

Antananarivo, also known as Tana, is the capital and largest city of Madagascar. It is the political, economic, and cultural centre of the country. The city is located 1,280 metres above the sea level in the centre of the island and has been the country's largest population centre since at least the 18th century.*

SWM services are mainly provided by a private company supervised by the central government. The municipality also carries out sweeping and collection services. There is one final disposal site, which is located approximately 15 kilometres away from the city centre. One materials recovery facility (MRF) and one composting facility are in operation at the final disposal site.

Source: * Wikipedia, Antananarivo, accessed 6 March 2019, <<https://en.wikipedia.org/wiki/Antananarivo>>

Information

Population*	2.62 million (2015)
Population growth (annual %)*	5.3 (2010-2015)
Area (km ²)**	88
Climate**	Subtropical highland climate
Main industries**	Soap production, food and tobacco processing, brewing, textiles, and leather manufacturing
Currency***	USD 1: MGA 3,681.25 (Malagasy ariary) (September 2019)

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

** Wikipedia, Antananarivo, accessed 6 March 2019, <<https://en.wikipedia.org/wiki/Antananarivo>>

*** Oanda.com

Current SWM Situation

Item	Outline
Institutional System	
Legal system	<ul style="list-style-type: none"> ● The municipality does not have regulation specific for SWM. There is a related Municipal Hygiene Code.
Policy/Plan	<ul style="list-style-type: none"> ● Plan of evacuation of the city in case of flood.
Implementation system	<ul style="list-style-type: none"> ● The municipality provides sweeping and collection services. ● Related agencies and their responsibilities are as follows: <ul style="list-style-type: none"> » The Ministry of Water, Sanitation and Energy prepares policies, strategies and plans for this sector, and provides support for community strengthening. » The Ministry of Land Planning considers the integration of sectorial plans into land use planning. » The Ministry of Health is in charge of medical waste management. ● The private sector participates in the following services: <ul style="list-style-type: none"> » Collection service. » Transfer station.
Technical System	
Waste generation amount & characteristics	<ul style="list-style-type: none"> ● Waste generation amount is between 1,900 and 2,100 m³ per day. ● Waste characteristics: food 85%, plastics 4%, paper 3%.
Storage and discharge/ Collection and transportation/ Road sweeping	<ul style="list-style-type: none"> ● Sweeping is carried out in the city centre, public areas, and residential areas. ● Waste amount collected is 1,500 m³ per day. ● 2,180,000 citizens in 12 zones, i.e. 70% of the total population has access to the collection service. This rate has been identified through a waste collection area map. ● The collection service is provided three times a week or more both in the city centre and the residential areas. ● The service uses 50 collection trucks with a capacity of 15 m³. ● The trucks carry waste to the disposal site, which is located 15 km from the city centre.
Intermediate treatment/ Recycling	<ul style="list-style-type: none"> ● There is one MRF and one composting facility at the final disposal site.
Final disposal	<ul style="list-style-type: none"> ● There is one final disposal site which is located at S 18°54'44.8" E 47°34'36.7". The site has an area of 18 ha. ● Although the site does not have a bottom liner, it has leachate collection pipes, enclosed bund, weighbridge, tyre washer, gate, and fence. ● An operation plan has been prepared. ● Waste is compacted, but daily cover is not practiced.

Item	Outline
Financial system	<ul style="list-style-type: none"> ● The waste collection fee is applied independently from other public services. ● The fee is managed by a national agency. ● Tipping fee on the disposal site is not applied.
Environmental and social considerations	<ul style="list-style-type: none"> ● The informal sector collects recyclable materials. There is no policy for supporting this sector. ● Communities are informed about waste collection day and time by public consultation meetings and/or flyers/brochures.
Donor support	<ul style="list-style-type: none"> ● World Bank and the French Development Agency (AFD) provide technical cooperation in solid waste management capacity development.
Areas for improvement (in order of priority)	<ul style="list-style-type: none"> ● Improvement is necessary in the areas of legislation, technique, and finance.

Waste Amount at Each Stage of Waste Flow*

Waste flow	Amount** (m ³ /day)	Remarks
① Waste generation	1,900–2,100	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, to recyclers.
⑤ Collection and transport	1,500	Waste amount collected and transported.
⑥ Clandestine dumping	N/A	Waste illegally disposed of at somewhere.
⑦ Treatment	N/A	Material recycle, composting, incineration, etc.
⑧ Recycling/Reduction	N/A	Recycled and/or reduced waste amount by material recycle, composting, incineration, etc.
⑨ Residue	N/A	Residue from treatment facilities.
⑩ Final disposal site	N/A	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.

Location of Waste Management Facility and Related Photographs:



Final Disposal Site (coordinates: S 18°54'44.8" E 47°34'36.7")