ENDING PLASTIC POLLUTION IN NIGERIA (LEGAL IMPERATIVES)*

Abstract
Nigeria's struggle with plastic pollution necessitates a robust legal framework to mitigate its environmental and health impacts. This study examines the existing legal regime, including the National Environmental Standards and Regulations Enforcement Agency (NESREA) Act 2007 and the Harmful Waste (Special Criminal Provisions, etc.) Act, 1988 to assess their efficacy in addressing plastic pollution. It highlights the need for comprehensive legislation, effective enforcement, and public awareness to combat plastic pollution. The study advocates for policy reforms, extended producer responsibility, and community engagement to ensure a plastic-free Nigeria. By exploring the legal imperatives, this research provides insights into the challenges and opportunities for reducing plastic pollution in Nigeria, ultimately promoting a healthier environment and sustainable future.

Introduction

Plastic pollution has become a pressing environmental issue in Nigeria, threatening the country's ecosystems, wildlife, and human health. The widespread use and disposal of plastics have led to severe pollution problems, necessitating a comprehensive legal framework to address this challenge. This article explores the legal imperatives for ending plastic pollution in Nigeria, examining existing laws and regulations, and identifying gaps and opportunities for improvement. By analyzing the current legal regime and proposing reforms, this study aims to contribute to the development of effective strategies for mitigating plastic pollution in Nigeria and promoting a sustainable future for its citizens.

Pollution

Pollution is the introduction of harmful substances or products into the environment, which can have adverse effects on the ecosystem, human health, and the economy. It can take many forms, including air, water, land, and noise pollution. Pollution can be caused by human activities, such as industrial processes, transportation, and waste disposal, as well as natural events like volcanic eruptions.[1]

Air pollution occurs when pollutants are released into the atmosphere, affecting air quality and human health. Common air pollutants include particulate matter, nitrogen oxides, sulfur dioxide, and volatile organic compounds. These pollutants can cause respiratory problems, cardiovascular disease, and even cancer. Air pollution can also damage crops, buildings, and ecosystems.
Water pollution occurs when pollutants are released into water bodies, such as rivers, lakes, and oceans. This can harm aquatic life, contaminate drinking water, and affect human health. Common water pollutants include industrial chemicals, agricultural runoff, and sewage. Water pollution can also impact economic activities like fishing and tourism.

Land pollution, also known as soil pollution, occurs when pollutants are released into the soil, affecting plant growth, wildlife habitats, and human health. Common land pollutants include industrial chemicals, agricultural chemicals, and waste disposal. Land pollution can lead to soil degradation, reduced fertility, and increased risk of natural disasters.

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[1] Cambridge Pollution, https://dictionary.cambridge.org. Accessed on 2/6/25.

The impact of pollution is far-reaching and can have severe consequences on human health, ecosystems, and the economy. Reducing pollution requires a collective effort from governments, businesses, and individuals. This can be achieved through sustainable practices, regulations, and education. By working together, we can mitigate the effects of pollution and create a healthier environment for future generations.

Plastic pollution

Plastic pollution is the accumulation of plastic waste in the environment, including oceans, rivers, and land, that harms ecosystems,[2] wildlife, and human health.[3] Plastic pollution occurs when plastic debris, such as bags, bottles, microbeads, and other disposable items, are not disposed of properly and enter the environment. These plastics can take hundreds of years to decompose, breaking down into microplastics that can be ingested by animals and contaminate the food chain.[4]

The impact of plastic pollution on marine life is particularly devastating. Plastic debris can entangle,[5] suffocate,[6] or be ingested[7] by marine animals, causing physical harm, toxicity,[8] and even death. Moreover, plastic pollution can also affect human health through the consumption of seafood contaminated with microplastics.[9] The economic impacts of plastic pollution are also significant, with damage to fisheries, tourism, and other industries that rely on healthy ecosystems.[10]

Plastic pollution is a global problem that requires a collective response.[11] Single-use plastics,[12] such as straws, bags, and water bottles, are major contributors to plastic pollution. Reducing plastic waste requires a shift towards sustainable practices, such as using reusable products,[13] recycling, and proper waste disposal. Governments, businesses, and individuals must work together to develop and implement effective solutions to plastic pollution.

[2] Dergipark Environmental Pollution and Pollutants on the Ecosystem. https://dergipark.org.tp. Accessed on 2/6/25
Pollution can affect plants trees animals, lakes, streams, damage trees and forest, soils, aquatic life, ozone layers etc.

[3] Population Education: Effects of pollution on Human Health. https://populationeducation.org. Pollution, significantly impacts human life, leading to various health problems, reduced life span, and decreased cognitive function (mental process).

[4] MET Group: How long does it take for plastic to decompose? https://group.met.com. Accessed on 2/6/25
It should be noted that plastics can take between 20 years to 500 years to decompose, subject to the level of exposure to sunlight.

[5] Fauna – Flora.org. How does plastic pollution affect manne life? https://fauna-flora.org. Accessed on 2/6/25
Plastics contributes to deaths of many mammals year (100,000), ingestion, entanglement, injuries etc.

[6] NOAA Fisheries (.gov): Entanglement of Marine Life. Risks and Response. https://www.fisheries.noaa.org. Accessed on 2/6/25
Whales, dolphins, seals, sea lions, sea turtles, sharks become entangled in fishing gear, which can result to their death.

[7] *Ibid.*

[8] Seaside Sustainability: Plastic Pollution and Marine wildlife: A Toxic Relationship. https://www.seasidesustainability.org.
When sea mammals and species feeds on plastics it leads to toxicity and possible death. Also the macro plastics like abandoned fishing nets can entangle, suffocate and injure sea mammals and species.

[9] National Geographical Society: Microplastics – National Geographical Education. https://education.nationalgeography.org Accessed on 2/6/25
They are tiny plastics developed from breakdown of larger plastics and commercial plastics production.

[10] School of Marine and Environmental Affairs. (Noah Nick),
Plastic Pollution: A Global Problem that starts with us. https://smea.uw.edu. Accessed on 2/6/25

[11] *Ibid.*

[12] Climate Action Africa: Lagos State's Ban on Single use plastics and sachet water. Climate action.africa. Accessed on 2/6/25. Lagos State will start enforcing the Ban from 1 July, 2025

[13] Hartmann-Science-Center.com. Single use and reusable products.

The effects of plastic pollution are not limited to the environment; they also have social and economic implications.[14] In many communities, plastic pollution can affect livelihoods, particularly in industries that rely on natural resources. Moreover, plastic pollution can also impact human health, particularly in communities that lack access to proper waste management and sanitation.

To mitigate the impacts of plastic pollution, it is essential to adopt a circular economy approach that promotes sustainable consumption and production patterns.[15] This can be achieved through extended producer responsibility, product design innovation, and waste reduction strategies. By working together, we can reduce plastic waste, protect ecosystems, and promote a healthier environment for future generations.

Micro plastics

Microplastics are tiny plastic particles that are less than 5 millimeters in size, often resulting from the breakdown of larger plastic debris or intentionally manufactured as microbeads in personal care products.[16] These small plastics can be ingested by marine life, contaminating the food chain and potentially harming human health.[17] Microplastics have been found in oceans, rivers, and even drinking water, raising concerns about their impact on ecosystems and human well-being. Their small size makes them difficult to clean up, and their effects on the environment and human health are still being researched.

Extended Producer Responsibility

Extended Producer Responsibility (EPR) is a policy approach that holds manufacturers accountable for the environmental impacts of their products throughout their entire lifecycle, including disposal. By implementing EPR, producers are incentivized to design and produce products that are more sustainable, recyclable, and environmentally friendly. This approach encourages producers to take responsibility for waste management and recycling, reducing the environmental harm caused by their products and promoting a more circular economy.[18]

Legal Imperatives

The legal imperatives of plastic pollution involve implementing and enforcing laws and regulations to reduce plastic waste, promote sustainable practices, and hold polluters accountable. Governments can establish policies such as banning single-use plastics, implementing extended producer responsibility, and imposing fines for non-compliance.[19] These measures can help mitigate the impacts of plastic pollution on the environment, human health, and the economy.[20]

Effective enforcement of plastic pollution laws requires strong institutional frameworks, public awareness, and community engagement. Governments, businesses, and civil society must work

[14] Green Habitat Initiative: Drowning in Plastics: How Plastic Pollution is Destroying Nigeria. https://www.greenhabitat.ng. Accessed on 2/6/25

[15] United Nations Environmental Program: Pollution and Circular Economy. https://www.unepf.org. Accessed on 2/6/25. There is a need for sustainable use of plastic materials by resuing them and producing quality products, that can be used again and again. Also extended producer responsibility in necessary to keep them accountable beyond production.

[16] Micro Plastics: National Institute of Health (NIH)

Microplastics: A Real Global Threat for Environment and Food Safety. . Accessed 2/6/25

[17] *Ibid.* Where these toxic sea mammals are consumed by humans, it also affects the consumers.

[18] Extended Producer Responsibility could be equated with polluter pay principle in the sense that both principles aim to reduce environmental harm and promote sustainability.

However, polluter pays principles holds those responsible for pollution liable for the costs of managing and mitigating its effects. Therefore, it emphasizes financial liability for pollution, while, EPR focuses on life cycle responsibility of the producers.

[19] Climate Action Africa: Lagos State's Ban on Single use plastics and sachet water. Climate action.africa. Accessed on 2/6/25. Lagos State will start enforcing the Ban from 1 July, 2025

[20] Hartmann-Science-Center.com. Single use and reusable products. The Green equation. https://www.hartmann-science-center.com. Accessed on 2/6/25.

[21] Institute of sustainable studies: Why is sustainable product design and innovation important? https://institute of sustainable studies.com. Accessed on 2/6/25

There is a need for good product design from production stage leading to reduced environmental impact through out the product cycle.

together to ensure compliance, monitor plastic pollution, and develop innovative solutions. This can include establishing recycling programs, promoting eco-friendly alternatives,[21] and implementing waste management systems.
Legal imperatives can also promote sustainable consumption and production patterns. By implementing policies that encourage the use of reusable products, biodegradable materials,[22] and minimal packaging,[23] governments can reduce plastic waste and promote a circular economy. Businesses can also be held accountable for the waste generated by their products, through extended producer responsibility and product stewardship.

International cooperation is essential in addressing plastic pollution, as plastic waste knows no borders.[24] Governments can work together to develop global standards[25] share best practices, and coordinate efforts to address plastic pollution. This can include implementing international agreements, such as the United Nations Environment Programme's Clean Seas campaign.[26]
Ultimately, the legal imperatives of plastic pollution require a multi-faceted approach that combines legislation, education, and community engagement. By working together, governments, businesses, and individuals can reduce plastic waste, protect the environment, and promote a sustainable future.[27] Strong laws and regulations are essential for driving this change and ensuring a plastic-free world for future generations.

Legal provisions
The National Environmental Standards and Regulations Enforcement Agency (NESREA) Act in Nigeria provides a framework for environmental protection and conservation. Specifically, the Act empowers NESREA to regulate and enforce standards on waste management, including plastic waste. *Section 1* of the Act mandates NESREA to protect and improve the environment, while *Section 7* empowers the Agency to establish standards and guidelines for waste management.

Section 27 of the NESREA Act prohibits the importation, manufacture, sale, or distribution of chemicals, including those that are hazardous to the environment. This provision can be applied to plastic pollution, particularly in relation to the production and disposal of plastic products.

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[21] Institute of sustainable studies: Why is sustainable product design and innovation important? https://institute of sustainable studies.com. Accessed on 2/6/25
There is a need for good product design from production stage leading to reduced environmental impact through out the product cycle.

[22] Biodegradable materials are substances that can breakdown naturally in the environment, within a relatively short period through the actin of microorganism like bacteria and fungi. For example wood, paper, and cardboard.

[23] Packaging Gateway: Minimals it packaging gains ground. https://www.packaging.gateway.com. Accessed on 2/6/25.

The primary reason for embracing minimalist packaging is to contribute to reducing environmental impact, lowering and improving recyclability.

[24] Ecos – Environmental Coalition on Standard. Plastic Pollution knows no boundaries – international efforts. https://ecostandard.org. Accessed on 2/6/25

There should be a global treaty to end plastic pollution, as plastics moves from countries to countries, especially through the seas and oceans.

[25] NRDC: 10 ways to reduce plastic pollution. https://www.nrdc.org. Accessed on 2/6/25. It includes: Promoting reusable alternatives, waste management infrastructure, limiting single use plastics, recycling, extended producer responsibility, boycott microbeads, cook more, buy in Bulk (use ecofriendly packaging) choose natural fibres.

[26] Clean Seas: Cleans Seas Campaign: https://www.cleanseas.org. Accessed on 2/6/25.
This is aimed to raise global awareness on plastic pollution and marine litter, 69 Countries have joined the campaign, it was launched by UNEP, in 2017.

[27] Sdgs.gov.ng

Goal 12, Responsible Consumption and Production.
This is aimed at the use of products and services in a way that minimizes the impact on the environment so that human needs can be met not only in the present, but also in the future generation.

Furthermore, the Act's provisions on environmental impact assessment and waste management can be used to regulate plastic waste and mitigate its impacts on the environment.[28]

The NESREA Act also provides for penalties and sanctions for non-compliance with environmental regulations. *Section 32* of the Act prescribes penalties for individuals or organizations that contravene environmental regulations, including fines and imprisonment. This provision can serve as a deterrent to individuals and organizations that engage in activities that contribute to plastic pollution.

In addition to the NESREA Act, Nigeria has other regulations and guidelines aimed at reducing plastic pollution, such as the National Policy on the Environment and the National Environmental (Sanitation and Waste Control) Policy. These policies and regulations demonstrate the government's commitment to addressing environmental issues, including plastic pollution.

While the NESREA Act provides a framework for addressing plastic pollution, its effective implementation and enforcement are crucial to achieving meaningful results. NESREA, in collaboration with other stakeholders, must work to raise awareness, monitor compliance, and enforce regulations to mitigate the impacts of plastic pollution in Nigeria.
By doing so, the Agency can help protect the environment, promote sustainable development, and ensure a healthier future for Nigerians.[29]

The Harmful Waste Decree in Nigeria, enacted in 1988, prohibits the importation, transportation, storage, and disposal of hazardous waste within the country. Despite this decree, Nigeria still struggles with plastic pollution, particularly due to inadequate waste management infrastructure, lack of enforcement, and high volumes of plastic waste generated. The combination of these factors has led to widespread environmental degradation, health risks, and challenges for communities across Nigeria. Effective implementation and enforcement of the decree, coupled with comprehensive waste management strategies, are crucial to mitigating these issues.

Conclusion

In conclusion, the legal imperatives of plastic pollution are crucial for mitigating its impacts on the environment, human health, and the economy. Effective laws and regulations can reduce plastic waste, promote sustainable practices, and hold polluters accountable. Governments, businesses, and individuals must work together to develop and implement strong legal frameworks that address plastic pollution.

[28] In other jurisdictions express laws on plastic pollution has already being enacted and implemented. In the USA there is:
Breakfree from plastic Act, 2021 – USA.
Article 124; Law 8 for Recovery of boadivesly, nature and landscapes (Microbeads) prohibited in rise of cosmetics) (Fraud)
German: (2019) German Packaging Act
Ireland: (2017) Wastenight (farn plastics)
Span : (2018) Royal Decree No 293
Barbados: (2019) Central of Disposable Plastic Act (ban on plastic cutlery, sup boys)
Canada: (2016) Microbeads in Torleters Regulation
Jamaica: (2018) The Trade (Plastic Packaging Materials Prohibition order)
St. Lucia: (2018) The Styrofoam and Plastic (Prohibition Act) ban on plastic bags and sup items.
European Union: (2019) Directive on the Reduction of sup (Natural ban on sup bags)
Global: (2018) G7 Plastics Charter Charlero

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The implementation of plastic pollution laws requires a multi-faceted approach that combines legislation, education, and community engagement. Governments must prioritize the development of robust legal frameworks, while businesses and individuals must take responsibility for their actions and adopt sustainable practices. By working together, we can reduce plastic waste and promote a healthier environment.

Strong laws and regulations are essential for driving change and ensuring a plastic-free world for future generations. Governments must take a proactive approach to addressing plastic pollution, by implementing policies that promote sustainable consumption and production patterns. This can include banning single-use plastics, implementing extended producer responsibility, and promoting recycling and waste management.
Ultimately, the fight against plastic pollution requires a collective effort from governments, businesses, and individuals. By working together and implementing effective laws and regulations, we can mitigate the impacts of plastic pollution and promote a sustainable future for all. It is our responsibility to protect the environment and ensure a healthy and thriving planet for future generations.

Recommendations
To effectively address plastic pollution, governments should enact and enforce strict regulations, such as banning single-use plastics, implementing extended producer responsibility, and imposing penalties for non-compliance. Additionally, laws should promote recycling, waste management, and the use of eco-friendly alternatives. This can include implementing deposit-refund systems, bag fees, and product design standards that minimize waste.

Businesses should also take responsibility for their role in plastic pollution by adopting sustainable practices, such as reducing packaging, using biodegradable materials, and promoting product reuse. Governments can incentivize these efforts through tax breaks, subsidies, or public recognition. Furthermore, businesses should be held accountable for the waste generated by their products, through extended producer responsibility and product stewardship.

Education and awareness-raising efforts are also crucial in reducing plastic pollution. Governments, NGOs, and businesses should work together to educate the public about the impacts of plastic pollution and promote behavioral change. This can include public awareness campaigns, school programs, and community outreach initiatives. By empowering individuals with knowledge and skills, we can promote a culture of sustainability and reduce plastic waste.
International cooperation is essential in addressing plastic pollution, as plastic waste knows no borders. Governments should work together to develop global standards, share best practices, and coordinate efforts to address plastic pollution. This can include implementing international agreements, such as the United Nations Environment Programme's Clean Seas campaign, and collaborating on research and development of new technologies and solutions.

German: (2019) German Packaging Act
Ireland: (2017) Wastenight (farn plastics)
Span : (2018) Royal Decree No 293
Barbados: (2019) Central of Disposible Plastic Act (ban on plastic cutlery, sup boys)
Canada: (2016) Microbeads in Torleters Regulation
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St. Lucia: (2018) The Styrofoam and Plastic (Prohibition Act) ban on plastic bags and sup items.
European Union: (2019) Directive on the Reduction of sup (Natural ban on sup bags)