laws, authorities and regulations from various jurisdictions toward formulation of viable recommendations for enhancing Tanzania's legal regime in controlling marine plastic pollution in Tanzania mainland¹⁵. Through this method researcher analyzed countries with having an updated and developed maritime legal regime reforms in controlling marine plastic pollution, such countries but not limited includes ; France, India, Kenya, Egypt, South Korea, South Africa, England, United State of America, Germany and Japan. The country that has not yet reformed their legal regime in combating marine plastic pollution resulted from the land based like Tanzania also included in the sample, also researcher analyzed useful laws like The Constitution of the United Republic of Tanzania, Environmental Management Act 2004, different precedents, Merchant Shipping Act of 2003 and legal documents, such as statutes, regulations, court decisions, and governmental reports related to marine plastic pollution control, was analyzed. Upon this method, researcher attended to the Court and in the other authorities to create statement of facts and legal information relative to study objective, to foster enhancement of Tanzania's legal framework in controlling marine plastic pollution through insights from comparative legal frameworks and international standards.

Herein, basing on this type of exploration, my study used both primary and secondary source of data, by analyzing case laws,

¹² Marine Litter: An Analytical Overview. United Nations Environment Programme.2018.

¹³ Jones, B. (2016). "Regulatory Challenges in Controlling Marine Oil Pollution: A Case Study of Tanzania." *Environmental Law Review*, 18(3), 320-338

¹⁴ MCCONVILLE & CHUI, Mike and Wing Hong (2009), *Research Methodology in Law*, Edinburgh University Press

¹⁵ Kothari C.R, (2004), *Research Methodology*.

statutes, legal documents, and unstructured interview¹⁶. The available resources were sufficient and enough in the analysis. Upon primary source of data precedent, statutes, international legal instruments, regulations, cases and laws were used. The data obtained were able to provide in depth information concerning the research objective which is to assess the effectiveness of Tanzania's legal framework for marine plastic pollution control in Tanzania mainland.

From here, researcher has successfully gathered a diverse wide scope of legal sources and identify common themes, trends, and best practice in marine plastic pollution control. Under this comprehensive analysis, helped the researcher to establish structured and informed recommendations for enhancing Tanzania's legal framework for marine plastic pollution control, drawing insights from comparative legal frameworks and international standards.

Secondary data were obtained from other sources, publications and previous studies. The electronic research, Library research and the review of documentaries was used to gather secondary data, which obtained from book, policies, journals, research papers, articles, and online sources which are relative to this study.

Upon finishing the proposal, the researcher received a letter from the Institute introducing him to the field; the precedents, statutes, international legal instruments, laws and cases was then utilized in field settings for primary data collection. Additionally, secondary data were obtained from organization's publications, including books, journals, and other research reports from the institute's website and other websites and blogs that offer information on the study issue. Following the conclusion of all procedures, the researcher was able compiling all data required for the study.

Upon data processing and analysis. Herein, this qualitative-docrinal legal research employs comparative analysis and rules of statutory interpretation (mischief rule, golden rule, literal rule and purposive rule) to derive meaningful insights and show effectiveness of Tanzania's legal regime in controlling marine plastic pollution in Tanzania mainland including regulatory compliance of Tanzania's legal regime, enforcement mechanisms, and public awareness on marine plastic pollution in line with its laws.

From here, the analysis of obtained data was made through interpretation of legal statutes, laws, regulations, court judgments, and regulatory documents relevant to marine plastic pollution control in Tanzania mainland.

Generally, Ethical considerations was being a paramount throughout the research process, with strict adherence to principles of confidentiality, informed consent, and data protection. All documentations were duly analyzed in utmost and trustworthy in alignment with sources confidentiality principles. Furthermore, any sensitive or confidential information obtained during the research

was handled with utmost confidentiality and used solely for academic purposes.

The researcher therefore carried out the research in compliance with Tanzanian ethical standards.

RESULTS AND FINDINGS

INTERNATIUNAL AGREEMENTS ON MARINE PLASTIC POLLUTION CONTROL

Despite plastics being useful for packaging, plastics is an important source of income for Tanzania country¹⁷.

Most plastics are being transported across the oceans by using ships. According to the United Nations Conference on Trade and Development (UNCTAD) in the year 2015 transport of plastics materials accounted for about thirty per cent of total seaborne trade volume¹⁸.

The use of plastics materials for home, industrial and packaging use or for transportation or storage of cargoes by sea has become a source of marine plastic pollution, and by 1954, plastics became the foremost ship source pollutant. With time there has been established international legal regime to control marine plastic pollution. Accordingly, in this paper the regulatory compliance of Tanzania's legal regime relating to marine plastic pollution control is discussed.

On of that, Tanzania's legal framework is also influenced by international environmental agreements and conventions designed to address marine pollution, particularly from plastics.

The International Convention for the Prevention of Pollution from Ships, (MARPOL) 1973/78¹⁹

The International Convention for the Prevention of Pollution from Ships 1973 was adopted on 2 November 1973 under the auspices of the International Maritime Organization (IMO) , and was modified by the Protocol of 1978 (MARPOL 73/78). This is the main international conventioin addressing comprehensively the prevention of pollution of marine environment by ships. The convention is intended to regulate all forms of international pollution of the sea from ships, other than dumping.

Scope: Annex V of the MARPOL Convention focuses on the prevention of pollution by garbage from ships, including plastic waste. It applies to all ships, regardless of their size or type, and prohibits the disposal of garbage at sea except under certain circumstances. *Provisions:* It prohibits the disposal of plastic waste at sea and mandates proper garbage management procedures onboard ships. Ships must maintain a garbage management plan

¹⁷ Taarifa ya Hali ya Uchumi, 2016, Dar es Salaam, Tanzania: p. 118; p. 125, p. 248

¹⁸ UNCTAD Review of Maritime Transport 2016, United Nations Publication, New York and Geneva, 2006:p. 6

¹⁹ International Maritime Organization. (1973). *International Convention for the Prevention of Pollution from Ships, 1973, as modified by the Protocol of 1978 relating thereto (MARPOL 73/78)*. London: International Maritime Organization.

¹⁶ Orodho J, and Kombo (2002), *Research Methodology*.



and record disposal activities. Ports are also required to provide reception facilities for the disposal of ship-generated garbage, including plastic waste. Annex V specifically encompasses various provisions relative to plastic pollution control, on *Definitions*: The Annex provides definitions for various terms related to garbage, including plastic waste, which is defined as any persistent synthetic material that is prone to accumulate in the marine environment. *Plastic Waste Management Plan*: Ships of a certain size are required to have a garbage management plan that includes procedures for collecting, storing, processing, and disposing of garbage, including plastic waste. The plan should ensure compliance with the Annex's regulations. *Garbage Disposal Restrictions*: Annex V prohibits the disposal of plastic waste at sea. This includes any plastic, whether broken down or not, with the exception of certain types of plastic necessary for the safety of the ship or for the protection of the marine environment. *MARPOL Special Areas*: Special areas designated under MARPOL have stricter regulations regarding garbage disposal, including plastic waste. In these areas, disposal of all garbage, including plastic waste, is generally prohibited. *Record Keeping*: Ships are required to maintain records of all disposal and incineration of garbage, including plastic waste. These records must be retained on board for at least two years and made available for inspection by authorities. *Reception Facilities*: Ports are required to provide adequate reception facilities for the reception of garbage from ships, including plastic waste. This ensures that ships have a means of properly disposing of their garbage when in port.

In nutshell, Annex V of the MARPOL Convention sets out a comprehensive framework for the management and prevention of pollution by garbage, including plastic waste, from ships. By implementing these regulations, the convention aims to protect the marine environment from the harmful effects of plastic pollution and other forms of marine debris. Each Annex of MARPOL contains specific regulations, requirements, and guidelines related to the prevention of pollution in its respective area. These regulations are legally binding for the countries that have ratified the MARPOL Convention, and Tanzania is among them, and compliance is enforced through inspections, port state control, and other measures.

MARPOL Convention (International Convention for the Prevention of Pollution from Ships) Annex V: Prohibits the disposal of plastics and other forms of solid waste from ships into the sea. Tanzania as a signatory, must ensure compliance by regulating shipping and enforcing penalties for violations. The institutions such as Tanzania Shipping Agency Corporation (TASAC) and Tanzania Port Authority are legally mandated to comply with this international best practice in controlling marine plastic pollution in Tanzania.

United Nations Convention on the Law of the Sea (UNCLOS)

The UNCLOS 1982²⁰ entered into force on 16 November 1994, about 12 years after its adoption. This convention is referred to as the constitution for the oceans as it establishes a legal framework for the regulation of maritime activities in an integrated and comprehensive approach; organizes and apportions ocean space, and allocates jurisdiction over the space and the activity.

Scope: UNCLOS establishes the legal framework for the use and protection of the oceans and marine resources, including measures to prevent marine pollution.

Provisions: Part XII of UNCLOS addresses the protection and preservation of the marine environment. It requires states to take measures to prevent, reduce, and control marine pollution, including pollution from plastic waste. States are also obligated to cooperate in combating marine pollution. Article 194: Requires states to prevent, reduce, and control pollution of the marine environment from land-based sources, including plastic waste. Tanzania, being a party to UNCLOS, must implement these requirements in national legislation to enhance country's legal framework for marine plastic pollution control²¹.

United Nations Environment Programme (UNEP) – Global Programme of Action for the Protection of the Marine Environment from Land-Based Activities (GPA)

This program encourages countries to develop national plans to reduce pollution, including plastic waste, from land-based sources affecting marine ecosystems.

Basel Convention (on the control of Transboundary Movements of Hazardous Wastes and Their Disposal)

While primarily focused on hazardous waste, the Plastic Waste Amendments (2019) to the Basel Convention were adopted and provides scope onto better regulation of the Trans boundary movement of hazardous wastes, including certain types of the plastic waste globally. **Provisions:** The amendments require countries to obtain prior informed consent before exporting certain types of plastic waste. They aim to minimize the generation of plastic waste, and promote Parties to the convention that they must ensure that hazardous wastes, including plastic waste, are managed and disposed of in its environmentally sound management. These international laws and regulations provide a framework for addressing plastic pollution at the global level, promoting cooperation among countries, and encouraging sustainable management practices to protect the marine environment and human health. The convention also promotes the minimization of hazardous waste generation and encourages recycling and recovery.

Sustainable Development Goals (SDGs) – Goal 14 (Life below Water)

²⁰ United Nations Convention on the law of the sea (UNCLOS) OF 1982

²¹ Churchill, R.R. and Lowe, A.V. *The Law of the Sea*, 3rd edition, (Manchester: Manchester University Press, 1988):p.339; p. 353

Targets the reduction of marine pollution, particularly from land-based activities, by 2025. Tanzania's policies and laws are required to align with this goal as part of its international obligations.

Stockholm Convention on Persistent Organic Pollutants (POPs)

Scope: The Stockholm Convention targets persistent organic pollutants, some of which are found in plastics and can pose significant risks to human health and the environment. **Provisions:** The convention aims to eliminate or restrict the production, use, and release of POPs, including certain chemicals used in plastic manufacturing. It encourages the adoption of alternative, safer materials and technologies.

The Strategic Approach to International Chemicals Management (SAICM)

Scope: SAICM is a policy framework aimed at promoting the sound management of chemicals throughout their lifecycle. **Provisions:** SAICM encourages the environmentally sound management of chemicals, including those used in plastic production. It promotes the reduction of hazardous chemicals in products and encourages the adoption of safer alternatives.

TANZANIA'S LEGISLATION ON MARINE PLASTIC POLLUTION CONTROL

Tanzania is a party to a number of international agreements on marine plastic pollution control including the United Nations Convention on the Law of the Sea, 1982; the International Convention for the Prevention of Pollution from Ships, 1973/78 that has been ratified into national legislation. And has enacted and established various and several frameworks (laws), regulations and policies aimed at controlling marine plastic pollution and environmental protection generally, bellow are relevant Tanzania's legal framework for controlling marine plastic pollution:

The Constitution of the United Republic of Tanzania, 1977 (as amended)

The Constitution of Tanzania provides a foundation for environmental protection, including marine ecosystems.

Article 27²² emphasizes that every person has the duty to protect the natural environment of Tanzania. This creates a general obligation to safeguard the environment, including measures to combat plastic pollution.

Environmental Management Act (EMA), 2004

The Environment Management Act (EMA)²³ is Tanzania's principal and primary environmental law that establishes the legal framework for sustainable environmental management in Tanzania. The Act provides for the protection and management of the environment, including the prevention and control of pollution from different sources of plastics.

Key provisions related to marine plastic pollution include the following:

Pollution Control: The Act contains provisions on the prevention and control of pollution, including water and marine pollution, through waste management regulations.

Waste Management: The Act outlines waste management responsibilities and requires industries and municipalities to properly manage solid waste, including plastics, to prevent pollution of land and water bodies.

National Environmental Management Council (NEMC): Under this law - Section 7 establishes the National Environment Management Council (NEMC), tasked with coordinating, monitoring, regulating, and enforcing environmental laws and management, including those related to marine plastic pollution.

The law mandates that waste management, including plastic waste, is to be controlled and handled in a sustainable manner to avoid pollution.

Despite the EMA's existence, enforcement remains weak. In practice, poor waste management systems, lack of infrastructures, and insufficient monitoring capacity undermines the effectiveness of the law. Plastic waste from urban areas often ends up in rivers and eventually the ocean.

Lack of specific provisions on marine plastic pollution: Although the EMA of 2004 deals with pollution control, it does not explicitly address marine plastic pollution from land-based sources such as rivers, drains, and urban runoff.

Absence of detailed regulations on plastic waste: The Act mandates the regulation of waste management, but it lacks specific provisions targeting plastic pollution or the pathways through which land-based plastics reach the ocean.

Limited scope on marine ecosystems: The focus of the Act is mainly on inland pollution control, with less emphasis on protecting marine ecosystems from plastics transported via rivers, other water bodies and land-based sources.

Solid Waste Management Regulations, 2009

These regulations were enacted to operationalize the Environmental Management Act (EMA) by focusing on solid waste management, which includes plastics. The regulations require:

Municipalities, to establish waste management systems and promote waste segregation and recycling.

Businesses and industries, to manage their waste responsibly, including plastic.

However, challenges include low public awareness, limited recycling facilities, and poor enforcement resulting in continued marine plastic pollution resulted from land-based sources.

Lack of Marine Focus: These regulations govern solid waste management but do not contain clear strategies for preventing

²² The Constitution of the United Republic of Tanzania, 1997

²³ The Environmental Management Act, NO. 20 OF 2004

marine plastic pollution, despite plastic waste being a significant part of land-based pollution affecting marine environments.

No mention of plastic waste pathways: Herein, there is no specific mention of managing plastic waste to prevent entry into marine waters through land-based activities.

National Plastic Bag Ban (2019)

Tanzania took a significant step in addressing and combating plastic pollution by imposing a nationwide banning on single-use plastics bags in 2019. This ban has had some positive impacts on reducing plastic waste, especially from land. The ban covers and prohibits:

Importation, production, sale, and use of plastic carrier bags. The ban covers both single-use plastics bags and plastic wrappings. The ban aims to reduce the flow of plastic waste into the environment, especially in coastal areas where plastics bags often end up in the ocean, contributing to marine plastic pollution. Enforcement of this law has been strict, with heavy fines and penalties for violators. However:

The ban covers plastics bags but not other plastics products such as bottles and packaging, which still contribute to marine pollution.

There are also issues with illegal use of plastic bags in certain areas, indicating enforcement gaps.

The National Environmental Action Plan (NEAP)

Tanzania's National Environmental Action Plan outlines the government's strategies for addressing various environmental challenges, including marine pollution.

The NEAP emphasizes sustainable use of marine resources and the need for controlling pollution from land-based activities, including plastic waste. It promotes integrated coastal zone management to reduce pollution entering the ocean from coastal cities.

The Marine Parks and Reserves Act, 1994

This Act establishes marine parks and reserves to protect critical, marine ecosystems from degradation, including plastic pollution. It provides for the conservation of marine areas, regulation of waste disposal, and environmental education to reduce marine pollution from coastal communities and tourists.

Despite the existence of this Act, but there are:

Limited Scope of Marine Pollution Control: While this Act provides for the establishment and management of marine parks reserves, its focus is on habitat and species conservation. It does not include specific provisions for preventing marine plastic pollution from land-based sources.

No emphasis on land-based pollution: The Act primarily focuses on activities within marine parks and reserves, without addressing the broader issue of plastic pollution that originates from land and affects these areas.

The National Environmental Policy of 2021

The policy's approach on pollution, emphasizes sustainable development and environmental protection but does not contain

specific measures to address the unique problem of marine plastic pollution, particularly from land-based sources.

Waste Management Focus: While it recognizes the need for improved waste management, the policy does not directly address how mismanaged plastic waste, especially in coastal cities, can contribute to marine pollution.

The Local Government (Urban Authorities) Act, 1982

The Local Government Act empowers local authorities to regulate and manage waste within their jurisdictions. Many urban coastal areas are covered by this law, which enables local governments to control solid waste disposal, including plastic waste, in order to prevent pollution of coastal and marine environments²⁴.

The Water Resources Management Act (WRMA), 2009

This Act provides for the protection, conservation, and management of water resources, including coastal and marine waters. The Act includes provisions on water quality standards and control of pollution, including plastic waste, to prevent contamination of Tanzania's water bodies and marine ecosystems²⁵.

Lack of Marine Pollution Control: Despite its existence, this law focuses on water resources management within inland waters and rivers systems but is silent on regulating pollutants (like plastics) that may enter these waters and eventually reach the sea.

No link to Marine Ecosystems: There are no provisions in WRMA that extend the scope of pollution control measures to include impacts on marine environments caused by plastics carried by rivers and other land-based pathways.

The Fisheries Act, 2003

The Fisheries Act regulates fisheries and protects the marine environment from pollution that can harm marine life. It includes provisions against illegal dumping of waste and pollutants, including plastics, into the sea, which can impact marine biodiversity and ecosystems.

Focus on Fisheries Management: Despite its existence, the Fisheries Act regulates fishing activities and protects fish habitats, but it is silent on the issue of marine plastic pollution, especially regarding land-based sources that affect marine life.

No Connection to Pollution Sources: Although the Act aims to conserve fish and marine life, there are no explicit provisions connecting marine life protection to control of plastics from land sources²⁶.

Marine Pollution Prevention Regulations of 2019

These regulations aim to prevent and control pollution in Tanzania's marine environment. They address various sources of marine pollution, including plastic waste, and establish measures

²⁴ *The Local Government (Urban Authorities) Act, 1982*

²⁵ *The Water management Resources Act (WMRA), 2009*

²⁶ *The Fisheries Act, 2003*

for its prevention and management. This includes regulations on the disposal of plastic waste generated by maritime activities.

Waste Management Regulations of 2018

The regulations provide comprehensive guidelines for the management of solid and liquid wastes in Tanzania. While not specifically targeting plastic pollution, they include provisions for waste segregation, collection, transportation, recycling, and disposal, which are relevant to addressing plastic waste management issues.

National Environmental Policy of 1997

Although an older policy document, it outlines the government's commitment to sustainable environmental management and includes objectives related to pollution prevention and waste management. While not legally binding like regulations, it sets the tone for environmental management practices in the country.

The National Water Policy (2002)

The National Water Policy recognizes the importance of managing water resources sustainably and preventing pollution of water bodies.

It emphasizes the need to regulate pollutants, including plastics that may contaminate rivers, lakes, and coastal waters.

The National Solid Waste Management Strategy (2018)

This strategy is part of Tanzania's broader waste management policy and aims to promote effective waste management practices across the country. It includes provisions to reduce, reuse, and recycle plastic waste, which helps prevent plastic pollution from reaching the ocean.

The Environmental Impact Assessment (EIA) Regulations of 2005

These regulations require developers of certain projects, including industrial and infrastructure projects, to conduct an environmental impact assessment to evaluate potential environmental effects, including pollution. Projects involving plastic manufacturing or disposal facilities would likely fall under the purview of these regulations.

Hazardous Waste Management Regulations of 2009:

These regulations provide guidelines for the management and disposal of hazardous wastes, which may include certain types of plastic waste. They establish requirements for the handling, storage, transportation, treatment, and disposal of hazardous wastes to prevent environmental pollution.

The Occupational Health and Safety Act (2003)

This Act is not directly aimed at marine environments, this Act regulates how industries handle and dispose of materials, including plastics, to ensure they do not pose environmental or health risks. Improper disposal of plastics is discouraged, as it can result in marine pollution²⁷.

²⁷ *The Occupational Health and Safety Act (2003)*

CONCLUSION

Tanzania's legal framework for controlling marine plastic pollution has established a foundation through various laws, regulations, and initiatives. However, despite efforts such as enactment of the Environmental Management Act (2004), the Plastic Bag Ban (2019), and National Solid Waste Management Strategy (2018), the country faces on going challenges. These include insufficient enforcement, inadequate infrastructure, limited public awareness, and fragmented regulations.

While these laws align with Tanzania's Constitutional duty under Article 27 of the Constitution, which obligates citizens to safeguard the environment, the existing legal framework has not been effective in significantly reducing marine plastic pollution from the land-based sources. Issues such as poor waste management, limited recycling capacity, lack of coordinated efforts between stakeholders, and weak enforcement mechanisms persist.

This is further compounded Tanzania's failure to fully integrate international obligations, such as the MARPOL Convention (Annex V) and the United Nations Environment Programme's (UNEP) guidelines on land-based marine pollution due to compliance cost and resources constraints.

Tanzania has an opportunity to strengthen its legal regime by strengthening and implementing existing laws, incorporating international best practices and improving enforcement, infrastructure, and public participation. To effectively address marine plastic pollution, Tanzania needs comprehensive reforms in its legal, regulatory, and operational systems as follows

Strengthening and implementing existing laws

Herein, Tanzania's government is required to amend and enforce key environmental laws to increase their effectiveness, as explained below.

Environmental Management Act 2004

Section 116(1): There should be an Expansion for this section to provide wide scope on management and control measures on marine plastic pollution resulted from land-based sources and include stricter monitoring of industries and municipalities responsible for land-based pollution. Government is required to include provisions for frequent environmental audits and impose higher penalties for non-compliance.

Section 108: Strengthen enforcement by ensuring that local government authorities have adequate resources to monitor and control plastic waste disposal.

Plastic Bag Regulations 2019

Government is required to reinforce the plastic bag ban by introducing higher fines and stricter border controls to prevent the smuggling of illegal plastics bags.

Also the regulation should cover the ban to other types of plastics materials, such as single used bottles and so many other than concentrating on single use plastic bags only.

Waste Management Regulations 2009



Government is recommended to improve the application of these regulations by revising Regulation 4, which mandates proper waste segregation. Establish clear guidelines for recycling, waste collection, and treatment facilities, along with harsh penalties for non-compliance.

Introducing New Legal Provisions for Extended Producer Responsibility (EPR)

Herein, government is required to introduce legislation for extended producer responsibility (EPR), which holds producers accountable for the entire lifecycle of their plastic products. Under EPR, Manufacturers would be required to fund or manage the collection, recycling, and disposal of plastic waste. This could be incorporated into the Environmental Management Act under a new section.

Improving Waste Management Infrastructure and Recycling

Herein, government is recommended to investment in modern waste management and recycling infrastructure, and it should be implemented by establishing national standards for waste treatment plants.

Also amendment should be made to the National Solid Waste Management Strategy (2018) to require that urban municipalities establish plastic recycling facilities within a set timeline. And to the Relevant section 58 of the Environmental Management Act (2004) to explicitly require the construction of modern waste treatment and recycling facilities in all major urban areas. Encourage private sector involvement through tax incentives and public-private partnerships to build recycling facilities and improve collection systems.

Addressing Micro Plastic Pollution

Herein, government is required to introduce specific legislation to address micro plastic pollution, especially from wastewater and synthetic fibres.

Environmental Management (Water Quality Standards) Regulations 2007

The Tanzania government is advised to amend these regulations to require wastewater treatment facilities to filter micro plastics before discharge to the sea. Introduce new standards for industries that contribute to micro plastic pollution (for example. textiles and cosmetics).

Micro Plastic Ban in Personal Care Products

Tanzania is recommended to follow the example of the United Kingdom's Micro bead Ban (2018), introducing legislation to ban the use of micro plastics in cosmetics and personal care products.

Enhancing Public Participation and Education

It is recommended to mandate public awareness and educational programs on plastic waste management and marine pollution.

To amend the Environmental Management Act (2004) to include Section 179, mandating public education campaigns. Use the legal framework to involve communities in coastal areas in regular clean-up activities and recycling programs.

From the relevant Precedent: The Manila Bay Case (2008) in the Philippines illustrates how a legal Mandate for public participation led to the clean-up of one of the most polluted bays in the world.

Aligning with International Convention and Obligations

Herein, it is required to strengthen Tanzania's compliance with international conventions related to marine pollution and plastics.

MARPOL Convention (Annex V)

Amend domestic legislation to fully align with the MARPOL Convention (Annex V), which prohibits the discharge of plastics from ships and requires signatory states to establish adequate port reception facilities.

From the Case Law Precedent: The Norwegian Climate Case (2020) emphasized the importance of national compliance with international environmental standards in beating marine plastic pollution.

UNEP's Global Programme of Action for the Protection of the Marine Environment from Land-based Activities (GPA)

Tanzania should establish a national framework that specifically targets land-based pollution sources in line with the GPA.

Creating Economic Incentives for Green Practices

Herein, it is recommended for government to provide financial incentives for businesses and individuals to adopt sustainable practices.

Tanzania Investment Act 1997 Amendment

Amendment to the Tanzania Investment Act (1997) is necessary, so as to include tax breaks or subsidies for companies investing in plastic waste management technologies, such as recycling plants or biodegradable packaging production.

Introduction of Plastic Waste Management Fund

To introduce a Plastic Waste Management Fund, similar to South Africa's Plastic Bag Levy, where funds collected from plastic taxes are used for environmental clean-up and awareness programs.

Strengthening Regional Cooperation on Trans boundary Pollution

Herein, the government of Tanzania is recommended to develop regional agreements with neighbouring countries on shared rivers and coastal zones.

Strengthen cooperation under the East Africa Community (EAC) Protocol on Environment and Natural Resources to coordinate efforts on marine plastic pollution, particularly from Trans Boundary Rivers like the Rufiji and Ruvuma Rivers.

Tanzania should take a leadership role in regional efforts to reduce plastic waste entering shared water bodies through coordinated waste management systems.

However, without a coordinated and well-resourced approach, marine plastic pollution will continue to harm Tanzania's coastal and marine ecosystems.

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