Nigeria's Experience in Solid Waste Management of Plastics

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Presentation Outline

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Introduction

- Nigeria, as Africa's most populous nation, generates a significant volume of solid waste, with plastics constituting a major component. Annually, Nigeria produces millions of tons of plastic waste

- Rapid population growth and urbanization have resulted in a massive volume of solid waste

- Waste composition studies show that plastics account for 15.27% of the total

❑ Progress on Solid Waste Management

- Over the past decade, Nigeria has made significant progress through a multi-faceted approach
  - **Policy, Legal and Regulatory Framework:** Nigeria has established several key policies:
  - **National Policy on Solid Waste Management (2020):** Establishes principles for sustainable waste handling and disposal
    - Municipal Waste Treatment plants are in existence in some States and Compost Plants have been established in Kano, Kaduna, Lagos and Anambra, and there is also a "waste to energy" plant in Lagos

❑ Progress on Solid Waste Management

- **National Policy on Plastic Waste Management (2020):** Provides a framework for plastic reduction, recycling, and extended producer responsibility (EPR)

- **Ban on Single-Use Plastics (SUPs) in all Ministries, Departments and Agencies (MDAs) (June 25, 2024)**

  - A nationwide directive has mandated all federal institutions to eliminate SUP use in offices and official events, serving as a catalyst for broader public adoption of alternatives

- **Ongoing Development (May 2025)**

  - The National Policy on Off-Grid Renewable Energy Equipment (OGREE) Waste Management is currently under development to regulate the disposal of renewable energy equipment

❑ Progress on Solid Waste Management

❖ **Specialized Programmes and Project:** Community-Based Programmes

- Initiatives engage local communities in waste collection, segregation and recycling. In the yearly appropriation, there have been not less than 10 different recycling projects by the Federal Government of Nigeria for the past five years

❖ **World Bank-assisted Projects:**

- The Pro-Blue Project in Lagos is helping to reduce marine plastic pollution.

❖ **Extended Producer Responsibility (EPR):**

- Key Producer Responsibility Organizations (PROs) have been established, including Food and Beverage Recycling Alliance (FBRA) for plastics

❑ Progress on Solid Waste Management

- **Waste-to-Wealth:**
  - Entrepreneurship programs are empowering women and youth to generate income from recycling. These programs are gender-sensitive with equal participation, with not less than five projects in the Ministries' appropriation for each year for the past five years.
- **Capacity Building Programmes:**
  - For federal, state, and local government regulators, private sector actors, and informal waste collectors
- **Awareness Initiatives:**
  - Public sensitization campaigns on waste segregation, recycling and SUP alternatives

❑ Progress on Solid Waste Management

❖ **Collaboration and partnerships:**

- The Ministry works with development partners, NGO's, CSO's and engage with proponents in zero waste initiatives and promote circular economy principles in the country

❖ **The Role of Innovation and Technology:**

- We are seeing promising technological innovations to improve collection and sorting. For example, **reverse vending machines** are now being piloted in a few key areas to incentivize citizens to return plastic bottles for recycling

- Furthermore, the Ministry of Environment recently launched a **textile mobile cloth facility**, signaling a broader commitment to a multi-material circular economy. These are encouraging steps, though they are not yet fully implemented or widespread

❑ Challenges with waste management

- **Lack of Infrastructure :** One of the biggest challenges is the absence of comprehensive waste collection infrastructure, especially in rural and low-income urban areas
  - The majority of this waste is uncollected and ends up in open dumpsites, drainages, and waterways, contributing to environmental degradation, flooding and microplastics in both humans and animals
  - Plastic waste, especially single-use plastics (SUPs), is particularly damaging stream due to its low recycling rate and environmental persistence

- **Weak Enforcement :** Inconsistent application of existing laws and policies
  - Despite the existence of policies like the NPPWM, Ban on SUPs, and the introduction of new technologies like reverse vending machines, full implementation and enforcement remain weak

❑ Challenges with waste management Contd.

- **Insufficient Funding:** A lack of dedicated financing mechanisms for waste infrastructure
  - The initial launch of new projects is a great start, but scaling these initiatives nationwide requires sustained political will, sufficient funding, and a well-coordinated regulatory body

- **Data Gaps:** Incomplete and inconsistent waste generation and recycling machinery
  - There is a significant data gap. We lack precise, up-to-date data on plastic generation rates, composition, and collection efficiency, which makes policy and planning difficult

- **Public attitudes:** Low adoption of waste segregation and recycling by the public

- **Limited Stakeholders Coordination:** Fragmentation among government agencies, the private sector, and civil society

❑ Priority Needs

- **Policy and Enforcement:** Strengthen enforcement of existing laws and SUP bans.
  - We need to accelerate the full implementation and strict enforcement of the EPR framework. This requires clear guidelines and a robust monitoring system to ensure producers meet their obligations, e.g; Establishing a Plastic Waste Compliance and Monitoring Unit at national and state levels

- **Scaling Innovations and Investment in Infrastructure:**
  - The pilot projects, such as the reverse vending machines and the textile mobile cloth bank facility, must be scaled up with a clear roadmap for nationwide implementation. This requires significant investment in modern waste collection and sorting facilities.
  - We must invest in local innovators and recycling startups, particularly those led by youth. This can be done through dedicated green funds, business incubators, and partnerships with private companies.

❑ Priority Needs

❖Sustainable Financing

- Scale up Extended Producer Responsibility (EPR) schemes for more sectors
- Introduce eco-levies on virgin plastics to finance recycling programs
- Create a National Plastic Recycling Fund and Circular Economy Fund for start-ups and SMEs

❖Education and Behavioural Change

- Mainstream waste segregation and recycling into school curricula
- Conduct nationwide public awareness campaigns on the environmental cost of SUPs

❖Data and Research

- Establish a national waste data monitoring system.
- Encourage research into innovative plastic recycling technologies and market models

❑ Conclusion

- In conclusion, Nigeria has made encouraging strides in plastic waste management, from policy formulation to introducing new technologies
- However, major challenges remain in scaling these efforts, enforcing policies, and, crucially, in elevating the social and economic status of the informal workers who are at the heart of the recycling effort
- To move forward, we must formalize the informal sector, enforce our policies, and invest in a truly inclusive model that empowers youth and women. This is not just an environmental issue; it is a social and economic imperative for a sustainable and prosperous Nigeria

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❑ End of Presentation

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