



Mozambique

Vilankulo

The town of Vilankulo is located in the Vilankulo district in the northern region of Inhambane Province, south of the Save River, about 700 kilometres from Maputo, the capital of Mozambique. The town can be accessed through HN 240 linking the town to National Highway No 1 at Pambarra village. Four prominent geographical boundaries surround it: Circulo de Chigamane and Machocomane in the north, the Mangalise River in the south, Vilankulo Bay in the east and Circulo de Faiquete in the west. Vilankulo town covers an area near 78.80 square kilometres. The geodesic centre of the town and the Riacho Mangalisse estuary are separated by a distance of 18.75 kilometres, while the coast and the Nhamadjava swamps are separated by a distance 7.5 kilometres. According to the 2007 census, Vilankulo town has an estimated population of nearly 46,691 inhabitants, which represents about 18% of the Vilankulo district population. Young people under 15 years of age, the largest demographic segment, represent 43% of the town's population. Elderly people, the smallest segment, represent 4%. These values are close to the percentages at the provincial level (43.1% and 5.2%, respectively).

Municipal solid waste management services are provided by the Urban Division of the Municipal Council of Vilankulo Town. The town centre is kept fairly clean, but waste dumped on the ground in the streets, together with ditches and sand, make it difficult for waste collectors to serve the suburbs. Sanitary conditions in low-income residential areas are inferior to those in the urban area. Waste is discharged in an open dump not far from a number of households. The dump is already at the final stage of becoming a sanitary landfill, but works are suspended due to a lack of funding.

Information

Population*	46,691 (2017 census)
Population growth (annual %)	N/A
Area (km ²)*	78.80
Climate*	Dry tropical climate
Main industries*	Meat, seafood, and wood processing
Currency**	USD 1: MZN 62.09 (Mozambican metical) (February 2019)
Other*	Vilankulo is an international tourism centre of excellence that welcomes tourists from all over the world.

Sources: * Vilankulo Town Strategic Development Plan 2016-2025

** Oanda.com

Current SWM Situation

Item	Outline
Institutional System	
Legal system	<ul style="list-style-type: none"> ● Laws or regulations related to municipal solid waste management: <ul style="list-style-type: none"> » Stance of the Vilankulo Town Municipality (updated in 2010): fundamentals and norms regarding solid waste.
Policy/Plan	<ul style="list-style-type: none"> ● There is no specific policy or plan for solid waste management in the town.
Implementation system	<ul style="list-style-type: none"> ● The Urban Division is responsible for municipal solid waste management in the town (street sweeping, collection, operation of the final disposal facility, and environmental education) and the drafting of municipal waste management plans. It engages a workforce of 30 people for operations. Another 20 people from the municipal boroughs are dispatched to support cleaning processes. ● Ministry of Land, Environment and Rural Development through the Inhambane Provincial Directorate of Land, Environment and Rural Development: responsible for environmental legislation and supervision. ● Ministry of Health: responsible for biomedical waste through the Rural Hospital of Vilankulo. ● Private sector participants provide collection and street-sweeping services, transport waste from the transfer stations to the final disposal facility, and carry out recycling activities.
Technical System	
Waste generation amount & characteristics	<ul style="list-style-type: none"> ● Quantity of waste generated: 72,000 tons/year (estimation based on the total of the town population and incoming working population, multiplied by the waste generation rate). ● Waste composition: organic (food) 60%, plastic 10%, paper 8%, metal and glass 15%, work debris 2%, and health facilities and fuel pumps 5%.
Storage and discharge/ Collection and transportation/ Road sweeping	<ul style="list-style-type: none"> ● Street-sweeping service is provided in the town centre and public and residential areas. ● Municipal waste is collected each week from Monday to Saturday in the city centre and residential areas. ● Collection coverage: collection service is provided to households, institutions, and companies that enter contracts with the Municipal Council of Vilankulo Town. ● The company 3Rs is working within a partnership focused on recycling and public awareness of the importance of separated waste collection from municipal markets, commercial facilities, and institutions. ● Number of vehicles: four tractors, three vans.
Intermediate treatment/ Recycling	<ul style="list-style-type: none"> ● 3Rs manages a materials recovery division. In total, 100 kg is treated per day. ● The town has no composting plant. ● The town has no transfer station.

Item	Outline
Final disposal	<ul style="list-style-type: none"> ● The town has one open dump. » Owner: Municipal Council of Vilankulo Town. » Location: 5° Congresso borough. » Operation time: 8 hours/day. » Quantity of disposed waste: 500 tons/day. » Data source: estimated from truckload counts. » Installations: one open dump site. » Operation plans: there is an environmental management plan.
Financial system	<ul style="list-style-type: none"> ● Total revenue for waste management service: MZN 21,140/month. ● Total expenditure for waste management service: MZN 60,148/month for collection and transport, MZN 32,000 /month for street sweeping, MZN 1,385,290.37/month for final disposal. ● The Municipal Council of Vilankulo Town charges a waste collection fee through contracts. The fee ranges from MZN 30 for households to MZN 250 for service providers or restaurants and MZN 600 for major generators of waste such as tourist resorts and hotels. ● Individuals who drive into the dump to dispose of waste from vehicles are charged a fee of MZN 150.00 per load.
Environmental and social considerations	<ul style="list-style-type: none"> ● Policies and laws are in place to grant support to the informal sector through work opportunities and training. ● The town engages nearly 50 waste pickers and recyclers. ● Activists teach communities waste disposal procedures, the collection hours, and waste separation practices through environmental education meetings and environmental school clubs. Cleaning campaigns are also held in the town, suburbs, rural hospital, and municipal graveyards with community participation.
Donor support	<ul style="list-style-type: none"> ● There is no support from donors.
Areas for improvement (in order of priority)	<ul style="list-style-type: none"> ● Legal issues: updating the Environment Management Plan. ● Technical issues: training. ● Financial issues: financial resources for completion of the sanitary landfill, acquisition of municipal solid waste management equipment, and improvement of institutional functionality.

Waste Amount at Each Stage of Waste Flow*

Waste flow	Amount** (ton/day)	Remarks
① Waste generation	200	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	150	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	150	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.

Type of waste

Type of waste	Composition	Estimation (%)	Yearly volume (tons)	Generation source
Solid	Organic	60	4,320	Households, hotels, markets
	Glass, metal	15	10,800	Small-scale industry
	Paper	08	5,760	Schools, public institutions, offices
	Plastic	10	7,200	Markets and shops
	Debris	02	1,440	Works
Liquids	Other	05	3,600	Health facilities, fuel pumps
Total		100%	72,000	

Source: PDEM (Vilankulo Town Economic Development Plan)