# H2020/NAP indicator factsheet

Sanitation

**Egypt** 

Version: 3.0 Date: 27/07/2020

**Organisation: EEA** 











Version History

Version	Date	Author	Status and description	Distribution
V1	15/07/2020	C. Briere Spiteri	Sanitation and wastewater management indicators factsheets	SEIS NFPs
	15/7/2020	Sabah	Comments	Claudette
V2	17/7/2020	Claudette	Addressing comments by Sabah	
V3	21/7/2020	Claudette	Updating draft based on revised data by EG	







# **Indicator Assessment**

Indicator Set	Date [21/07/2020]
Indicator 3: Access to Sanitation	Author (s) [C. Briere Spiteri]

## **Indicators Title**

Indicator 3.2: Proportion of population using safely managed sanitation services (SMSS)

**Key policy question** *What is the status in access to sanitation in Egypt?* 

#### **Key messages**

- In 2017, 88.5 % of the total population had access to an improved sanitation system
- More than 99 % of the urban population and about 80 % of the rural population was using a safely managed sanitation service
- Enhancing access to improved sanitation services remains politically challenging due to rural/urban inequalities and the emergence of "pockets" of urban poverty

## **Key figure(s)**









Table 1 Number of individuals (total, urban and rural population) and % of population connected to different sanitation categories

Sanitation category	Total	Urban	Rural	Total	Urban	Rural
	Number of inhabitants		%			
1. Public network	51068930	36059169	15009761	53.9	89.72	27.51
2. Private network*	11702773	1001257	10701516	12.4	2.49	19.61
3. Cesspit	31784191	3061375	28722816	33.5	7.62	52.64
4. Empty land	174926	67001	107925	0.18	0.17	0.2
5. Other	26261	3889	22372	0.03	0.01	0.04
Total	94757081	40192691	54564390	100	100	100
Access to improved sanitation	83854378**	40121801	43732577	88.5**	99.8	80.1

Note: Categories considered as improved sanitation/safely managed sanitation systems are marked in **bold** (see section on Methodology below)

<sup>\*\*</sup> Computed as the sum of improved sanitation in urban & rural areas

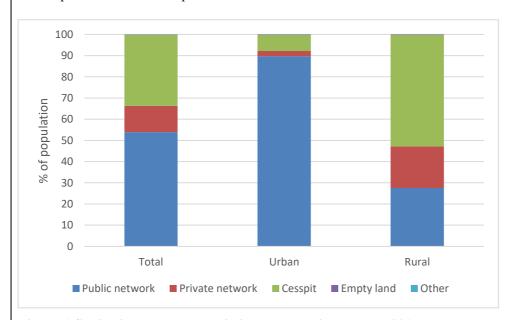


Figure 1 Sanitation coverage statistics at the national level (2017)







<sup>\*</sup> Private networks are only considered as improved sanitation systems in urban areas

## Key assessment text

In 2017, 88.5 % of the total population in Egypt (equivalent to ~ 84 million inhabitants) had access to improved sanitation (Table 1). Discrepancies between urban and rural areas exist, with up to 99.8 % of the urban population having access to improved sanitation, as compared to 80.1 % in rural areas. Note however that these figures assume a distinction between the sanitation categories considered as improved sanitation systems in urban and rural areas (see Methodology section for more details).

Ensuring access to sanitation services in unregulated peripheral quarters and in medium and small-sized towns is a major social challenge in Egypt. In total, it is estimated that 53.9 % of the population is connected to public network, of which almost 90 % are urban dwellers, as compared to only 28 % of rural inhabitants (Figure 1). Enhancing access to improved sanitation services remains politically challenging due to rural/urban inequalities and the emergence of "pockets" of urban poverty. Apart from the health risks posed by inadequate sanitation services especially on the poorer segments of the population due to contaminated drinking water and life-threatening forms of diarrhea to infants, provision of proper sanitation facilities is important for the management of Egypt's limited water resources. When untreated wastewater is discharged into agricultural drains, it limits the drainage reuse policy adopted by Egypt aimed at closing the growing gap between water supply and demand. Climate change and threats of reduced inflow of Nile water due to developments in upstream countries place the additional challenge to Egypt's already scarce water supplies to manage better its water resources and services.

#### References in key assessment text

Ghanem A. (2019). Assessment factsheets of water-related indicators. Report No. 2 Ghanem A. (2020). Draft National H2020 Assessment Water Chapter. Report No. 4 and references therein.

**Specific policy question** What is the status in access to sanitation in specific governorates?

**Specific figures** 









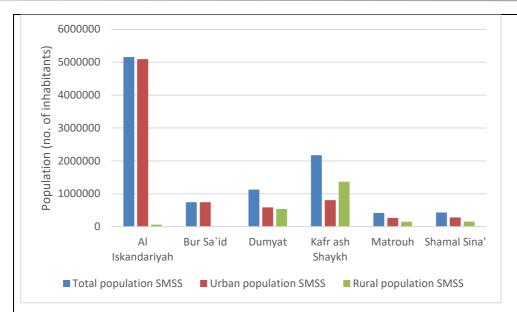


Figure 2 Population with access to SMSS in specific governorates in 2017

Table 2 % Population with access to SMSS in specific governorates. 2017.

Governorate	Access to SMSS % of population		
	Total	Urban	Rural
Al Iskandariyah	100	100	88
Bur Sa`id	99	99	
Dumyat	75	100	59
Kafr ash Shaykh	65	100	53
Matrouh	98	100	95
Shamal Sina'	96	99	92

## Specific assessment text

The total population with access to SMSS varies between governorates (Figure 2), reaching near-full coverage in some governorates e.g. Al Iskandariyah, Bur Sa`id. Discrepancies in access to SMSS between urban and rural areas are more pronounced in certain governorates, such as Dumyat, Kafr ash Shaykh, where urban coverage is 100 %, as compared to 53-59 % coverage in rural areas (Table 2).

#### Methodology for indicator calculation

In Egypt, the Central Administration for Public Mobilization and Statistics (CAPMAS) provides data on sanitation coverage. The data is provided on a national level as well for each of the 27 governorates, subdivided into urban, rural and total coverage. With regard to sanitation technology, data is provided by CAPMAS for the













following 5 categories: public network, private network, cesspits, empty land and others.

Although based on the same source data by CAPMAS (Table 1), the SDG 6 national report (CAPMAS, 2018) makes different assumptions on the sanitation categories which are regarded as SMSS (Table 3).

Table 3 Overview of sanitation categories assumed as SMSS in different national sources

National Source	H2020 reporting, assessment and factsheet Ghanem	SGD 6 national report CAPMAS (2018)
Sanitation category	(2019 & 2020)	
1. Public network	SMSS	SMSS
2. Private network	See note *	SMSS
3. Cesspit	SMSS	-
4. Empty land	-	-
5. Other	_	-

<sup>\*</sup> Private networks are considered as improved sanitation systems/SMSS in urban areas; unimproved/not SMSS in rural areas.

The calculations in Ghanem (2019 & 2020) were based on the following assumptions for safely managed sanitation systems (SMSS):

#### A. For urban areas:

- 1. **public networks** are collection systems ending with a secondary treatment activated sludge wastewater treatment plant (SMSS)
- 2. **private networks** are collection systems constructed by residential compounds. These compounds construct their own wastewater treatment plant (usually tertiary treatment) to re-use the treated wastewater for landscape irrigation (SMSS)
- 3. **cesspits** are generally properly constructed and maintained and may be considered as SMSS (SMSS)
- 4. **empty land** disposal (not SMSS)
- 5. "other" (not SMSS)

## B. For rural areas:

- 1. **public networks** are collection systems ending with a secondary treatment activated sludge wastewater treatment plant (SMSS)
- 2. **private networks** are collection systems constructed by village inhabitants in rural areas generally where the groundwater table is too high and thus cesspits flood frequently. Thus, they construct a collection system that discharges to a public agricultural drain usually without treatment (not SMSS)
- 3. **cesspits** are generally properly constructed and maintained and may be considered as SMSS (unless the groundwater table is high which brings us to











the previous point) (SMSS)

- 4. **empty land** disposal (not SMSS)
- 5. "other" (not SMSS)

The report by CAPMAS (2018) on SGD 6 for Egypt assumed that only sanitation categories 1 and 2 (public and private networks) are SMSS, giving rise to the following figures for 2017:

Population	% access to SMSS		
Total	66.24		
Urban	92.21		
Rural	47.12		

According to the UN SDG 6 global database, 60.74 % of the total population and 70.71 % of the urban population have access to SMSS.

Note that the terms "improved sanitation" and "safely managed sanitation systems" are often used interchangeably herein.

#### References

- CAPMAS (2018) Sustainable Development Indicators 2030. Goal 6: Water and Sanitation. Methodology Assessment
- UNSTAT, 2020: https://unstats.un.org/sdgs/indicators/database/

#### **Data issues**

As only data for 2017 is available, it is not possible to evaluate the progress in access to sanitation.

Egypt is administratively sub-divided into 27 governorates of. Eight of these governorates (Alexandria, Port Said, Damietta, Dakahlia, Kafr El Sheikh, Behera, Matrouh and North Sinai) have a coastline on the Mediterranean Sea, whereas 16 of the 27 governorates are located within the Nile River catchment. It should be noted that some of the coastal governorates are also part of the Nile River catchment, such as Kafr El Sheikh, Beheira and Dakahlia.

Data reported under H2020 for Indicator 3.2 covered 6 of 8 coastal governorates.

## References

 Ghanem A. (2019). Review of H2020/NAP water-related indicators. Report No. 1









