



# Egypt

Egypt, officially the Arab Republic of Egypt, is a Mediterranean country bordered by Sudan, Libya, the Gaza Strip, and Israel. It is around one million square kilometres in size and has a population of around 97.55 million. The capital and largest city is Cairo. Egypt is divided into 27 governorates, which are further divided into regions containing towns and villages. Each governorate has a capital, sometimes carrying the same name as the governorate.\*

The Solid Waste Management Regulatory Agency, under the Ministry of Environment, is in charge of integrated solid waste management in the country. The Agency covers municipal waste and all other types of waste. The Agency works with other ministries such as Ministry of Local Development, Ministry of Health, and others. There is a system to collect waste data from the local governments.

Source: \* Wikipedia, Egypt, accessed 14 August 2018, <<https://en.wikipedia.org/wiki/Egypt>>

## Information

Population*	97.55 million (2017)
Population growth (annual %)*	1.9 (2017)
Area (km <sup>2</sup> )*	1,001,450
GDP (current USD)*	235.37 billion (2017)
GDP growth (annual %)*	4.2 (2017)
GNI per capita, Atlas method (current USD)*	3,010 (2017)
Main industries**	Textiles, food processing, tourism, chemicals, pharmaceuticals, hydrocarbons, construction, cement, metals, light manufacturing
Currency***	USD 1 : EGP 17.27 (Egyptian pound) (March 2019)

Sources: \* World Bank, Egypt, accessed 8 April 2019, <<https://databank.worldbank.org/data/reports.aspx?source=2&country=egy>>

\*\* Central Intelligence Agency, accessed 14 August 2018, <<https://www.cia.gov/library/publications/resources/the-world-factbook/geos/eg.html>>

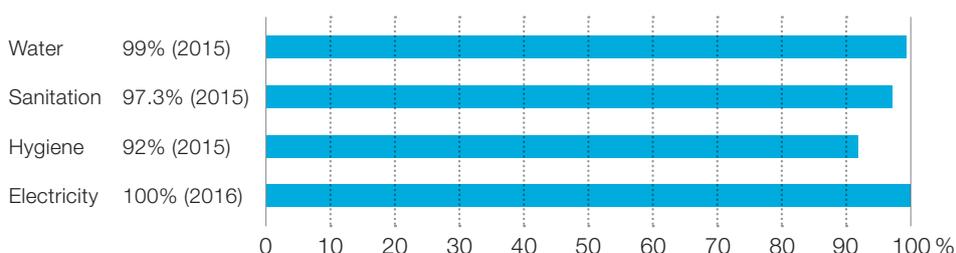
\*\*\* Oanda.com

## Current SWM Situation

Item	Outline
<b>Legal system</b>	<ul style="list-style-type: none"> <li>● Law No. 38/1967 (General Public Cleaning Law) and Law No. 4/1994 (Environmental Law) are the national basic laws covering municipal solid waste management. These laws clearly define municipal waste and the responsibilities of the stakeholders.</li> <li>● The Environmental Law 1994 requires administrative authorities to undertake Environmental Impact Assessment (EIA). Also, it covers healthcare waste, construction waste, industrial waste and hazardous waste.</li> <li>● Currently, a new basic law, the Solid Waste Management Law, is under preparation.</li> </ul>
<b>Policy/Plan</b>	<ul style="list-style-type: none"> <li>● There is a national policy and plan, requiring an Integrated Solid Waste Strategy and Master Plan for all governorates.</li> <li>● A national program for the preparation of SWM master plans is currently being trialled in four governorates.</li> </ul>
<b>Implementation system</b>	<ul style="list-style-type: none"> <li>● The Solid Waste Management Regulatory Agency, under the Ministry of Environment, is in charge of Integrated Solid Waste Management in the country. The Agency covers all types of waste, including municipal waste.</li> <li>● The Agency is responsible for communicating with local government and supporting the implementation of laws and regulations by providing technical and financial support.</li> <li>● Establishing a SWM unit in each local government is in progress. The unit will be a counterpart institution of the Agency.</li> <li>● The Agency has 25 staff and provides them with training programs.</li> <li>● The Agency works with other ministries:               <ul style="list-style-type: none"> <li>» Ministry of Local Development (in charge of municipal waste).</li> <li>» The Ministry of Health (in charge of medical waste).</li> <li>» The Ministry of Agriculture (in charge of agricultural waste).</li> <li>» The Ministry of Industry, Housing and Development (in charge of industrial waste).</li> </ul> </li> <li>● There is a system to collect data from local government. It covers many cities.</li> </ul>
<b>Waste data</b>	<ul style="list-style-type: none"> <li>● Waste generation amounts (million ton/year):               <ul style="list-style-type: none"> <li>» Municipal 21</li> <li>» Agricultural 31</li> <li>» Construction and demolition 5.8</li> <li>» Industrial 4.9</li> <li>» Hazardous 0.55</li> <li>» Medical and healthcare 0.52</li> <li>» Sludge 2</li> <li>» Waterways and canals 25</li> <li>» Total 90.76</li> </ul> </li> </ul>

Item	Outline
	<ul style="list-style-type: none"> <li>● Average municipal waste generation rates:               <ul style="list-style-type: none"> <li>» Urban areas: 0.7 kg/capita/day</li> <li>» Rural areas: 0.4 kg/capita/day</li> </ul> </li> <li>● Composition of municipal waste:               <ul style="list-style-type: none"> <li>» Organic 56%</li> <li>» Paper/cardboard 10%</li> <li>» Plastics 13%</li> <li>» Glasses 4%</li> <li>» Metals 2%</li> <li>» Others 15%</li> </ul> </li> <li>● Average collection efficiency nationwide: 55-65%</li> <li>● Disposal manner:               <ul style="list-style-type: none"> <li>» Open dumping 81%</li> <li>» Landfill 7%                   <ul style="list-style-type: none"> <li>○ Four landfills in Cairo and Alexandria.</li> <li>○ Two are operated by private companies and two by local government.</li> <li>○ One is for hazardous waste.</li> </ul> </li> <li>» Recycled &amp; treated 12%                   <ul style="list-style-type: none"> <li>○ 66 recycling facilities with many of them applying mechanical biological treatment (MBT).</li> <li>○ A significant part of the recycling is carried out by the informal sector.</li> </ul> </li> </ul> </li> </ul> <p>Most of the figures above are taken from surveys for preparing master plans in various governorates.</p>
<b>Financial system</b>	<ul style="list-style-type: none"> <li>● There is no specific tax on waste.</li> <li>● Almost all governorates apply a collection fee which is usually charged as part of the electricity bill.</li> <li>● There is a subsidy related to SWM for local governments. It is used for equipment procurement and operations.</li> <li>● The private sector is expected to invest in facilities.</li> <li>● Average Costs:               <ul style="list-style-type: none"> <li>» For collection and transportation EGP 100-150 per ton.</li> <li>» For treatment and final disposal EGP 250-350 per ton.</li> </ul> </li> </ul>
<b>Donor support</b>	<ul style="list-style-type: none"> <li>● KfW Group.</li> <li>● German Corporation for International Cooperation (GIZ).</li> <li>● European Union.</li> </ul>
<b>Areas for improvement</b>	<ul style="list-style-type: none"> <li>● Consolidating the legal system by preparing a SWM law, by-laws, standards, etc.</li> <li>● Institutional reform: defining clearly the responsibilities of the stakeholders, and establishing and supporting a SWM Unit in each governorate.</li> <li>● Creation of an attractive investment environment for the private sector, e.g. by providing incentives.</li> <li>● Consolidating the financial resources by applying fees or a tax related to waste.</li> <li>● Social inclusion of waste pickers by organising them into micro and small enterprises.</li> </ul>

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



\*The definition of each basic service is on page 1 of ANNEX.

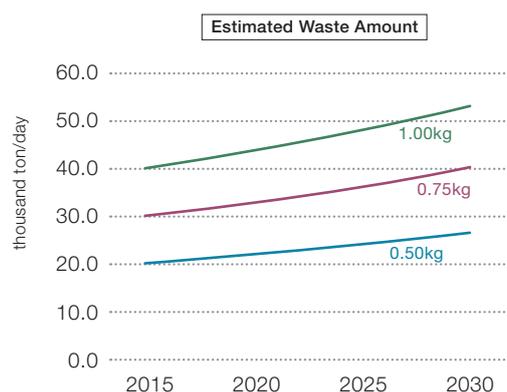
## Estimated Waste Amount

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 kg/person/day.

		unit: thousand persons			
Population	Year	2015	2020	2025	2030
	Total		93,778	102,941	111,471
Urban		40,123	44,041	48,427	53,613

		unit: thousand ton/day			
Waste Amount	Generation rate	2015	2020	2025	2030
	0.50 kg/pers/day	20.1	22.0	24.2	26.8
	0.75 kg/pers/day	30.1	33.0	36.3	40.2
	1.00 kg/pers/day	40.1	44.0	48.4	53.6



Waste Amount = (generation rate) x (urban population)

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