

Ministère de l'Environnement,
de la Gestion des déchets et
du Changement climatique

CONTROLE DES DECHETS PLASTIQUES



Les Assises de
l'Environnement

CAUDAN ARTS CENTRE / 16 -17 DECEMBRE 2019



BACKGROUND

Plastic is a material, which is produced from oil by a chemical process and which is used to make many objects. It is light in weight and does not break easily. Consumption of plastics has increased dramatically in the past decade and has become an essential product in our modern lives.

Unfortunately, much of our plastics end up in landfills, oceans and waterways and the environment. It can persist for up to 1,000 years before it fully disintegrates. Plastics not only impact negatively on our marine and terrestrial biodiversity, but they also block drains, resulting in flooding and cause health problems through proliferation of mosquitoes, leading to diseases such as Chikungunya and Dengue. Moreover, bioaccumulation of plastic in the food chain and burning of plastic waste cause other health problems.

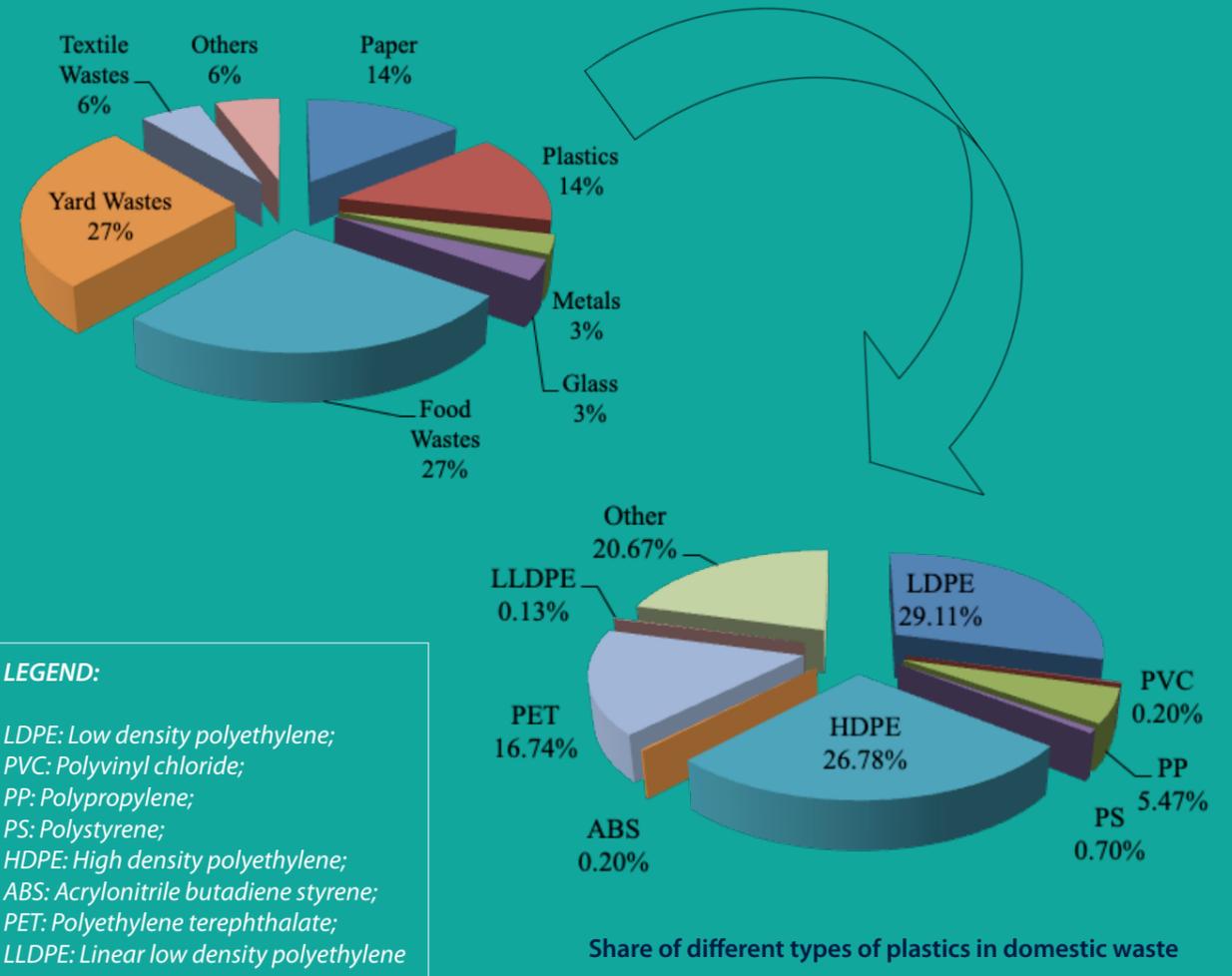
Plastic pollution has become one of the most pressing environmental issues receiving significant attention around the world nowadays. According to Plastic Oceans International, annually, more than 300 million tonnes of plastics are produced and approximately 500 billion plastic bags are used worldwide. Yet, more than 90% of all plastics are not recycled, with 50% comprising single-use plastics. At least 8 million tonnes of plastics are dumped into the ocean each year, which equal to a garbage truck per minute. As per research by the Ellen MacArthur Foundation, by 2050, the ocean will contain more plastics (by weight) than fish. The plastics that end up in the oceans can circle the Earth four times in a single year.

Microplastics are a major danger to aquatic organisms through entanglement and are even more harmful when ingested by these organisms. As a pronounced effect of bio-accumulation in aquatic organisms, the toxic components of microplastics may be fatal to human beings as part of the food chain.

“...annually, more than 300 million tonnes of plastics are produced and approximately 500 billion plastic bags are used worldwide...”

Mauritius, with a total population of around 1.3 million, generates about 1,488 tonnes of waste daily. In 2018, the total volume of wastes disposed at the Mare Chicose Landfill was 543,196 tonnes, which is the sole landfill on the island. Government spends around Rs. 1.5 billion annually on waste management. Plastic wastes are predominantly those used in packaging (plastic bags, plastic bottles and food boxes/package) and remain a large component of municipal solid waste. Plastic wastes account for more than 75,000 tonnes (14 %) of wastes, which are landfilled annually. However, only 2,000 to 3,000 tonnes of plastic wastes are recycled yearly, either locally or through export.

Composition of Domestic Wastes in Mauritius



VISION/TARGETS

The Republic of Mauritius attaches prime importance to both national and global environmental problems. Plastic pollution has been recognised as one of the main threats posed to the oceans. It is addressed by the Sustainable Development Goal (SDG) 14.1, that is: "by 2025, prevent and significantly reduce marine pollution of all kinds, in particular from land-based activities, including marine debris and nutrient pollution".

Mauritius ratified the Basel Convention on the Control of Transboundary Movement of Hazardous Wastes and their disposal. The Convention calls for addressing marine plastic litter and microplastics, amongst others. It urges countries to make efforts at the domestic level to prevent and minimise the generation of plastic wastes, promote the environmentally sound and efficient management of plastic wastes and ensure that transboundary movements of plastic wastes are undertaken in accordance with the provisions of the Convention.

Mauritius has also ratified the Convention on the Protection, Management and Development of the Marine and Coastal Environment of the Eastern African Region and related Protocols (Nairobi Convention). The aim is to prevent the degradation of the coastal and marine environment of the Western Indian Ocean region and to provide a mechanism for regional cooperation, coordination and collaborative actions for more effective management of coastal and marine ecosystems. The Nairobi Convention is working towards the development of a regional strategy or action plan on the management of marine litter and microplastics.

A plastic free Mauritius

Government acknowledges fully the serious consequences resulting from the degradation of the environment due to plastic pollution and its impact on the quality of life, health and on the economy. The vision of the Ministry of Environment, Solid Waste Management and Climate Change is to achieve a "cleaner, greener and safer Mauritius" in a sustainable manner through protection and management of our environmental assets. Along this line, Government aims to implement a plastic waste management mechanism to ensure the collection, sorting and recycling of plastic wastes, thus, shifting from a linear approach to a circular economy, whereby, resource recovery and recycling are maximised.



ISSUES OF CONCERN

- Inadequate compliance with the plastic bag regulations (manufacturers, sellers, general public) / Lack of regular control for trade of illegal plastic bags
- Single use plastic items and their impacts on the environment (e.g. straws, cups, packaging, etc.)
- Blocking of drains / Flooding
- Impacts on marine life
- Impacts on human health
 - Bioaccumulation of microplastics in bloodstream
 - Burning of plastic wastes
- Need to provide incentives to recyclers and producers to promote alternatives
- Need to provide sorting facilities for collection of plastic wastes

EXISTING POLICIES AND STRATEGIES

Government has adopted a National Environment Policy (NEP) in 2007 and updated its National Environmental Strategies (NES) in 2008. These documents set out a policy framework and environmental objectives and strategies on waste minimisation, including plastic pollution.

A new Solid Waste Management Strategy and Action Plan is also under preparation. This new strategy focuses on resource recovery and recycling in the short to medium term and calls for a change in the solid waste management system of Mauritius through the adoption of waste segregation at source. Through this strategy, plastic wastes will be collected separately and diverted towards recycling.

EXISTING LAWS AND REGULATIONS

The Environment Protection Act 2002 provides for the legal framework and the mechanism to protect the natural environment, to plan for environmental management and to coordinate the inter-relations of environmental issues. It ensures the proper implementation of governmental policies and enforcement provisions necessary for the protection of human health and the environment of Mauritius. Under the Act, the following regulations have been promulgated to control plastic pollution:

- the Environment Protection (Polyethylene Terephthalate (PET) bottle Permit) Regulations 2001 to ensure the environmentally sound management of PET bottles
- the Environment Protection (Banning of plastic bags) Regulations 2015, calling for a ban on the importation, manufacture, sale or supply of plastic bags including non-woven polypropylene bags

Under the Excise Act, financial incentive schemes were introduced to encourage PET collection for local recycling and exportation. Under the same Act, the Excise (amendment) Regulations 2019 have been promulgated for imposing Rs 2 levy on non-biodegradable plastic containers to discourage the consumption of such containers and shift towards biodegradable ones.

ACTIONS TAKEN/ ONGOING

In line with the above, the following actions were taken as follows:

- Introduction of a PET Levy of Rs 1 per bottle in 2006. This levy was increased to Rs 2 in 2010.
- As from 2014, Financial Incentive Schemes to encourage PET collection for recycling were introduced:
 - In 2014, Rs 15 per kg of PET were provided for the export for recycling in excess of 1000 tonnes and Rs 20/kg in excess of 1500 tonnes
 - This was revised in 2015 and the incentive was Rs 5 per kg of PET exported for recycling in excess of 1 tonne to encourage small operators
 - In addition, to encourage recycling of PET locally, an incentive of Rs 15 per kg of PET recycled has been introduced since July 2018
 - In 2019, the incentive was increased from Rs 5 to Rs 15 per kg for the exportation of waste PET for recycling in excess of 1 tonne
- Enforcement of the Banning of Plastic Bag Regulations through registration of importers and manufacturers, seizure of illegal plastic bags at port and airport, crack down operation for illegal plastic bags and prosecution
- 27 clearances have been issued for import of biodegradable bags since 2016
- About 179 million biodegradable / compostable bags have been imported and manufactured since 2016
- An excise duty of Rs 2 per unit of non-biodegradable disposable plastic containers including take-aways, plates, bowls, cups and trays has been imposed as from May 2019
- Acquisition of Benchtop Fourier Transform Infrared (FTIR) Spectrometer for identification of plastic materials in October 2019 to carry out test on plastics
- A new solid waste strategy and action plan is under preparation with focus on resource recovery and recycling

PROJECTS IMPLEMENTED/BEING IMPLEMENTED

- The Industrial Symbiosis project has been implemented under SWITCH Africa Green Project. It aimed at stimulating industrial symbiosis through the establishment of recycling activities and a circular economy
- Provision of PET bottles collection facility in 28 Social Welfare Centres and 12 Local Authorities by this Ministry
- Implementation of projects on empty pesticide container management by Crop Life (Mauritius)



- Provision of recycling bin facilities to collect paper, carton, aluminium cans and various sort of plastic by the NGO Mission Verte
- Promotion of eco-friendly folders and cloth bags in workshops/seminars
- Promotion of jute/cloth bags and "tente vacoas"
- Promotion of glass bottles and long-lasting flasks



PROPOSED ISSUES FOR DISCUSSION (NON-EXHAUSTIVE)

Where we are

- Plastics in the environment is a problem in Mauritius
- About 75,000 tonnes of plastic wastes are generated annually, which represent 14 % of the total wastes of 543,196 tonnes
- Regulations on banning of plastic bags and PET bottles in place and enforcement actions are being carried out
- Around 3-4% of plastic wastes are recycled yearly. 410 tonnes of plastics are recycled locally per year and 1966 tonnes of total plastic wastes are exported for recycling per year
- Financial Incentive Schemes are provided to encourage PET collection for recycling
- Introduction of levy/excise duty on PET and non-biodegradable disposable plastic containers
- A list of registered plastic recyclers/exporters is available
- Conditions are being imposed in EIA Licences and PER approvals to control plastic pollution
- Sensitisation on control of plastic pollution is being carried out
- Testing equipment for plastic is available
- Biodegradable plastic bags are being manufactured and imported
- Promote use of alternatives to plastic

Where we need to go?

- Plastic free environment, particularly for single-use plastics
- Regional solutions and collaboration to tackle transboundary movement of marine litter and microplastics
- Build circularity in plastics economy

How to reach there?

- Curb single-use of plastic items such as straws, cotton buds and drinking stirrers
- Discourage use of roll-on plastic bags for other purposes, apart from fresh, chilled or frozen seafood, meat, poultry etc
- Strengthen enforcement to better control plastic pollution
- Provide subsidies on biodegradable pellets and control import of plastic pellets
- Promote biodegradable plastic items
- Promote alternatives to plastics
- Increase recycling rate of plastic wastes into usable items
- Upgrade existing and setting-up new infrastructure to enable waste sorting
- Provide testing facility in relation to plastics
- Mobilise funds
- International /Regional funding for implementation of projects under the relevant Multilateral Environmental Agreements (MEAs)
- Build circularity in plastics economy and identification of stakeholders and engagement
- Replicate successful projects
- Research on microplastics, plastic-eating bacteria etc.
- Build capacity of stakeholders
- Enforce human resources
- Empower women entrepreneurs for providing eco-friendly products instead of plastic ones



Les Assises de
l'Environnement

CAUDAN ARTS CENTRE / 16 - 17 DECEMBRE 2019

CONTROLE DES DECHETS PLASTIQUES

Ministère de l'Environnement,
de la Gestion des déchets et
du Changement climatique