



## Chapter 9 Environment

Lack of access to basic and improved water and sanitation services remains a challenge in many Arab countries, especially for poor households and those living in rural areas. Women and girls' death attributed to unsafe water, unsafe sanitation and lack of hygiene is higher than men's.

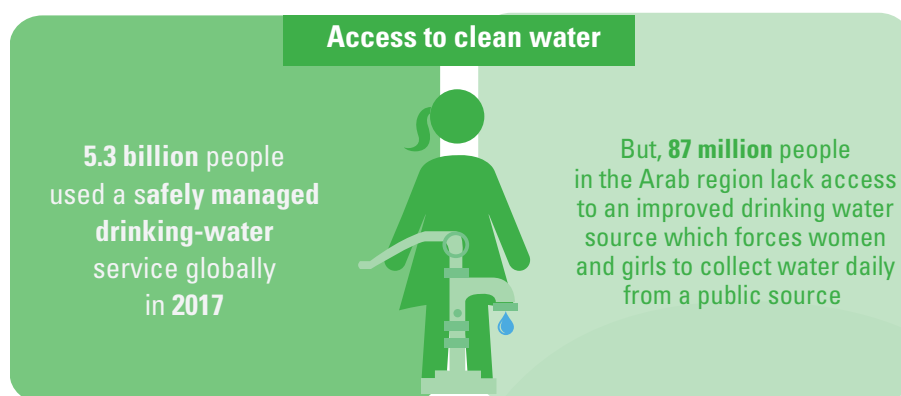
Many still do not have full access to clean fuels and technology, and only a handful of countries have full access to electricity. The burden of not having access to those services falls more on women, because they are mostly responsible for cooking and domestic chores.

## Environment

Women and men interact differently with the environment and its natural resources and these gender dynamics were one of the issues identified in the Beijing Platform for Action.<sup>1</sup> Access to clean water and management of energy sources, such as cooking fuel, is mostly undertaken by women. The burden of not having access to electricity falls more on women because they are mostly responsible for cooking and domestic chores.

### A. Drinking water sources

The right to safe, clean drinking water is a human right.<sup>2</sup> Access to improved drinking water sources is virtually universal in developed regions and has been improving in developing regions. Sub-Saharan Africa accounts for half of the world's population that does not have access to improved drinking water sources.<sup>3</sup> About 87 million people in the region lack access to



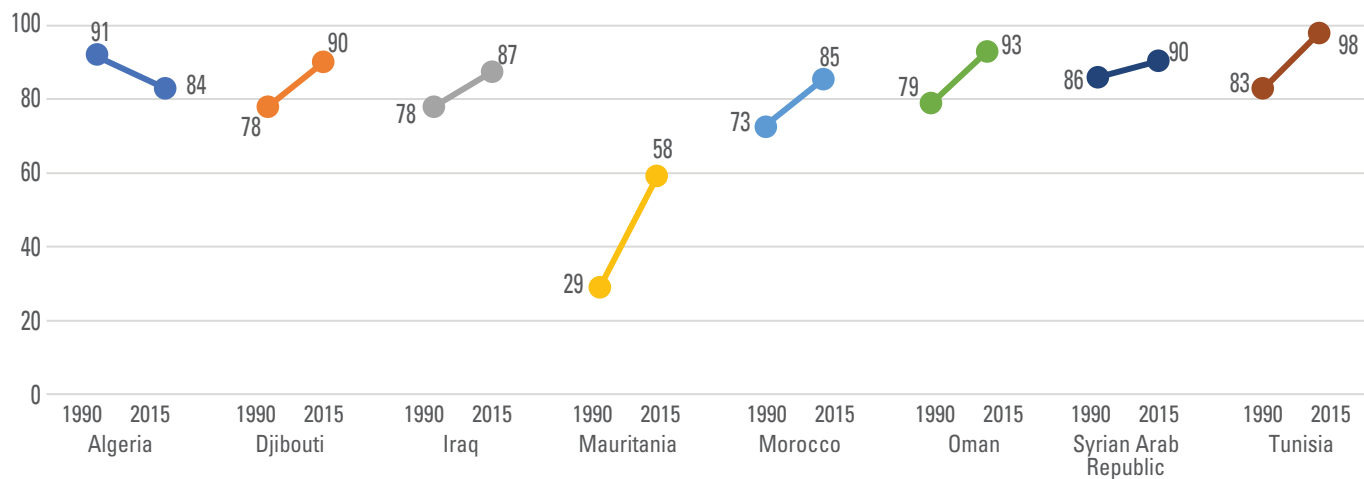
an improved drinking water source in their homes which force them to collect water daily from a public source which is mostly undertaken by women and girls.

Encouragingly, between 1990 and 2015, the majority of countries increased access to improved drinking water sources, in Tunisia by 15 percentage points, Oman by 14 percentage points, Djibouti and Morocco by 12 percentage points, Iraq by 9 percentage points and in the case of Mauritania the proportion doubled (from 29% to 58%). However, access to improved

drinking water sources decreased in Algeria from 91% in 1990 to 84% in 2015. During the same period Comoros, Kuwait and the United Arab Emirates maintained their rates at 90%, 99% and 100%, respectively **Figure 132.**

Data on population living in households using an improved water source by location and wealth show the poorest households and those with significant proportion of their population living in rural areas remain the least likely to have access to improved water sources. In Mauritania, for example,

**Figure 132.** Trend in population with access to improved drinking water sources in selected countries, 1990 and 2015 (percentage)



**Source:** UNICEF and WHO, *Progress on Sanitation and Drinking Water: 2015 Update and MDG Assessment* (Geneva, 2015).

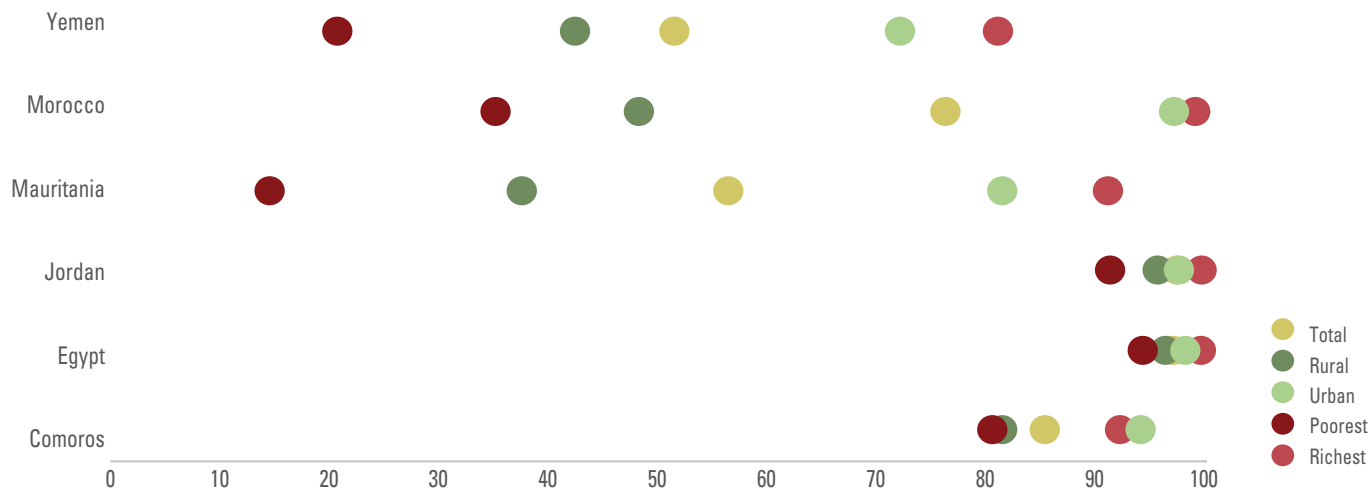
only 46 per cent of rural population and only 24 per cent of the poorest people live in households using an improved water source in comparison to 84 per cent urban people and 93 per cent of wealthiest. Similarly, in Yemen 50 per cent of rural population and 31 per cent of the poorest population live in households using improved

water source, while 76 per cent of urban and 84 per cent of wealthiest **Figure 133.**

In fact, Yemen has been struggling for decades with acute water shortages and lack of access to safe water, causing serious health problems, particularly in children. In December 2017, WHO, the World

Food Programme (WFP) and UNICEF put out a statement declaring the country was in a water crisis and that “safe water is now completely unaffordable for more than two thirds of Yemenis living in extreme poverty.”<sup>4</sup> The cost of diesel fuel had skyrocketed and most of the water for cities was pumped or delivered by trucks to rural areas.

**Figure 133.** Population living in households using an improved water source by location and wealth, latest year (percentage)

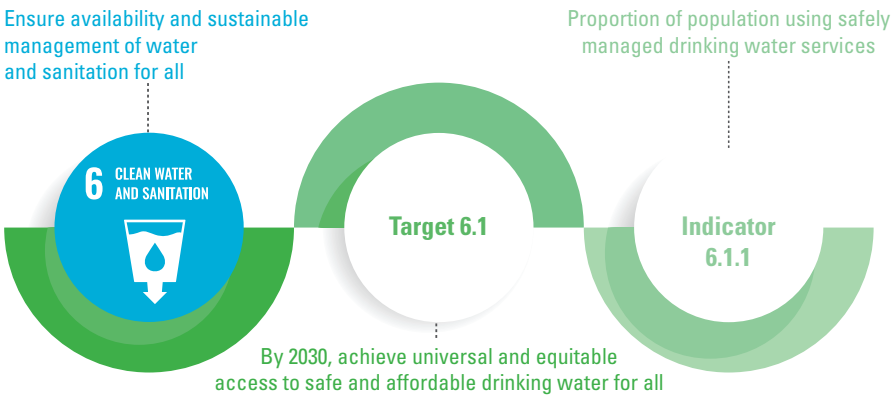


**Source:** ICF 2015, The DHS Program STATcompiler.

B. Water services

In 2017, 5.3 billion people used safely managed drinking water services.<sup>5</sup> In the Arab region, 89 per cent of the population were using safely managed drinking water services. The majority of population in GCC used safely managed drinking water services (over 90%).

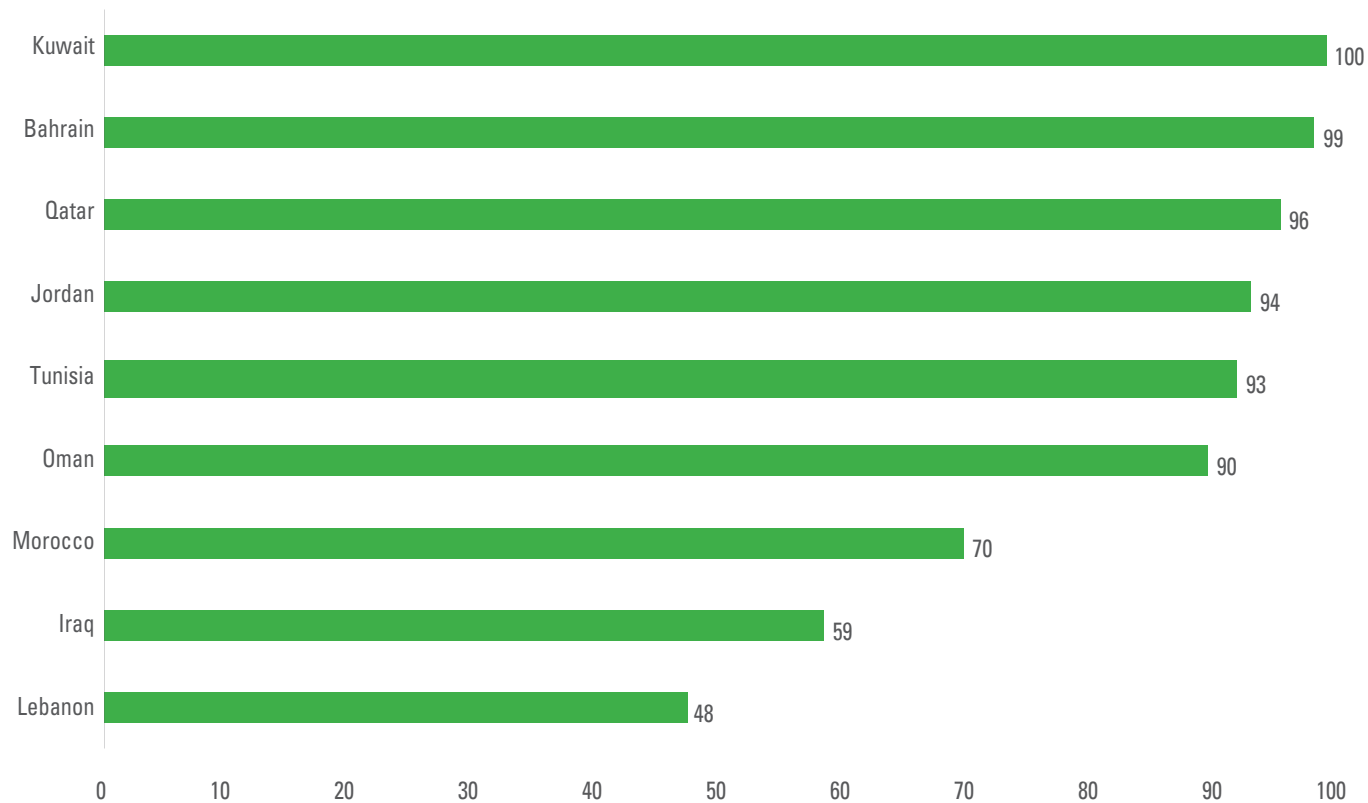
However, the rates were still lagging in Iraq (59%) where less than half of rural population could not use safely managed drinking water services. Similarly, in Morocco, while the overall average was 70 per cent, only 1 in 4 people in rural areas could use safely



managed drinking water services. As per available data, Lebanon reported the lowest rate at 48 per cent of population in the country that had access to use safely managed drinking water services Figure 134.



Figure 134. Proportion of population using safely managed drinking water services, 2017 (percentage)

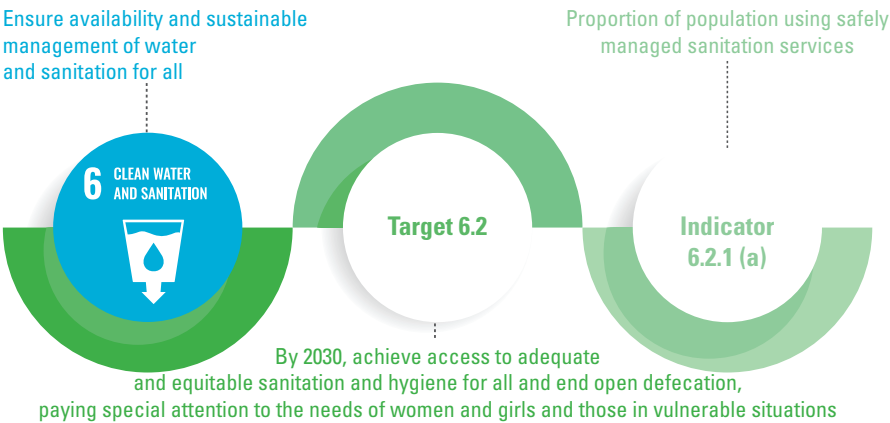


Source: UNSD, “SDG indicators”, Global SDG Indicators database.

C. Sanitation services

Population using a safely managed sanitation services are defined by those population not shared with other households and where excreta are safely disposed in situ or transported to a designated place for safe disposal or treatment.<sup>6</sup> In 2017, 3.4 billion people used safely managed sanitation services.<sup>7</sup>

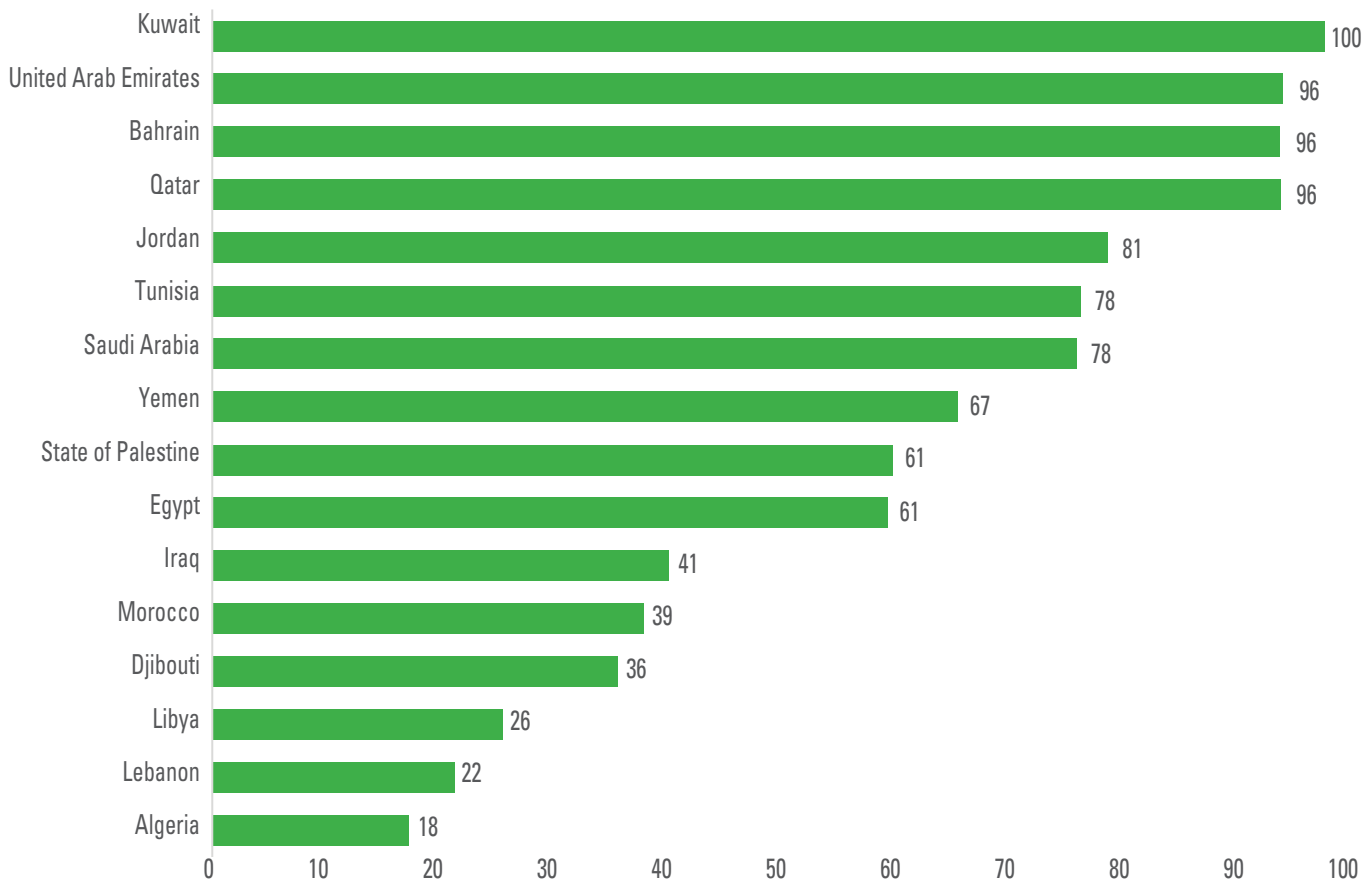
In 2017, only third of the population (31%) used safely managed sanitation services in the Arab States.



The use of safely managed sanitation services varies among Arab countries widely. Kuwait, for example, recorded highest proportion of population using

safely managed sanitation at a 100 per cent followed by the United Arab Emirates (96%), Bahrain (96%), Qatar (96%) and Jordan (81%)

Figure 135. Proportion of population using safely managed sanitation services, 2017 (percentage)



Source: UNSD, "SDG indicators", Global SDG Indicators database.

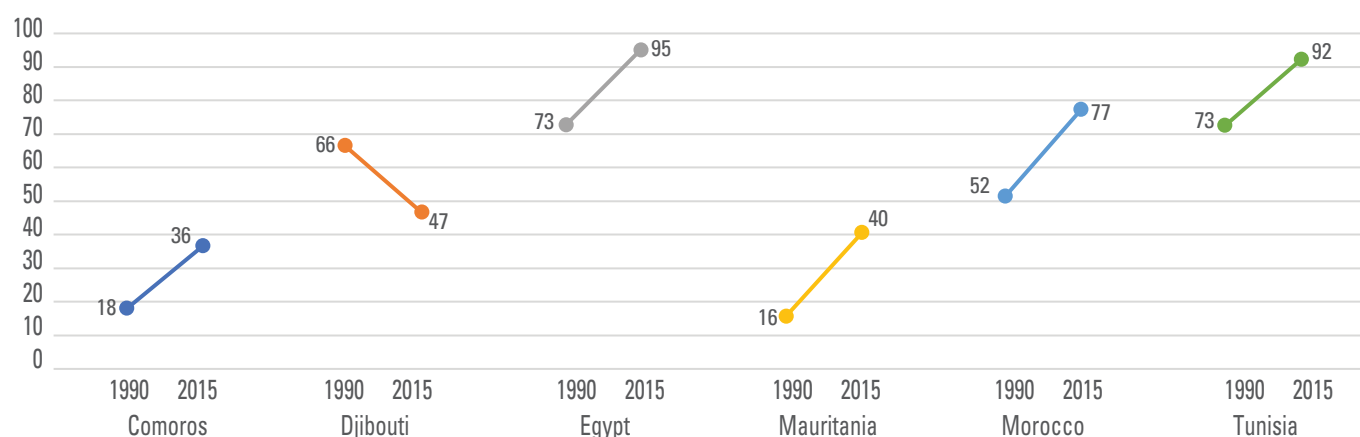
## D. Sanitation facilities

Use of improved sanitation facilities had improved in the 25 years between 1990 and 2015 in almost all the countries, with available estimates.

Significant progress was made in Egypt by 22 percentage points, Mauritania by 24 percentage points and Morocco by 25 percentage points during the 25 years. Djibouti, however, have regressed by 19 percentage points and Qatar by 2 percentage points [Figure 136](#).

Despite progress achieved, less than half the population in Djibouti (47%), Mauritania (40%), Comoros (36%), Libya (26%), Lebanon (22%) and Algeria (18%) had access to improved sanitation facilities, as per latest data.

**Figure 136.** Trend in population with access to improved sanitation in selected countries, 1990 and 2015 (percentage)



**Source:** UNICEF and WHO, *Progress on Sanitation and Drinking Water: 2015 Update and MDG Assessment* (Geneva, 2015).

## E. Hand-washing facilities

Hygiene is multifaceted and can comprise many behaviours, including hand washing, menstrual hygiene and food hygiene. International consultations identified hand washing with soap and water as a top priority in all settings, and also as a suitable indicator for national and global monitoring. In 2017, only 60 per cent of the global population had basic handwashing facilities with soap and water available at home.<sup>8</sup> In the Arab region around 74 million people lacked access to a basic handwashing facility.

Ensure availability and sustainable management of water and sanitation for all



In the Arab States, the presence of hand washing facilities with soap and water on premises vary among urban and rural areas. In all the countries, the proportion of population with basic hand



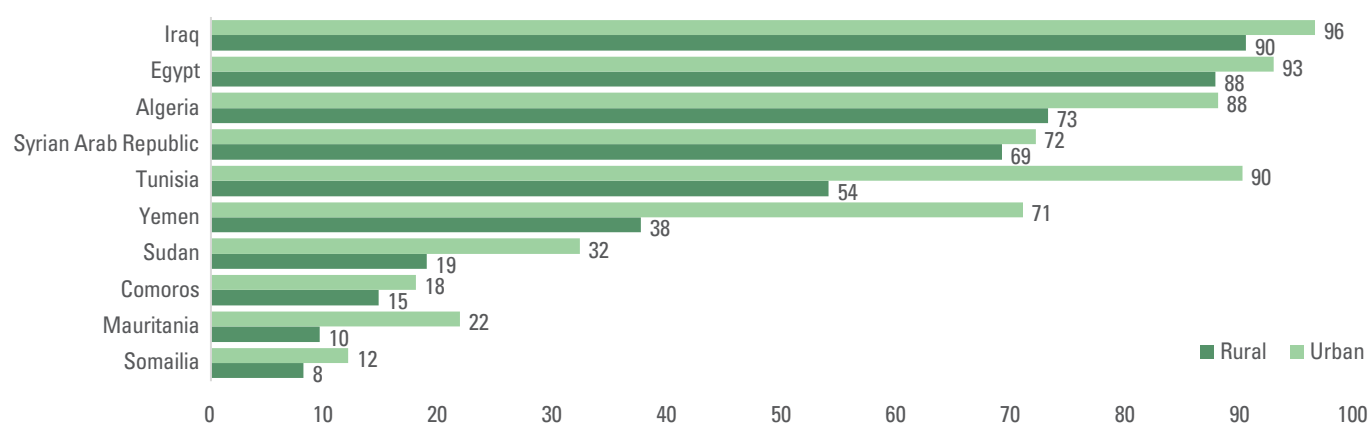
Less than **35%** of population in **Somalia, Mauritania, Comoros and Sudan** with access to **hand washing facility** with soap and water

washing facilities on premises is higher in urban areas compared to rural areas as per 2017 estimates. Tunisia, for example, recorded a proportion of urban population

with basic hand washing facilities at 90 per cent, while the rural area in Tunisia was at 54 per cent only. Iraq recorded the highest percentage in both rural and urban

areas (90% and 96%, respectively), while Somalia recorded the lowest proportion (8% and 12%, respectively) **Figure 137.**

**Figure 137.** Proportion of population with basic hand washing facilities on premises by location, 2017 (percentage)



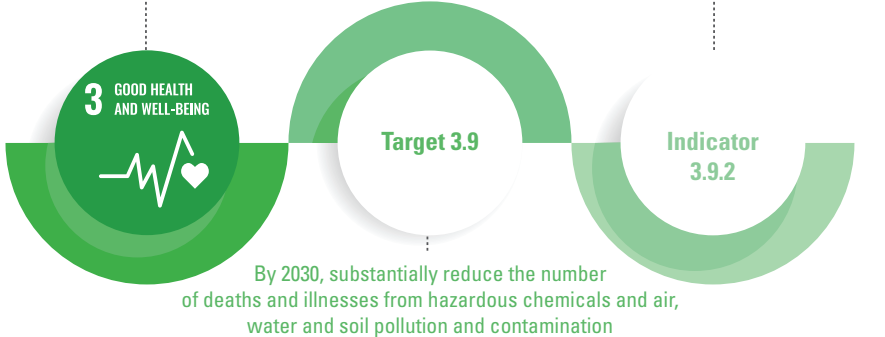
Source: UNSD, “SDG indicators”, Global SDG Indicators database.

## F. Mortality due to unsafe water and sanitation

WHO and UNICEF estimate that 1 in 3 people do not have access to safe drinking water. Some 2.2 billion people around the world do not have safely managed drinking water services, 4.2 billion people do not have safely managed sanitation services, and 3 billion lack basic handwashing facilities.<sup>9</sup> In the Arab region, despite increase in population using at least basic sanitation services (83%), only 31 per cent of population had access to safely managed sanitation services in 2017.

Unsafe hygiene practices are widespread, compounding the negative effects on people’s health.

Ensure healthy lives and promote well-being for all at all ages



The impact on child mortality rates is devastating, with more than 297,000 children under five who die annually from diarrhoeal diseases due to poor sanitation, poor hygiene or unsafe drinking water. The benefits of having access to an improved drinking water source can only be fully realized when there is also access to improved

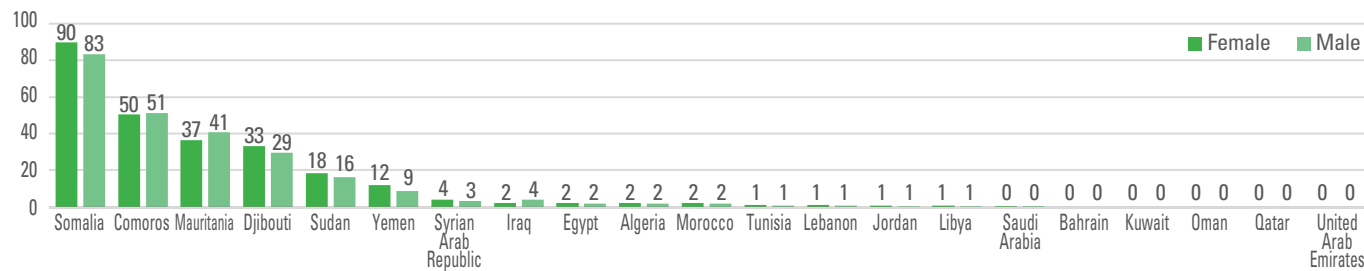
sanitation and adherence to good hygiene practices. Beyond the immediate and obvious advantages of people being hydrated and healthier, access to water, sanitation and hygiene – known collectively as WASH – has profound wider socioeconomic impacts, particularly for women and girls.

In 2016, the Arab region had 7.4 deaths per 100,000 population due to WASH, with high mortality rates among women and girls. Somalia had the highest rates among Arab countries with a mortality rate of 90 per cent of women and girls and 83 per cent of men and boys attributed to unsafe water, unsafe sanitation

and lack of hygiene. In Comoros, nearly half of the death rates for both females and males were attributed to unsafe water, unsafe sanitation and lack of hygiene, followed by Mauritania at 37 per cent for women and girls and 41 per cent for men and boys. Countries like the Syrian Arab Republic, Iraq, Egypt, Algeria,

Morocco, Tunisia, Lebanon, Jordan and Libya had less than 5 per cent of deaths attributed to unsafe water, unsafe sanitation and lack of hygiene. The Gulf countries - Saudi Arabia, Bahrain, Kuwait, Oman, Qatar and the United Arab Emirates - had no cases of death reported [Figure 138](#).

**Figure 138.** Mortality rate attributed to unsafe water, unsafe sanitation and lack of hygiene, 2016 (percentage)



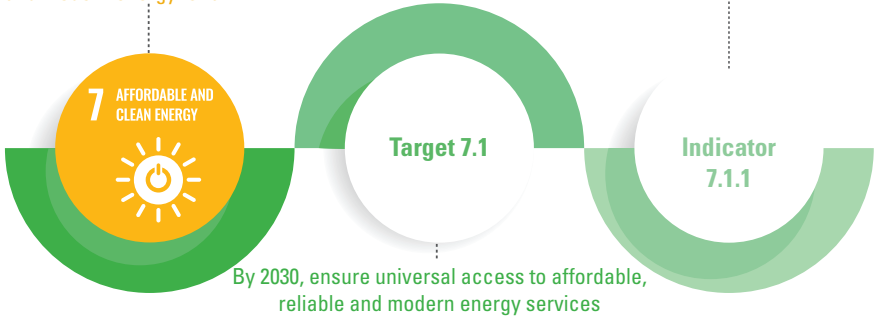
**Source:** WHO, Global Health Observatory data repository (last updated on 07 February 2019).

### G. Access to electricity

Access to electricity is important for several reasons. Where people do not have access to sources of electricity, potential pollution, work, safety and health issues develop. The burden of not having access to electricity falls more on women because they are mostly responsible for cooking and domestic chores. If heating for cooking relies on firewood women bear the effort required to gather firewood.

In 2000, 78 per cent of the world’s population had access to electricity. By 2017 that proportion has risen to 89 per cent. Since 2000 only four countries, namely: Kuwait, the State of Palestine, Qatar and the United

Ensure access to affordable, reliable, sustainable and modern energy for all



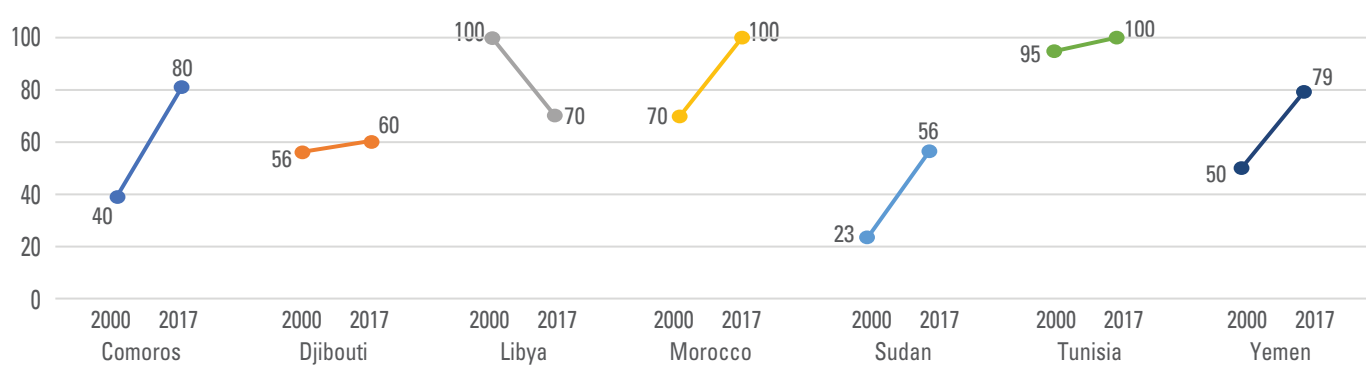
Arab Emirates, had 100 per cent of their population with access to electricity.

Access to electricity has improved significantly in four countries; in Djibouti and the Sudan to 56 per cent, and in Comoros and Yemen to 80 per cent.

Comoros had the highest increase by 40 percentage points so now 80 per cent of its population have access to electricity. Morocco, the Sudan and Yemen progressed by 30 percentage points and Tunisia improved by 5 percentage points. Djibouti improved only by 4 percentage points and 40 per cent of its population remain



**Figure 139.** Trend in population with access to electricity in selected countries, 2000 and 2017 (percentage)



**Source:** World Bank, “Access to electricity (% of population), 2000 and 2017”, World Bank Data.

with no access to electricity in 2017. In Libya access to electricity has been regressing over the years with a drop of 30 percentage points from a full coverage in 2000 to 70 per cent in 2017 [Figure 139](#).

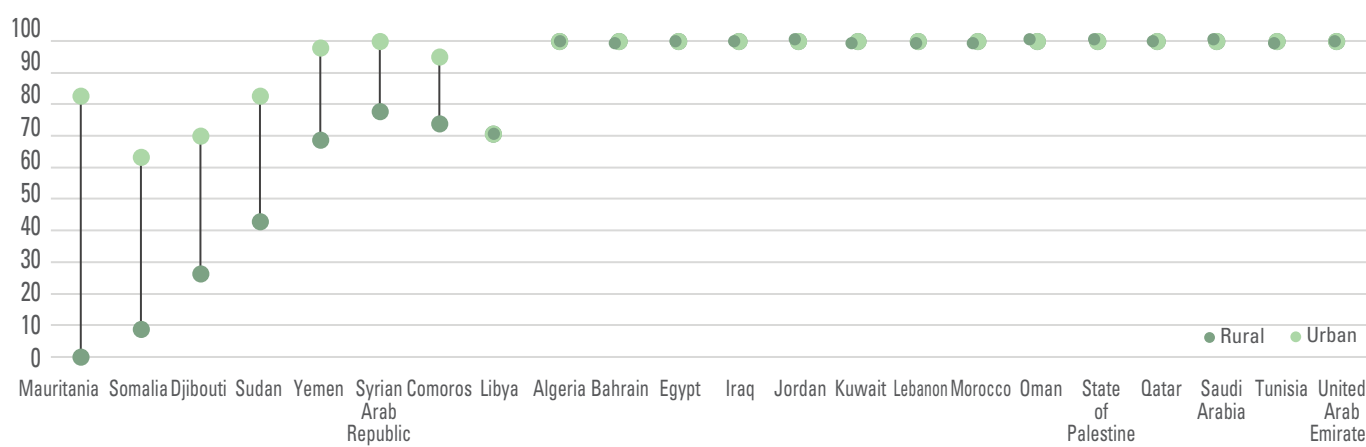


only **56%**  
of population in  
the **Sudan**  
have access to  
**Electricity** in 2017

In the Arab States the access to electricity varies among rural and urban areas. In Mauritania, Somalia, Djibouti, the Sudan, Yemen, Syrian Arab Republic and Comoros the proportion of access to electricity is higher in urban areas compared to rural areas as per 2017 estimates. However, in the remaining countries there is full coverage of access to electricity in both urban and rural areas. In Libya, urban and rural areas had the same access at 70 per cent.

The highest gap between rural and urban areas was in Mauritania. Population in rural areas had no access to electricity while urban population access was at 83 per cent. Mauritania had the highest gap among at 83 percentage points, while Somalia had a gap of 54 percentage points (rural 9% and urban 63%). Comoros, on the other hand, recorded the lowest gap between rural and urban areas at 21 percentage points (rural 74% and urban 95%). There was no gap between rural and urban areas in access to electricity in the rest of the countries [Figure 140](#).

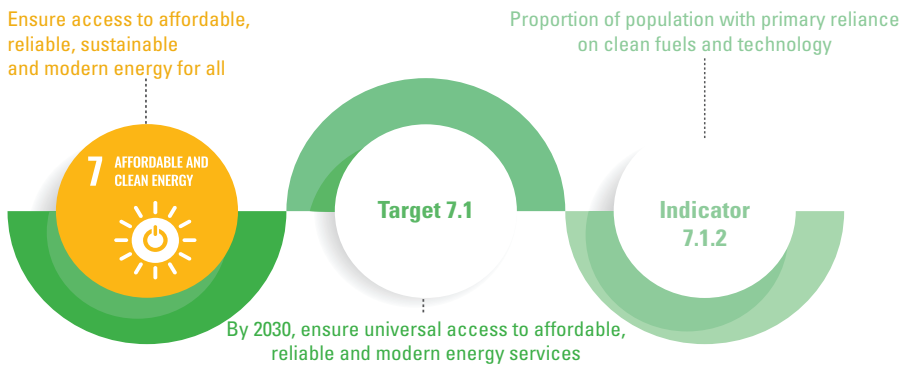
**Figure 140.** Gap between rural and urban areas of population with access to electricity, 2017 (percentage)



**Source:** World Bank, “Access to electricity (% of population), 2017”, World Bank Data.

## H. Clean fuels and technology

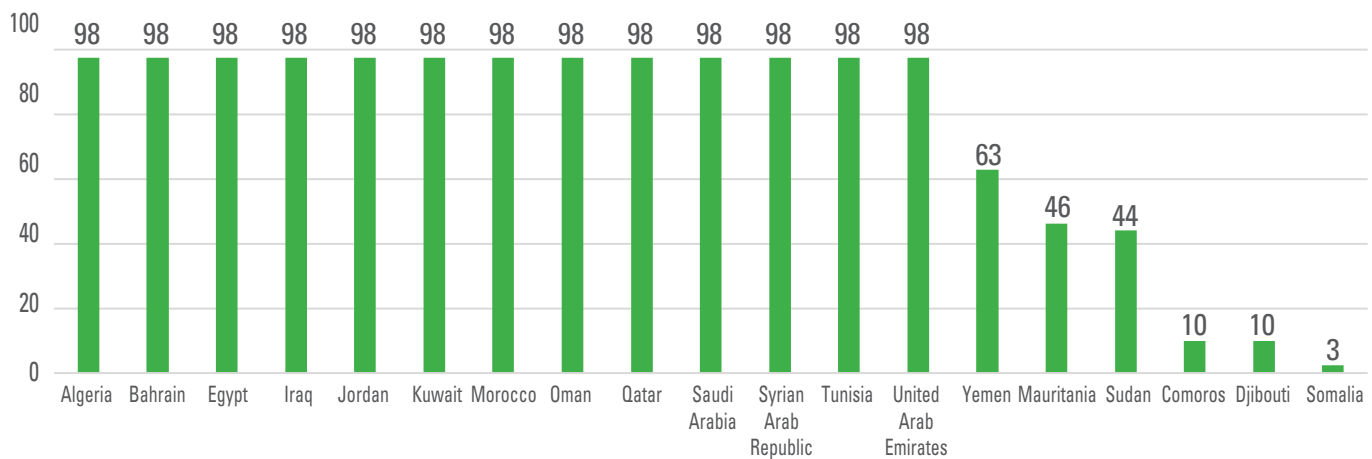
In 2017, in almost all the countries with available data, the population had access to clean fuels and technology, with rates exceeding 95 per cent. However, the coverage was not as successful in six other countries. The proportion of population with primary reliance on clean fuels and technology in Yemen was only 63 per cent, Mauritania 46 per cent, the Sudan 44 per cent. Moreover, the remaining



three countries had 10 per cent or less of their population with primary reliance on clean fuels and

technology, namely Comoros and Djibouti (10%), and Somalia (3%)

**Figure 141.** Proportion of population with primary reliance on clean fuels and technology, latest available data (percentage)



Source: UNSD, "SDG indicators", Global SDG Indicators database.