

Ethiopia

Ethiopia is a federal republic nation located in East Africa. It is an inland country, sharing borders with Eritrea to the north and northeast, Djibouti and Somalia to the east, Sudan and South Sudan to the west, and Kenya to the south. The capital city is Addis Ababa. The population is approximately 104.98 million, the second largest population in Sub-Saharan Africa, following Nigeria. It is located in the tropics, but the majority of the country is highlands centered on the Ethiopian Plateau with an average annual temperature of 13°C. The Ethiopian Plateau has a lot of precipitation and the annual rainfall is over 1200mm. Usually, the rainy season is from mid-June to mid-September.

Municipal waste management in Ethiopia is under the supervision of the Ministry of Urban Development and Housing (MoUDH), and it is shared by Ministry of Environment, Forest & Climate Change (MoEFCC) and Ministry of Health (MoH). The MoUDH provides guidance to local governments for the formulation of waste management plans and regularly monitors them. By incorporating the private sector into waste services, the country considers the creation of employment opportunities for the poor and low-income group.

Information

Population*	104.98 million (2017)	
Population growth (annual %)*	2.5 (2017)	
Area (km²)*	1,104,300	
Climate	Tropical climate (depending on altitude)	
GDP (current USD)*	80.56 billion (2017)	
GDP growth (annual %)*	10.2 (2017)	
GNI per capita, Atlas method (current USD)*	740 (2017)	
Main industries	Agriculture (grain, beans, coffee, oil), floristry, leather (cattle, sheep, goat).	
Currency**	USD 1 : ETB 28.55 (Ethiopian birr) (June 2019)	

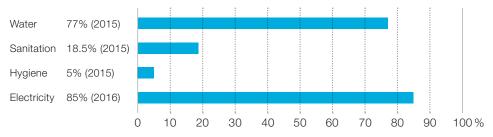
Sources: * World Bank, Ethiopia, accessed 28 June 2019, * Oanda.com">https://databank.worldbank.org/reports.aspx?source=2&country=ETH> * Oanda.com

Current SWM Situation

Item	Outline
Legal system	 Regarding waste management, the following two regulations are important: Solid Waste Management Proclamation No 513/2007. National Urban Solid Waste Management Standards. The related regulations are as follows: Federal Democratic Republic of Ethiopia (FDRE) Constitution, 1994. Environmental Protection Organs Establishment Proclamation No 295/2002. Environmental Pollution Control Proclamation No 300/2002. EIA Proclamation No 299/2002. Regulation on Prevention of Industrial Pollution No 159/2008. Standards for Industrial Pollution Control, 2013.
Policy/Plan	 Regarding waste management, the following three policies are important: » Urban Solid Waste Handling and Disposal Strategy, 2014. » National Integrated Urban Sanitation and Hygiene Strategy, 2017. » 2nd Growth and Transformation Plan (GTP-2 for 2016-2020). The related policies are as follows: » Environmental Policy of Ethiopia, 1997. » Urban Development Policy, 1991. There is no privatisation policy on waste management.

Item	Outline				
Implementation system	 Ministry of Urban Development and Housing (MoUDH): Main organisation responsible for waste management. Ministry of Environment, Forest and Climate Change (MoEFCC): Responsible for overseeing the formulation and implementation of policies, strategies, laws and standards concerning the overall environment. Ministry of Health (MoH): Involved in waste management from a public health perspective. Ministry of Water, Irrigation and Electricity (MoWIE): Organisation responsible for formulation of policies, strategies and implementation of capacity building related to water resources development, urban water supply and sewerage. Ethiopia Standard Agency (ESA): Organisation that sets and manages various standards. Ethiopia Water Technology Institute (EWTI): Established by JICA, mainly disseminates technologies related to excavation and management of wells, but also conducts waste management courses. 				
Financial system	 Ratio of SWM budget allocated within national budget: Data not provided. Tax on waste disposal: None. Subsidies from central government to local government: None. 				
Donor support	 Prepared "National Integrated Urban Sanitation and Hygiene Strategy, 2017" with the support of the World Bank. Prepared "National Urban Solid Waste Management Standards" with the support of GIZ. 				
Areas for improvement	Support for establishment of waste management systems in local cities.				

Status of Access to Basic Services* (in urban area)



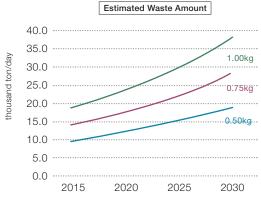
^{*}The definition of each basic service is on page 1 of ANNEX.

Estimated Waste Amount

The future amount of waste generation is estimated based on the projection of urban population at three waste generation rates, i.e. 0.5, 0.75, and $1.0 \, \text{kg/person/day}$.

			unit: thou	sand persons			
Year	2015	2020	2025	2030			
Total	99,873	112,759	126,121	139,620			
Urban	19,403	24,463	30,487	37,496			
unit: thousand ton/day							
Generation rate	2015	2020	2025	2030			
0.50 kg/pers/day	9.7	12.2	15.2	18.7			
0.75 kg/pers/day	14.6	18.3	22.9	28.1			
1.00 kg/pers/day	19.4	24.5	30.5	37.5			
	Total Urban Generation rate 0.50 kg/pers/day 0.75 kg/pers/day	Total 99,873 Urban 19,403 Generation rate 2015 0.50 kg/pers/day 9.7 0.75 kg/pers/day 14.6	Total 99,873 112,759 Urban 19,403 24,463 Generation rate 2015 2020 0.50 kg/pers/day 9.7 12.2 0.75 kg/pers/day 14.6 18.3	Year 2015 2020 2025 Total 99,873 112,759 126,121 Urban 19,403 24,463 30,487 unit: thou Generation rate 2015 2020 2025 0.50 kg/pers/day 9.7 12.2 15.2 0.75 kg/pers/day 14.6 18.3 22.9			





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