



Maputo is the capital and most populous city of Mozambique. It is located near the southern end of the country, within 120 kilometres of the Swaziland and South African borders. The city has a population of 1,101,170 (2017 census) distributed over a land area of 347 square kilometres. The Maputo metropolitan area includes the neighbouring city of Matola, and has a total population of 2,717,437. Maputo is a port city, with an economy centred on commerce. The city is divided into seven main administrative divisions. Each of these consists of several smaller city quarters or bairros.

SWM services in the Maputo City are managed by Municipal Directorate for SWM of the Maputo City Council (MCC). The centre of the city seems to be kept clean but the sanitary environment of low income and poor residential areas is in poor condition due to the dumping of garbage on roadsides and in drains. The final disposal site is open dumping, and the surrounding environment seems to be deteriorating.

Information

Population*	1,101,170 (2017 census)
Population growth (annual %)**	0.1 (2010-2015)
Area (km²)*	346.77
Climate*	Tropical savanna climate
Main industries	Food, beverages, chemicals (fertiliser, soap, paints), petroleum products, textiles, cement, glass, asbestos, and tobacco
Currency***	USD 1: MZN 62.09 (Mozambican metical) (February 2019)

Sources: * Wikipedia, Maputo, accessed 26 February 2019, <<https://en.wikipedia.org/wiki/Maputo>>

** United Nations, Department of Economic and Social Affairs, Population Division (2018). World Urbanization Prospects: The 2018 Revision, Online Edition.

*** Oanda.com

Current SWM Situation

Item	Outline
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Institutional System

Legal system	<ul style="list-style-type: none"> ● The laws and regulations related to SWM are as follows: <ul style="list-style-type: none"> » Code of Maputo City Waste Management (revised in 2004): basic principles and norms for solid waste.
Policy/Plan	<ul style="list-style-type: none"> ● There is no specific SWM policy or plan in the city.
Implementation system	<ul style="list-style-type: none"> ● Municipal Directorate for SWM of the Maputo City Council (MCC): in charge of managing SWM in the city (street sweeping, collection, final disposal site operation, and civic environmental education), and prepares Municipal Waste Management Plans. It has 40 administration staff and 130 operations staff. It also has 30 supporters of Municipal Districts for cleaning process. ● Ministry of Environment - National Directorate of Environment: responsible for environmental legislation and supervision. ● Ministry of Health: responsible for the management of biomedical waste.

Technical System

Waste generation amount & characteristics	<ul style="list-style-type: none"> ● Waste generation amount: 1,500 tons/day (estimated by adding the number of people living in the city to the number of those coming to work in the city, and multiplying by the waste generation rate). ● Waste generation rate in residential area: 1.2 kg/person/day (updated in 2018). ● Waste collection amount: 1,200 tons/day (data obtained by weighbridge at disposal site). ● Waste collection coverage: 80% of the population has access to collection service (estimation resulting from daily activity). ● Waste composition: <ul style="list-style-type: none"> » Food 68.4%, plastics 9.9%, paper 2.4%, textiles 2.3%, metal 1.8%, glass 3.3%, other (ceramic, wood, rubber, sand) 11.9% (Source: JICA 2016).
Storage and discharge/ Collection and transportation/ Road sweeping	<ul style="list-style-type: none"> ● The private sector participates in provision of waste collection, sweeping services, transport of waste from the transfer station to the disposal site, and recycling activities. ● There are about 1,000 waste pickers and recyclers in the city. ● The community is informed of how to dispose of waste such as collection day and time, and separation of waste through public consultation meetings, school curriculum, flyers, and brochures. Information is also disseminated through theatres, music venues, and public expositions. There are also campaigns for cleaning the city with community participation. ● The city provides a road sweeping service in the city centre, residential areas, and major public areas. ● Waste is collected three times a week or more in the city centre and in residential areas. ● Separate collection is in place for municipal market waste, commercial and institutional waste, household waste, and pruned trees and grass. ● The hauling distance from the city centre to a disposal site is about 7 km. ● Number of collection vehicles: the number of trucks cannot be identified since waste management services are delegated to the private sector. ● There is no transfer station in the city.

Item	Outline
Intermediate treatment/ Recycling	<ul style="list-style-type: none"> ● There is one Materials Recovery Facility (MRF) in the city. <ul style="list-style-type: none"> » Location: Hulene Area between Julius Nyerere and Beira Avenues. » Capacity: 10 tons. » Operation hours: 8 hours/day. » Amount of waste treated in the facility: 7 tons a day. Another 43 tons/day of waste from Maputo is treated in other municipalities. ● There is one composting facility in the city which belongs to Maputo Municipality. <ul style="list-style-type: none"> » Location: Costa de Sol area next to Conferência Joaquim Chissano. » Capacity: 20 tons in 3 months. » Operation hours: 8 hours/day. » Amount of waste treated in the facility: 10 tons in three months (estimate). ● Self-disposal at generation source (open burning, animal feeding, composting, and selling recyclable materials to recyclers) exists.
Final disposal	<ul style="list-style-type: none"> ● There is one dump site managed by the MCC. <ul style="list-style-type: none"> » Location: Hulene Area at Julius Nyerere Avenue, near the Hulene Area MRF. » Area: 17 hectares. » Operation hours: 24 hours. » Waste disposal amount: 1,200 tons/day. » Data obtained by weighbridge. » Facility: bottom liner, weighbridge, gate, and fence. » Operation plan: mid-term plan exists. » Operation: compaction of waste but no covering with soil.
Financial system	<ul style="list-style-type: none"> ● Total revenue for waste service: USD 250,000/month. ● Total expenditure for waste service: USD 550,000/month (USD 384,000/month for collection and transportation, USD 50,000/month for sweeping, and USD 116,000/month for final disposal). ● Amount spent per ton of waste: USD 27/ton. ● The MCC charges waste collection fee of USD 200,000/month for household waste, USD 25,000/month for commercial waste and USD 25,000/month for institutional waste. ● Tipping fee for waste disposal is USD 1.70/ton.
Environmental and social considerations	<ul style="list-style-type: none"> ● There is a policy or law for supporting the informal sector by providing job opportunities and training.
Donor support	<ul style="list-style-type: none"> ● JICA supported capacity development on SWM and promotion of 3R including preparation of master plan.
Areas for improvement (in order of priority)	<ul style="list-style-type: none"> ● Legal issues: Approval of extended producer responsibility regulation. ● Technical Issues: Capacity building. ● Financial issues: Financial resources for acquisition of solid waste management equipment and for better functionality of the institution.

Waste Amount at Each Stage of Waste Flow*

Waste flow	Amount** (ton/day)	Remarks
① Waste generation	1,500	Waste generated at houses, offices, shops, restaurants, etc.
② Discharge to collection	N/A	Waste discharged for collection services.
③ Self disposal	N/A	Disposal at generation sources, such as burning and burying.
④ Recycling at source	N/A	Reuse of materials, composting, sold to recyclers.
⑤ Collection and transport	1,200	Waste amount collected and transported.
⑥ Clandestine dumping	N/A	Waste illegally disposed of in unknown location.
⑦ Treatment	N/A	Material recycling, composting, incineration, etc.
⑧ Recycling/Reduction	N/A	Recycled and/or reduced waste amount by material recycling, composting, incineration, etc.
⑨ Residue	N/A	Residue from treatment facilities.
⑩ Final disposal site	1,200	Waste amount brought into disposal sites.
⑪ Recycling	N/A	Recycled at disposal sites.
⑫ Final disposal	N/A	Waste amount finally disposed of at disposal sites.

* Based on the waste flow chart on page.

** Figures include estimated value.