



Centre for Health Ethics Law and Development

# Single-Use Plastic Ban in Lagos

## Implications for Public Health and Climate Change

## Introduction

Recently the Lagos state government placed a ban on Styrofoam and other single-use plastic products.[1] The ban aims to curtail the environmental menace these products constitutes in the State. Widely used throughout the State by canteens, cafeterias and other types of food sellers serving the 20-million population of the one of the most densely populated cities in the world, the ban has elicited many complaints from different quarters. The ban is the first of its kind by a government in Nigeria and has the potential to pave the way for similar prohibitions to be imposed by the federal and other state governments. This article reviews this ban and highlights key steps that will need to be taken to ensure that the ban is effective.

## The Environmental, Health and Climate Impacts of Single-use Plastics

Styrofoam is non-biodegradable, with little to no recyclable potential.[2] This material is made from polystyrene, which is slow to degrade. If disposed of improperly, as is often the case in Lagos, the foam leaches chemicals into the environment. The consequence includes the pollution of water sources and the negative impacts on the ozone layer and global warming.[3] Noteworthy is the fact that during production of Styrofoam cup 0.07229 pounds of CO<sub>2</sub> is released.[4]

The environmental nuisance constituted by single-use plastics is enormous. In Lagos, it is common to see drainages blocked and water bodies filled with these plastic products. Furthermore, the State with its huge population, faces a challenge of waste management. Styrofoam and other single-use plastics contribute in no small measure to waste generation in the State, and its lack of biodegradability is a major challenge resulting in blocked drainages and unsanitary environments.

Blocked drainages can lead to man-made disasters such as flooding with dire consequences on the health of persons affected. Flooding is a major challenge in Lagos, and has been for many years. In the rainy season, homes in parts of the State are often submerged in water, with the attendant destruction of property. In 2023, the National Emergency Agency (NEMA) stated that 8 million residents in the state are at risk of experiencing flood disaster with 12% of them subjected to seasonal flooding.[5] Being a coastal state, Lagos is surrounded by large water bodies which makes it prone to flooding. Data has also suggested a rise in sea level in the state, which may lead to more flooding.[6] Pollution from Styrofoam may aggravate flooding. Thus, the government's ban on Styrofoam is to be applauded for its potential mitigating impacts on the potential for flooding.

Outside of its environmental impacts, the health consequences of flooding are enormous. It increases the spread of waterborne diseases and destroys crops and livelihoods amongst others. Beyond flooding-related health impacts, other public health impacts of Styrofoam are concerning. Styrofoam contains the chemical compound styrene which leaks into food or other products served with Styrofoam. Styrene has been linked with the development of certain cancers, loss of vision, hearing and nervous system damage.[7] With an estimated 120,000 new cases of cancer in the country yearly[8] and a weak health system struggling to provide cancer care[9], efforts at prevention such as this ban are welcome.

Importantly, the ban is crucial to the climate change efforts of the State and the entire country. Single-use plastics are acknowledged as a key contributor to climate change.[10] These materials which are non-biodegradable form a bulk of marine debris.[11]

These debris alter the chemistry of the marine environment which in-turn exacerbates climate change.[12] Styrofoam disintegrates without degrading into micro-plastics in the ocean, which when ingested by marine life can harm or kill them.[13] The destruction of marine flora and fauna disrupts the carbon storage capacity of the oceans which increases global warming.[14] It is therefore heartwarming to see Lagos, a coastal State addressing this through the ban of these products.

### Implementing the Ban

In imposing a ban on single-use plastics, Lagos State is following similar efforts in several countries around the world. For example, Italy has imposed a national ban on the production and selling of single-use plastic cotton buds.[15] Other jurisdictions such as Tallinn, Estonia, and Flanders, Belgium, France, Germany, Austria have implemented bans on specific single-use plastics such as plastic bags.[16] In Africa, Kenya and Rwanda have imposed bans on single-use plastics. Such bans have proven effective. However, it is critical to consider contextual concerns in the enforcement of bans.

Effective implementation is necessary. One critical step to ensure the success of the ban is stakeholder engagement. This engagement should include interaction with the identified stakeholders to support buy-in. It should also include awareness creation and sensitization of food sellers, restaurants, and other informal businesses that use these products extensively. Indeed, this should have preceded the announcement, and arguably a phasing-out period may have been helpful. Many food sellers and other businesses in the informal sector use these products because they are cheaper, which makes implementing the ban challenging.

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However, undertaking education on alternative, more climate-friendly containers, perhaps in partnership with private sector actors involved in green technologies and materials, even after the ban may assist in persuading food sellers to choose other food containers not made from Styrofoam and other single-use plastics and reduce the costs of enforcement. A consideration of incentives towards supporting food sellers' adoption of more climate-change-friendly products should remain on the action plan for climate change in the State.

It also remains unclear if the ban will be firmly solidified in law through legislation or regulations. The State referenced such legislation as the National Environmental (Sanitation and Waste Control) Regulations 2009 which was established under the NESREA Act and asserting that these prohibit ban single-use plastic in the country. A review of this legislation suggests that this is debatable. Other laws referenced include the Lagos State Environmental Management and Protection Law, 2017 which states under section 56(l) (Y), "Prevent, stop or discontinue any activity or omission, which is likely to cause harm or has caused harm to human health or the environment." [17] This is a broad provision which though it allows the State to impose prohibitions, does not address the specificities of such prohibition. Developing regulations under the Lagos State Environmental Management and Protection Law addressing key issues such as defining single-use plastics and specifying penalties, at the minimum is important. This is key to sustainability, ensuring this ban goes beyond the current administration.

It remains to be seen how effective the ban will be in the State of over 20 million persons, and many businesses which have long relied on single-use plastics. Despite the potential challenges, there is no doubt that, from a climate change mitigation view and a health protection perspective this is a step in the right direction for the State, for Nigeria and the world.

[1] LAGOS ANNOUNCES BAN ON USAGE OF STYROFOAMS, SINGLE-USE PLASTICS – Lagos State Government

[2] Styrofoam: Why it is harmful, and alternatives.

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[4] Ibid

[5] Resident Recount Loses as Flood Wreaks Havoc in Lagos | Premium Times.

[6] Lagos in Nigeria, Risk of Going Under Water | Ecohubmap

[7] Sytrene and Polysytrene 101

[8] There are 120,000 new cases of cancer yearly in Nigeria | PM News

[9] Nigeria: Commercial Guide

[10] Shivka Sharma et al, (2023) Contribution of plastic and microplastic to global climate change and their conjoining impacts on the environment - A review *Science of The Total Environment* Volume 875, 1 June 2023, 162627, online: < Contribution of plastic and microplastic to global climate change and their conjoining impacts on the environment - A review - ScienceDirect> Why Styrofoam is bad for the Environment

[11] Ibid

[12] Susana Lincoln, Barnaby Andrews, Silvana N.R. Birchenough, Piyali Chowdhury, Georg H. Engelhard, Olivia Harrod, John K. Pinnegar, Bryony L. Townhill, Marine litter and climate change: Inextricably connected threats to the world's oceans.

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[13] Ibid

[14] Micro-plastics Poses Risk to Oceans Plankton, Climate, Other Key Earth Systems

[15]

[16] Plan on the ban: status of Single Use Plastics Directive implementation in all European Union countries | BFG Packaging

[17] LAGOS ANNOUNCES BAN ON USAGE OF STYROFOAMS, SINGLE-USE PLASTICS – Lagos State Government

## Authors



**Prof Cheluchi Onyemelukwe**  
Executive Director



**Olamide Omigbile**  
Project Associate

**Centre for Health Ethics Law and Deveelopment**  
Suite 202, Dew International Complex  
58 Omorinre Johnson Street  
Lekki Phase 1, Lagos  
Nigeria  
[www.cheld.org](http://www.cheld.org)  
[info@cheld.org](mailto:info@cheld.org)