



The legal, policy and institutional frameworks governing marine plastics in Mozambique





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Abbreviations

AU African Union

CBD Convention on Biological Diversity

EDM National Electricity Company

EIA Environmental Impact Assessment

FIPAG Water Patrimony Investment Fund

INAE National Inspection of Economic Activities

MARPOL International Convention for Prevention of Pollution from Ships

MICOA Ministry for the Coordination of Environmental Action

MTA Ministry of Land and Environment

PRODEM Municipal Development Program

SADC Southern Africa Development Community

UNCLOS United Nations Convention on the Law of the Sea

Summary

Plastic waste pollution is addressed through different pieces of legislation and its management cannot be dissociated from the management of urban solid waste. Local government bodies emerge as the most important players in the necessary efforts to ensure a proper management of plastic waste pollution given its hierarchical position within the legal framework for urban waste management. However, an efficient coordination and cooperation among these bodies and all relevant governmental institutions with mandate on waste management remains challenging. Furthermore, a lack of institutional capacity jeopardizes the efficient action of these institutions.

There are also gaps in the current national legislation dealing with plastic waste management in order to ensure fulfilment of the institutional roles and implementation of the legislation. For instance, the law does not promote the recycling and reuse of plastic waste and there are no adequate penalties for acts resulting in plastic pollution. There is also no legislation addressing marine plastic pollution.

1 National background

Mozambique has a coastline of about 2,700 km, along which 60% of its 28 million inhabitants live. Seven of its ten provincial capitals as well as the capital of the country are also located on the coast, which means that the majority of urban areas are located near the shore.

The Constitution of the Republic of Mozambique enshrined within the scope of economic, social and cultural rights and duties the right of all citizens to live in a balanced environment and the duty to defend it.² In general, any act of pollution is prohibited in Mozambique unless it occurred within the legally established limits.³ Marine pollution is addressed within the Environment Framework Law and related regulations on waste management. As a consequence, waste must be separated according to its category and content. In this regard, plastic waste must be separated and treated as part of urban solid waste.⁴ This specific category of waste also includes household waste and single use plastics such as plastic bags and bottles, which are supposed to be managed at the local governmental level i.e. by the provincial, district or municipal authorities, while the central authorities mainly deal with policy and the enactment of general legislation.

Currently, all solid household waste collected is deposited in official or unofficial dump sites without proper (if any) treatment or segregation, a situation which leads to a constant need to create new landfills, especially in urban areas.⁵ If segregation at source were to be implemented, the potential for implementation of reutilization or recycling processes by the concerned entities would be more effective. Such a system could promote an increase in the lifetime of existing dump sites and potentially generate work and income for those who use waste as a means of living.

Rapid urbanization, the growth of districts without any basic services, and internal migration, amongst other factors, have challenged the public administration to face a new reality. In stores and markets, there is increasing marketing and use of plastic products, especially bags, replacing baskets of natural materials and fabrics. The exponential increase in the daily use of plastic objects is considered more economical in relation to similar products manufactured with wood or metal, and iconsequently has become one of the causes of increasing plastic pollution, resulting in garbage on the streets and the clogging of rainwater drainage channels.⁶

¹ Hoguane, A. M. (2007). Perfil Diagnóstico da Zona Costeira de Moçambique. *Revista de Gestão Costeira Integrada* 7(1):69-82.

² Lei No. 1/2018 of 12 June 2018. Art. 90 and 92 (Environmental Rights and Consumers' Rights).

³ *Lei* No. 20/97 of 1 October 1997 *Lei do Ambiente*. Art 9. It establishes a generic prohibition of production, deposit, or release into the water or atmosphere of any toxic or polluting substances, outside the legal limits established by the Cabinet.

⁴ Decreto No. 94/2014 of 31 December 2014 Regulamento sobre Gestão de Resíduos Sólidos Urbanos. Art. 14. This decree includes plastic waste in the category of urban solid waste.

⁵ Tas, A. and Belon, A. (2014). A Comprehensive Review of the Municipal Solid Waste Sector in Mozambique. Carbon Africa

⁶ Alberto, C. (8 December 2015). O que dizem os leitores - Limpar colectores de água. Available at https://www.jornalnoticias.co.mz/index.php/opiniao-analise/47614-o-que-dizem-os-leitores-limpar-colectores-deagua (accessed 20 March 2020).

2 International obligations

Mozambique is a member State of several international environmental conventions as well as regional institutions such as the African Union (AU) and the Southern Africa Development Community (SADC). Having ratified the Convention on Biological Diversity (CBD), the Basel, Bamako, Rotterdam and Stockholm Conventions, as well as the Nairobi Convention and the SADC Protocols on Transport, Communications and Meteorology, Wildlife Conservation and Law Enforcement, Water Shared Watercourses, Fisheries, Trade, Sanitary and Phytosanitary, the country has since been obliged to adopt policies and legislation relating to the management of natural resources in accordance with the principles of sustainable development introduced by the 1992 Rio Declaration on Environment and Development.

As a consequence, the country has embarked on a movement to enact environmental and natural resource policies and legislation that incorporate, by adjusting them to local conditions, the international environmental principles and obligations contained in these instruments, and to establish and empower institutions to ensure implementation of the obligations arising from these instruments. It was within these local conditions that in 1994, for the first time, the environment appeared as an autonomous sector within the Cabinet with the appointment of a Minister in charge of environmental affairs, with the aim to ensure that, in pursuing its development agenda, the country does not neglect environmental issues. Under the leadership of this Ministry, in 1997, an environmental framework law was adopted, laying the foundation for the domestication of environmental international obligations affected by the obligations arising from agreements concluded by these institutions or their members.

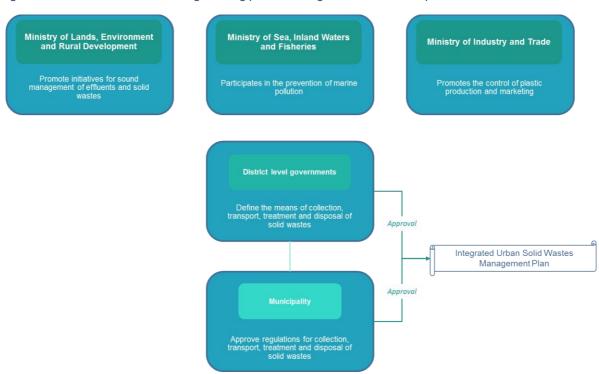
Table 1: The international conventions related to plastic pollution ratified by Mozambique

Agreement	Ratified	Implementing Legislation
UNCLOS	26 November 1996	 Sea Law Regulation on Pollution Prevention and Coastal and Marine Environmental Protection Maritime Court Law Environmental Law Fisheries Law Regulation Establishing the Legal Regime for the Use of the National Maritime Space
MARPOL	5 November 2003	
Basel Convention	26 November 1996	 Environmental Law Regulation on Management of Hazardou Waste
Stockholm Convention	31 December 2004	 Regulation on Management of Urban Solid Waste Regulation on Environmental Quality and Effluent Emission Standards Pesticides Regulation

Mozambique is also party to regional agreements dealing with environmental matters which have been implemented through the same legislation as the global related conventions, namely, Bamako Convention, Nairobi Convention, SADC Protocol on Fisheries and the SADC Protocol on Water Shared Watercourses.

3 Relevant institutions and processes

Figure 1: the institutional framework governing plastic management in Mozambique



The Ministry of Land and Environment (MTA), is the lead institution for plastic waste management, considering its mandate and role in implementing measures to prevent degradation and control the quality of the environment, as well as in promoting sound management of effluents and solid waste, including plastic waste.⁷

The Ministry has undertaken this role in its mandate and exercises it through the National Agency for Environmental Quality Control (AQUA), as overseer and controller of environmental quality in the country, proposing and implementing technical directives, procedures and standards for integrated control of environmental pollution. This is carried out in coordination with other government departments responsible for natural resource management, and economic supervision. AQUA, representing MTA, coordinates with the National Inspection of Economic Activities (INAE), representing the Ministry of Industry and Trade. INAE is an institution with the responsibility for ensuring that any economic activity, whether commercial or industrial or product, is developed in compliance with the legal

⁷ Decreto Presidencial No. 1/2020 of 17 January 2020; Resolução No. 30/2020 of 6 May 2020 que cria e aprova o Estatuto Orgânico do Ministério da Terra e Ambiente.

requirement when on inspection missions. The marketing and production of plastic bags are controlled by this body.

With regard to the marine ecosystem, MTA is supposed to coordinate with the Ministry of Sea, Inland Waters and Fisheries as well as with the National Maritime Institute (INAMAR), taking into account that both institutions have competencies to participate in and promote actions to prevent and combat marine pollution (including by plastics from any vessels).⁸

At the local level, the approval of the Municipalities Law in 1997 and of the Local Government Law in 2003 changed the scenario of urban administration in Mozambique.⁹ The first law introduced a new level of public governance for Municipalities aiming to establish the decentralization of powers to municipal governments as an important component of the ongoing State decentralization process. It provides Municipal Assemblies with powers to approve regulations for the collection, transport, treatment and disposal of solid waste within their jurisdictions, normally a city or village.¹⁰ The second law reformed the way the central government manages local interests at the provincial and district levels, by decentralizing certain powers to this level to ensure efficiency of local government matters.¹¹ This law empowers District level governments to define the means of collection, transport, treatment and disposal of solid waste within their jurisdictions.

However, since Mozambique's independence in 1975, all cities and villages in the country are administratively dependent on the central government, especially with regard to financial resources. Many administrative structures from the colonial era have remained in place until the present day. The growth of Mozambican cities has not been accompanied by the development of urban infrastructure and services, including public sanitation services such as drinking water supply, sewage collection and treatment, and waste management systems of urban drainage structures. Currently, in Mozambique, all Municipalities and District Governments dispose of their urban solid waste in open spaces called waste dumps.

The mechanism to promote the dialogue between all above mentioned institutions is supposed to be the National Council for Sustainable Development (CONDES), created by the Environment Law and empowered to ensure effective coordination among all interested stakeholders on processes of development and implementation of natural resources policies and related legislation. Although it was active at the beginning of its operationalisation, recent administrative changes have undermined its ability (power) to promote inter-institutional dialogue, as it no longer has an independent Secretariat and is no longer chaired by the Prime Minister. It is now chaired by the MTA, which also provides the Secretariat, which implies that it is perceived by other sectors as a non-independent institution.¹³

⁸Resolução No. 30/2020 of 6 May 2020 que aprova o Estatuto Orgânico do Ministério da Terra e Ambiente. Art 3 (c)(ix); Decreto Presidencial No 2/2017 de 10 de Julho que altera as atribuições e competências do MIMAIP. Art 3 (xiv). Resolução No. 12/2015 of 1 July 2015 aprova o Estatuto Orgânico do Ministério do Mar, Águas Interiores e Pescas

⁹ Lei No. 2/97 of 18 February 1997 aprova o Quadro Jurídico para a Implantação das Autarquias Locais as revised by Lei No. 6/2018 of 3 August 2018; Lei No. 8/2003 of 19 May 2003 estabelece princípios e normas de organização, competência e funcionamento dos órgãos locais do estado.

¹⁰ Lei No. 2/97 of 18 February 1997 aprova o Quadro Jurídico para a Implantação das Autarquias Locais as revised by Lei No. 6/2018 of 3 August 2018. Art. 47.

¹¹ Lei No. 8/2003 of 19 May 2003 estabelece princípios e normas de organização, competência e funcionamento dos órgãos locais do estado. Art. 39.

¹² Maputo (2008). Plano Director da Gestão de Resíduos Sólidos Urbanos da Cidade de Maputo.

¹³ Lei No. 20/97 of 1 October 1997 Lei do Ambiente. Art. 6; Decreto No.13/2013 of 11 April 2013 Regulamento do Conselho Nacional de Desenvolvimento Sustentável, amended by Decreto No. 19/2016 of 17 May 2016.

4 Legal and policy frameworks

4.1 Overarching law or strategy

At the national level, waste management in Mozambique is addressed under the Environmental Framework Law, which lays down general provisions for the protection of the environment including the marine environment. This law empowers the Government to issue all necessary regulations to control and prevent all types of pollution, including regulations to protect the marine environment. It establishes a generic prohibition on the production, deposit, or release into the water or atmosphere of any toxic or polluting substance, outside the legal limits established by the government. ¹⁵

As a consequence of the enactment of this Law, implementing regulations for waste management and for the prevention of marine pollution have been adopted to ensure a proper waste management. The law has also influenced the decentralization process by paving the way for the sharing of responsibility for waste management amongst the different governance structures in the country, as it provides for the need to create institutions at the local level to implement the law. The structure is the structure of the need to create institutions at the local level to implement the law.

4.2 Production

There is a general provision in the Regulation on Control and Management of Plastic Bags, which prohibits the production, import and retail marketing of plastic bags with a thickness of less than 30 micrometers, unless they are produced in a Free Zone for export.¹⁸

The Regulation on the Extended Producer Responsibility and Importers of Packages, aims to extend the responsibility to the producers and importers of any type of packages for their management when they become waste.¹⁹ The provisions of this regulation impose on the importers or producers the obligation to take back packaging materials when they are returned by end users. Producers must preferably use recyclable materials in the production of packaging.²⁰

The regulation provides for the introduction of an environmental tax on packaging, to be paid by producers and importers following the polluter pays principle. It also provides for packaging standardization systems to standardize packaging produced or imported into the country to ensure that it is reused or recycled by waste management entities.

The implementation of the regulation depends on the enactment of a Ministerial Diploma by MTA, jointly with the Ministries of Economy and Finance and of Industry and Trade, approving the calculation formula of the mentioned tax and the category and list of packages subject to or exempted from tax. This diploma has not yet been approved, and therefore the regulation is ineffective so far. The regulation also imposes responsibilities on the Ministry of Industry

¹⁴ Lei No. 20/97 of 1 October 1997 Lei do Ambiente. Art. 2, 6, 11, 12, 13 and 33.

¹⁵ *Ibid*. Art. 9.

¹⁶ Decreto No. 45/2006 of 30 November 2006 Regulamento para a Prevenção da Poluição e Protecção o Ambiente Marinho e Costeiro; Decreto No. 83/2014 of 31 December 2014 Regulamento sobre Gestão de Resíduos perigosos; Decreto No. 94/2014 of 31 December 2014 Regulamento sobre a Gestão de Resíduos Sólidos Urbanos.
¹⁷ Lei No. 20/97 of 1 October 1997 Lei do Ambiente. Art. 7.

¹⁸ Decreto No. 16/2015 of 5 August 2015 Regulamento Sobre a Gestão e Controlo do Saco de Plástico. Art. 4.

¹⁹ Decreto No. 79/2017 of 28 December 2017 Regulamento sobre a Responsabilidade Alargada dos Produtores e Importadores de Embalagens. Art. 6, 7 and 8.

²⁰ *Ibid.* Art. 17(1).

and Trade and the Ministry of Economy and Finance, as well as on Municipalities and District governments relating to recovery and management of packaging when it becomes waste.²¹

Unfortunately, as the informal actors in the recycling value chain, mainly the informal waste collectors, issue neither invoices nor receipts for their sales (waste), companies who buy their waste and use it as raw material have no way to identify that as a production cost for tax purposes. Consequently, the income from sales of the final produced goods with this material will be taxed as an unjustified expense, although the Corporate Income Tax Code (IRPC) provides for non-deductible charges for tax purposes.²² To avoid that situation, it is required that all actors involved in recycling activities compel the collectors to regularize their tax situation under the taxation legal framework, which would allow them to issue valid tax documents in order to enable the purchase of recyclable materials for industry.²³

4.3 Trade and transport

The regulations for the import and export of plastics are set out in the Regulation of the Licensing of Commercial Activities laying down the requirements and rules for the exercise of trade and consequent licensing of importers and exporters of goods and the Customs Transit Regulation of Goods laying down procedures for implementing the general rules for the customs clearance of goods.²⁴ International trade of waste is prohibited under Environmental Law except if it is made under the obligation of international conventions such as the Vienna, Rotterdam and Stockholm Conventions.²⁵ The transport legislation does not impose special rules for the transport of plastic, but it establishes the general rules for the transport of all types of goods.²⁶

4.4 Retail and consumer use

With regard to distribution, the Regulation on Control and Management of Plastic Bags, mentioned above, prohibits the retail marketing of plastic bags less than 30 micrometers thick, unless they are produced in a Free Zone for export.²⁷ This regulation also prohibits the free distribution of plastics in any place where commercial activities are carried out, including the sale or distribution of plastic bags containing more than 40% of recycled material in places or stores that market food products.²⁸ The regulations exempt the above restrictions for both types of plastic bags used for weighing food products or packaging of solid urban waste.²⁹

4.5 End of life

Mozambique does not have a national waste management policy that broadly addresses the various issues related to the management of this particular type of waste. However, it is

²¹ *Ibid*. Art. 5.

²² Lei No. 34/2007 of 31 December 2007 aprova o Imposto Sobre o Rendimento de Pessoas Colectivas (IRPC) and amended by Lei No. 20/2009 of 10 September 2009. Art. 36 and paragraphs (g) and (q).

²³ Lei No. 5/2009 of 12 January 2009 aprova o Imposto Simplificado para Pequenos Contribuintes (ISPC); Decreto No 14/2009 of 14 April 2009 Regulamento do ISPC.

²⁴ Decreto No. 34/2013 of 2 August 2013 Regulamento do Licenciamento da Actividade Comercial; Diploma Ministerial No. 116/2013 of 8 August 2013 Regulamento de Trânsito Aduaneiro.

²⁵ Lei No. 20/97 of 1 October 1997 Lei do Ambiente. Art. 9(2).

²⁶ Decreto No. 11/2009 of 29 May 2009 Regulamento do Transporte em Automóveis.

²⁷ Decreto No. 16/2015 of 5 August 2015 Regulamento sobre a Gestão e Controlo do Saco de Plástico. Art. 4.
²⁸ Ibid.

²⁹ Ibid. Art. 4(2).

important to emphasize that the establishment in 1994 of the Ministry for the Coordination of Environmental Action (MICOA), with powers to develop policies and legislation to deal with pollution, indicates a recognition that pollution control is one of the major environmental threats in Mozambique.³⁰ More recently adopted environmental management policies and programs show that governments are committed to address this problem, which remains a priority. Since 2015, the competencies and powers of MICOA have been integrated into MTA.³¹

In the absence of an overarching waste management policy, the issue of pollution was addressed by the National Environmental Policy adopted in 1995, which led to the categorization of plastic waste as part of the general category of urban solid waste, followed by a National Environmental Management Programme in 1996.³² The approval of this policy and programme paved the way for the implementation of concrete actions within the country for the development of a legal framework for the management of pollution resulting from waste disposal, particularly urban solid waste. The policy stressed the need to strengthen the management of the urban environment with special attention to the management of household and medical waste as a priority.

The strategy was to decentralize urban environmental management competences to Municipalities, training them in the management of household and medical waste, with the aim to improve the system of collection, treatment and disposal of waste and introduce mechanisms for community participation in solid waste management.

Although the policy does not set targets for the closure of all dumps in the country, it proposes the creation and management of landfill areas for solid waste by introducing treatment and recycling systems. It also goes further and proposes the introduction, for citizens, of mechanisms for the practice of separating urban solid waste.

The policy suggests, in the medium and long term, the adoption of legislative measures obliging polluters to recycle their waste. The policy proposes the creation of sanitary landfills (domestic and industrial), infrastructures for the recovery and disposal of hazardous domestic, chemical and biological waste and the creation of selective collection systems. The Strategy for the Integrated Management of Urban Solid Waste in Mozambique, adopted in 2012 by the Ministry for the Coordination of Environmental Affairs, outlined the guidelines for the adoption of standards for the different stages of solid urban waste management, as well as the adoption of targets for the installation of landfills and the consequent closure of open dumps between 2013 to 2016.³³

The policy and later the environmental law and subsequent regulations opened an opportunity for waste to be managed by companies created by Municipalities or private entities. Both need to be licensed by MTA.³⁴

³⁰ Decreto Presidencial No. 6/95 of 10 November 1995 define os objectivos e funções do Ministério para a Coordenação da Acção Ambiental.

³¹ Resolução No. 6/2015 of 26 June 2015 que aprova o Estatuto Orgânico do Ministério da Terra, Ambiente e Desenvolvimento Rural.

Decreto No. 94/2014 of 31 December 2014 Regulamento Sobre a Gestão de Resíduos Sólidos Urbanos. Art.
 14; Resolução No. 5/95 of 3 August 1995 aprova a Política Nacional de Ambiente.

³³ Ministério para a Coordenação da Acção Ambiental (2012). *Estratégia de Gestão integrada de Resíduos Sólidos Urbanos em Moçambique*.

³⁴ Decreto No. 94/2014 of 31 December 2014 Regulamento Sobre a Gestão de Resíduos Sólidos Urbanos. Art. 5(1) and 9.

4.5.1 Integrated urban solid waste management plans

The Regulation on Management of Urban (household) Solid Waste can be considered the primary tool to address solid waste in general. The regulation requires any public or private entity engaged in activities related to urban solid waste management to develop and submit an Integrated Urban Solid Waste Management Plan for approval by the district or municipality authorities.35 This means that the executive bodies of the Municipalities and District Government have to submit their integrated urban solid waste management plan to the competent legislative body of their institution for approval, while the private operator involved in collection and transport of urban solid wastes must be licensed by the Municipalities and District governments within the framework of the approved integrated urban solid waste management plans. Finally, those who own and/or operate waste disposal and/or treatment facilities have to submit their integrated urban solid waste management plan to MTA for approval as part of the facility licensing process for operation. The potential for dysfunction and competition in the system is present beside the fact that each plan is only valid for a geographic jurisdiction and the rules can vary from one jurisdiction to another. The exemptions are waste disposal or treatment facilities where one institution is responsible to oversee all plans (MTA). The plan must diagnose the current waste management situation and define the measures to be adopted to improve the processes of collection, treatment and disposal of the waste in an environmentally sound manner, including targets and the specific responsibilities of all entities involved in the waste management system.

The regulation also requires local and municipal authorities to promote public awareness campaigns on the importance of adequate urban waste management, focusing on the production, prevention and control of pollution and the benefits of reuse and recycling.³⁶ In addition, this regulation creates the obligation for the authorities to impose a system of separate collection of waste in accordance with established categories.³⁷ Plastics are considered as a specific category under this regulation, which means that the concerned entities in charge of waste collection are expected to collect plastics in a specific container and dispose of them in an environmentally sound manner.³⁸

As a complement to this regulation, the Local Government Regulation and the Municipalities Law impose obligations on District Governments and Municipal Assemblies to define the means of collection, transport, treatment and disposal of solid waste, especially medical and toxic waste.³⁹ Considering that material resources are required to ensure that this can be achieved, the Regulation on Management of Urban Solid Waste empowers the Municipalities and District Governments to establish and collect taxes under the above-mentioned regulations. As a result, all Municipalities, when approving their specific waste management legislation, include waste taxes that are to be paid by those interested in waste management business, as well as by the residents of the Municipality, to support waste management services provided by the Municipality.⁴⁰ Unfortunately for District Governments, although the

³⁵ *Ibid.* Art. 8.

³⁶ *Ibid*. Art. 18.

³⁷ *Ibid*. Art. 13.

³⁸ Ibid. Art. 14.

³⁹ Lei No. 8/2003 of 19 May 2003 estabelece princípios e normas de organização, competência e funcionamento dos órgãos locais do Estado. Art. 46(3); Lei No. 2/97 of 18 February 1997 aprova o Quadro Jurídico para a Implantação das Autarquias Locais as revised by Lei No. 6/2018 of 3 August 2018. Art. 46(d).

⁴⁰ Resolução No. 89/AM/2008 of 22 May 2008 Regulamento sobre os Componentes de Limpeza do Município de Maputo.

Regulation on Management of Urban Solid Waste proposes that they may establish taxes related to waste management, because they have not yet established their legislative powers (to be established after the 2024 general election) this provision, which can be seen as a potential solution to the problem of scarcity of resources at the municipal level, is not yet applicable for the Municipalities. However, the collection of revenues through tertiary entities such as The National Electricity Company (EDM) and the Water Patrimony Investment Fund (FIPAG) has not contributed to the improvement of solid waste management, as the mechanisms for the reimbursement of these taxes by the collector are encountering challenges and not all Municipalities allocate all the funds from these revenues for this purpose.⁴¹

Within this framework, Mozambique's 54 Municipalities and 154 Districts must develop and adopt specific waste management plans and regulations adequate to their own situation, based on the guidelines established by the general legislation adopted at the national level. 42 According to the Municipal Development Program (PRODEM), from 2017 to 2018 about 20% of the Municipalities were able to produce approved waste management plans. 43 The Maputo City Municipality is the only one to have an approved waste management regulation, on the cleaning components of the Municipality of Maputo, which was published in the official gazette in 2008 and adopts the principle of mandatory waste separation. 44 Even where Municipalities have developed waste management plans and have sanitation companies, such as Maputo, Matola and Beira Municipalities, they still face challenges in effective integrated urban solid waste management, due to lack of capacity and human and financial resources. 45

Municipalities and District Governments are not yet implementing obligations related to the sorting of urban waste separation prior to collection, or treatment prior to disposal. ⁴⁶ Current systems do not incorporate important aspects such as the environment, economic and financial sustainability, environmental education and the involvement of communities and the private sector into the waste management scheme. Even the Maputo City Municipality, which is the most developed and competent urban area in the country, does not yet implement the separation on waste collection required in its bylaws, except in the case of hazardous waste. It is the author's opinion that, although the solid waste management system is complete from a legal point of view, in practice it is deficient and can be improved.

4.5.2 Marine regulation

Under the Regulation on Pollution Prevention and Coastal and Marine Environmental Protection, illegal discharges of pollutants into the sea by vessels, platforms or land-based activities or the deposit of solid waste along the coastal areas outside appropriate containers are prohibited.⁴⁷ In the event that containers are not available on the beach, users are obliged to carry their waste to the nearest container. Although this regulation does not specifically

⁴¹ Radio Moçambique (16 March 2019). *ANAMM Reclama Valores de Taxa de Lixo cobrados pela EDM*. Available at https://www.rm.co.mz/rm.co.mz/index.php/component/k2/item/4518-anamm-reclama-valores-da-taxa-de-lixo-cobrados-pela-edm.html (accessed 12 February 2020).

⁴² Decreto No. 94/2014 of 31 December 2014 Regulamento Sobre a Gestão de Resíduos Sólidos Urbanos. Art. 8. ⁴³ Programa de Desenvolvimento Municipal website. Available at http://www.prodem.org.mz/ (accessed 13 March 2020).

⁴⁴ Resolução No. 89/AM/2008 of 22 May 2008 Regulamento sobre os Componentes da Limpeza do Município de Maputo. Art. 13.

⁴⁵ Programa de Desenvolvimento Municipal. *Gestão de Resíduos Sólidos em Moçambique*. Available at http://www.prodem.org.mz/static/gestao-de-residuos.html (accessed 13 March 2020).

⁴⁷ Decreto No. 45/2006 of 30 November 2006 Regulamento para a Prevenção da Poluição e Protecção do Ambiente Marinho e Costeiro. Art. 52.

mention plastic waste, it appears to be an important tool to prevent the disposal of plastics in the marine environment. This regulation is complemented by the provisions of the Regulation on Management of Urban Solid Waste, which classifies plastic waste into a specific category of solid waste that needs to be separated by producers and collection entities prior to disposal.⁴⁸ It imposes an obligation on Municipalities and District Governments to ensure that urban solid waste is not deposited freely on beaches and in the sea.⁴⁹ The General Regulation on Marine Fisheries and the Regulation on Sport and Recreational Fishing, although their provisions deal mainly with fishing activities, also include provisions for the control of marine plastic pollution. They impose on amateur fishermen and fishing crews the duty to collaborate with the authorities in preventing water pollution, including the obligation to rescue abandoned fishing gear, and in case of failure to do so, to report the incident to the local fisheries authority.⁵⁰ Although there is no specific reference to plastics, these provisions are still relevant as plastics are also used in the fabrication of fishing gear. Fishing regulations impose a duty on fishermen to avoid the abandonment of fishing gear in the ocean, but do not prescribe penalties for those found guilty.⁵¹ However, this provision can be used in conjunction with the provisions of the Environmental Framework Law and the Criminal Code (the provisions of the Environmental Law define what pollution is, while the Criminal Code qualifies pollution as a type of crime and prescribes the penalty to be applied) to charge offenders as polluters, subject to fines and imprisonment.⁵²

Although there are regulations in place that can be used to tackle marine pollution by plastics, a specific regulation on the issue of marine plastic pollution could ensure coordination and shared responsibilities between the entities responsible for waste management in Mozambique. Such a regulation should involve MTA, the Ministry of Seas, Inland Waters and Fisheries, the Ministry of Industry and Trade, the Ministry of Transport and Communications (which regulates the shipping industry as well as ports and maritime authorities) and District Governments and coastal Municipalities.

4.5.3 Territorial planning

Approval by local and municipal governments of land use and territorial plans is mandatory under the Territorial Planning Law, as a principle of public participation and citizens' awareness through access to information, on their development and the resulting implementation and evaluation processes.⁵³

As this law provides, the approved territorial planning instruments, such as land use plans, should be published in the Official Gazette, which gives any concerned citizens the opportunity to learn whether there is any violation.⁵⁴ This possibility enables them to participate or to be aware of the rights and obligations that the instruments impose on them to ensure their well-

⁵⁰ Decreto No. 43/2003 of 10 December 2003 Regulamento Geral da Pesca Marítima. Art. 2(6); Decreto Presidencial No. 1/2015 of 16 January 2015 as revised by Decreto Presidencial No. 17/2015 of 25 March 2015 and Decreto No. 51/99 of 31 August 1999 Regulamento da Pesca Desportiva e Recreativa. Art. 28.

⁴⁸ Decreto No. 94/2014 of 31 December 2014 Regulamento Sobre a Gestão de Resíduos Sólidos Urbanos. Art. 11.

⁴⁹ *Ibid*. Art. 5, 6 and 14.

⁵¹ Decreto No. 43/2003 of 10 December 2003 Regulamento Geral da Pesca Marítima. Art. 164. It mandated the Minister of Fisheries to approve the penalties for violations of this regulation under the provisions of the Fisheries Law but it was not applied. The revised Fisheries Law, *Lei* No. 22/2013 of 1 November 2013 *Lei das Pescas*, includes an extensive chapter on violations and sanctions (Title III) but also does not prescribe penalties for that Act.

⁵² Lei No. 35/2014 of 31 December 2014 Código Penal. Art. 354.

⁵³ Lei No.19/2007 of 18 July 2007 Lei de Ordenamento do Território. Art. 6.

⁵⁴ Ibid. Art. 11; Decreto No. 23/2008 of 1 July 2008 Regulamento da Lei de Ordenamento do Território. Art. 73.

being. Their approval may also help the government to avoid the proliferation of informal settlements. When these instruments are developed, they enable the competent authorities to provide everyone access to secure land tenure for the construction of housing as legal land plots. It also enables the district and municipal authorities to better implement their integrated waste management plans because the current difficulties of accessibility to many informal settlements due to the lack of basic infrastructure for waste collection can be minimized.

4.5.4 Waste transport and treatment

Facilities for treatment, recycling and disposal of urban waste must carry out an Environmental Impact Assessment (EIA) to obtain an environmental license prior to any construction and operation. ⁵⁵ Companies involved in waste management operations, including those involved in collection and transport, must be licensed and the vehicles used must be equipped with mechanisms to prevent waste from being littered during the transportation to the deposit sites created and managed by municipal or local government entities. ⁵⁶ The observance of these provisions aims to ensure that waste management is carried out in an environmentally sound manner.

5 Gaps and challenges

The major gap in the current legislation is that marine plastic pollution has not yet been treated as a major threat to the marine environment and no specific policy for the prevention of marine pollution has been developed. Such instruments are vital to align all the Municipal and District management plans specifically on the identification of common sources of plastic waste, the identification of plastic waste disposal technologies, and better tariff systems to cover the costs associated with different models of plastic waste management.

The fact that the current fisheries legislation does not contemplate penalties for those found responsible for abandoned fishing gear in the sea or on beaches is also a gap in the plastic pollution management system.

Current environmental legislation does not provide for instruments to promote the recycling and reuse of plastic waste, nor does it refer to the participation of separate collection and recycling organizations in the integrated solid waste management system as a way of addressing poverty and problems caused by solid waste. Nor does it provide for special funding for Municipalities or Districts that develop projects or programs for separate collection and recycling.

At the institutional level there is a lack of clarity on the role to be played by all governmental institutions with responsibilities in the field of plastic waste management. This leads to coordination difficulties and a situation where the problem of plastic pollution can only be dealt with by the Ministry responsible for environmental matters, even in situations where the legal framework gives responsibility to a separate entity. This results in an inadequate enforcement of the current legislation.

In addition to the factors mentioned above, municipal management faces capacity problems and challenges. The Municipality of Maputo is by far the most studied in the existing literature

Decreto No. 94/2014 of 31 December 2014 Regulamento Sobre a Gestão de Resíduos Sólidos Urbanos. Art. 9.
 Ibid. Art. 12.

and has more capacity than other Municipalities in the country, thus making it a paradigmatic case of the challenges faced by Municipalities, namely:

- excessive subordination of the legislative power to the municipal executive power, which leads to a low effectiveness of the existing legal framework;
- weak framework for the promotion of dialogue between the different stakeholders, combined with a perception that the Government is primarily responsible for municipal solid waste management;
- insufficient fees to ensure the financial sustainability of the sector and to reflect social justice principles;
- inadequate budgeting and ineffective cost control of solid waste management services;
- lack of incentives to reduce the costs of producing solid waste at source (domestic producers), such as recycling, re-use and other forms of exploitation; and
- weak political will, ineffectiveness of existing education programmes, lack of planning, monitoring and evaluation of strategic activities, weak community involvement and lack of participation in decision-making processes.



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