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6 CLEAN WATER AND SANITATION

SDG 6

Clean water and sanitation

Ensure availability and sustainable management of water and sanitation for all

Freshwater scarcity is a defining challenge for the Arab region, and is exacerbated by transboundary dependency, occupation and conflict, population growth, increased urbanization, and climate change. Nearly 90 per cent of the region's population lives in countries with less than 1,000 cubic metres of fresh water per person per year, and 19 of the 22 Arab countries are considered water scarce.¹ Achieving SDG 6 requires the region to adopt a human rights-based approach to water, sanitation and hygiene (WASH), along with robust water governance structures and transboundary cooperation arrangements, and strategies that link water, energy and food security. Considerable investment is needed in infrastructure, technology and the use of non-conventional water resources to improve productivity, sustainability and access for all.

The COVID-19 pandemic has highlighted the importance of ensuring access to WASH services for all to protect health and welfare, particularly as frequent and proper handwashing has emerged as the best prevention against transmission. However, what seems like a simple recommendation becomes much more complicated in the water-scarce Arab region, especially given the uneven access to WASH services across vulnerable groups. On the other hand, the pandemic has presented a unique opportunity to increase awareness regarding water-use efficiency, conservation and hygiene, with the potential for behaviour changes. Moreover, it has underlined the need for regional cooperation on the safe and sustainable management and disposal of bleaches, disinfectants, and medical and hazardous waste to prevent a waste management crisis that could impact groundwater resources and coastal environments.



Impact of COVID-19 and other crises on SDG 6 in the Arab region

The impact of the COVID-19 pandemic has been felt disproportionately across the region and within Arab countries, with vulnerable groups being the most affected, including in rural areas, informal settlements, and refugee and displaced persons camps. At the height of the pandemic, 74 million people in the region were at a higher risk of contracting COVID-19 owing to a lack of access to basic handwashing facilities.²The war in Ukraine, climate change and protracted conflict pose additional challenges to the availability, accessibility and quality of WASH services in a number of Arab countries.

Household water consumption in the Arab region increased by an estimated 5 per cent during the pandemic owing to frequent and lengthy handwashing.³ Significant variations were observed across the region, from no impact in Libya and Qatar to increases of 2.5 per cent in Hadramout in Yemen, 3 per cent in Tunisia, 10 per cent in Algeria, 25–30 per cent in Lebanon,

¹ ESCWA calculations based on data from FAO Aquastat. Accessed on 5 January 2023.

² ESCWA, The impact of COVID-19 on the water-scarce Arab region, 2020.

³ Ibid. This conservative estimate does not include projected increases in water demand for other household activities, such as laundry, cleaning and food washing.

and 40 per cent in Jordan.⁴ In most Arab countries, additional demand was met through the expansion of water supply, especially from groundwater sources. In some cases, increased water supply was associated with over-pumping and well depletion (as in Jordan and Lebanon), or unauthorized well digging and water pumping (as in Tunisia and Yemen).⁵

Augmented demand for equipment, chemicals, materials and electricity to treat water and wastewater created additional challenges for utilities in the Arab region. Owing to supply chain disruptions, some countries experienced difficulties in securing equipment for the maintenance of water tanks, sewage networks and treatment plants (as was the case in Qatar), or chemicals for water treatment (as was the case in Lebanon). Moreover, some utilities were affected by increasing power cuts and the lack of fuel to run water pumps, as was the case in Yemen.⁶The relative scarcity of inputs made it more challenging for utilities to ensure water quality, minimize the release of hazardous chemicals and materials, and increase water recycling and safe reuse.

Reduced revenues threatened the financial sustainability of utilities and the continuity of WASH services. Increased unemployment resulting from the pandemic constrained the ability of households to pay water bills at a time when their demand for WASH services had increased. In addition, lockdowns reduced demand for water from industry and services, which further slumped utility revenues. Financial strain was reported by utilities in a number of Arab countries, including Algeria, Iraq, Jordan, Lebanon and Tunisia.⁷

The pandemic and the war in Ukraine have led some Arab countries to shift food security policies towards self-sufficiency strategies that place additional pressure on scarce water resources. For example, Egypt raised investments in irrigation by 2 per cent, and expanded the cultivation of strategic crops.⁸ Before the pandemic, agriculture consumed almost 80 per cent of freshwater resources in the region, while contributing to 7 per cent of GDP.⁹ Integrated approaches are needed to increase water-use efficiency and productivity, achieve water security across all sectors, and avoid food self-sufficiency measures that are unsustainable in the long term.



⁴ E/ESCWA/CL1.CCS/2021/TP.6.

⁵ Ibid.

⁶ Ibid.

⁷ Ibid.

⁸ FAO, IFAD, UNICEF, WFP, WHO and ESCWA, <u>Near East and North Africa regional overview of food security and nutrition 2020: Enhancing resilience of food</u> systems in the Arab States, 2021.

⁹ ESCWA, Water Action Decade 2018–2028: Water for sustainable development – Arab region engagement, 2019.

Climate change is exacerbating water scarcity in the Arab region. Rising temperatures and record low rainfall threaten all Arab countries. In some Arab least developed countries (LDCs), the increase in the frequency and intensity of extreme weather events has forced families to leave their homes in search of food and water, putting their health, safety and education at risk. For instance, in Somalia, severe drought conditions and conflict have made it difficult to access safe drinking water, displacing millions of people. Women and children on the move are forced to spend more time collecting water, which increases their exposure to violence.¹⁰ **Conflict and occupation restrict access to clean water and sanitation in some Arab countries,** often compounding stresses imposed by climate change. Protracted conflicts have destroyed WASH infrastructure, contaminated water supplies, and increased the risk of waterborne diseases in parts of the region. For instance, climate-induced shocks and conflict-derived destruction of WASH infrastructure have reduced access to clean water and triggered outbreaks of cholera and other waterborne diseases in the Syrian Arab Republic¹¹ and Yemen.¹² In the State of Palestine, occupation restricts the ability of the Palestinian people to access and manage water resources, and to enjoy their right to safe drinking water and sanitation.

SDG interlinkages in the context of crises

The impact of the COVID-19 pandemic, the war in Ukraine, and climate change on SDG 6 reveal a number of interlinkages with other SDGs, including the following:

- **SDG 2** and **SDG 7** are intrinsically linked to SDG 6 through the water-energy-food nexus.
- SDG 3: waterborne diseases are associated with contaminated water and poor sanitation.
- **SDG 4:** inadequate WASH infrastructure and services can impact educational attainment.
- **SDG 5**: women spend more time in water collection and have specific WASH-related needs.
- **SDG 10**: equitable access to WASH services is fundamental for social justice and equality, including for persons with disabilities, refugees and the displaced.
- **SDG 11**: adequate housing and slum upgrading go hand-in-hand with WASH services.
- **SDG 13:** if left unchecked, climate change can further erode water resources.
- **SDG 16**: conflict can destroy WASH infrastructure and contaminate water supplies; water scarcity can in turn fuel conflict.

Source: Compiled by ESCWA.



¹⁰ UNICEF, Children are facing deadly drought in the Horn of Africa: Water crisis is devastating lives in Djibouti, Ethiopia, Kenya and Somalia, 2022.

¹¹ OCHA, Critical response and funding requirements: Response to the water crisis in Syria, 2022.

¹² ESCWA, COVID-19, conflict and risks in the Arab region: Ending hostilities and investing in peace, 2020.

Measures taken by Arab Governments

Policy responses to COVID-19 in the WASH sector have focused on the following four priorities:

- 1. Promoting hand hygiene and strengthening infection prevention and control. Nearly all Arab Governments intensified awarenessraising campaigns for handwashing with soap and water, and encouraged infection prevention and control measures at the household level. Most countries also fought misinformation and fake news about the virus. In addition, some countries trained community leaders in rural areas to promote proper handwashing in their communities. However, only a few Arab Governments rehabilitated or constructed new handwashing stations in public spaces, or ensured the availability of basic products for family hygiene and domestic water treatment.13
- 2. Preserving the ability of all people to meet basic WASH needs. In some Arab countries,
 - utilities expanded infrastructure and services to ensure a minimum daily volume of clean water for vulnerable households. Moreover, some countries took measures to delay bill payments or avoid cutting water supply to households and businesses unable to pay bills. However, few countries took action to ensure access to water for all. Efforts to take into account the needs of women and girls were often limited to the distribution of menstrual hygiene products.¹⁴

- **3.** Securing the continuity, affordability and safety of WASH services. In many Arab countries, utilities took measures to ensure the proper operation of piped water systems, including by protecting
 - the safety of utility workers, intensifying infrastructure maintenance, enhancing water quality monitoring, and securing alternative power supplies. However, few countries implemented measures to ensure the effective operation of sanitation services, and little support was provided to vulnerable groups not connected to the sewerage system.¹⁵
- **4.** Ensuring the financial sustainability of water utilities. Some Arab Governments offered support to WASH service providers to alleviate financial shortfalls from the pandemic, including delays in water bill payments by customers. Algeria, Bahrain, Lebanon, Libya, Mauritania and the United Arab Emirates are among the countries that provided financial support to WASH utilities. Evidence of financial support to utilities in other Arab countries was not readily available.¹⁶



¹³ UNICEF, Overview of water, sanitation, and hygiene (WASH) COVID-19 responses from Governments, regulators, utilities and other stakeholders in 84 countries, 2020.

15 Ibid.

¹⁴ Ibid.

Relaxing bill payments to promote access to WASH services and encourage economic recovery

Several Arab countries exempted or facilitated the payment of water bills as part of efforts to tackle the COVID-19 pandemic. For example, in Bahrain, the Government sponsored utility bills for all citizens, residents and private sector institutions in April, May and June of 2020 (not exceeding the costs incurred in the same period in 2019). The measure was later extended for citizens in their primary residences until December 2020.^a

In the United Arab Emirates, water bills and connection deposits were reduced by 10 per cent for three months in Dubai, and 5 billion dirhams (\$1.36 billion) were allocated in water and electricity subsidies in Abu Dhabi.^b

In Oman, water bills were postponed for three months for private sector firms, and until September 2021 for employees whose salaries were lowered owing to the pandemic.^c

In Mauritania and Tunisia, subscribers with overdue water bills were reconnected to the water supply.^d Moreover, the Government of Mauritania bore water supply costs in rural villages for a period of nine months, and covered the water bills of poor households for two months.^e Moreover, the national water utility of Tunisia granted subscribers additional time to settle accounts.^f

Other Arab countries, including Egypt, Lebanon, Morocco and Qatar, also delayed or temporarily suspended water billing as part of efforts to combat the COVID-19 pandemic.

- a Bahrain Economic Development Board, <u>Bahrain Coronavirus Updates</u>. Accessed on 15 January 2023.
- b UNICEF, <u>COVID-19 WASH responses by Governments, water utilities and stakeholders in MENA</u> <u>countries</u>, 2020.
- c IMF, Policy responses to COVID-19, 2020.
- d UNICEF, <u>Overview of water, sanitation, and hygiene (WASH) COVID-19 responses from</u> <u>Governments, regulators, utilities and other stakeholders in 84 countries, 2020; and UNICEF,</u> <u>COVID-19 WASH responses by Governments, water utilities and stakeholders in MENA countries,</u> 2020.
- e CNN Arabic, منها إعفاء الفقراء من فواتير الماء والكهرباء.. 7 إجراءات بموريتانيا لمواجهة فيروس كورونا ,2020.
- f UNICEF, <u>COVID-19 WASH responses by Governments, water utilities and stakeholders in MENA</u> <u>countries</u>, 2020.





Uneven access to clean water and sanitation in the Arab region is frequently compounded by intersecting inequalities. The COVID-19 pandemic, climate change and other shocks have amplified these divides. The following groups are notably at risk of being left behind.



Inhabitants of rural areas: There is a discrepancy in WASH services between rural and urban areas in the Arab region, with the economically disadvantaged in both areas most likely to be left behind. Even discounting varying levels of quality and considering only access to basic services, the disparities between rural and urban areas are striking.



Refugees, the displaced and persons living in conflict countries: The human right to access WASH services must not be threatened by occupation or conflict. Refugees, internally displaced persons, and persons living in conflict countries often lack access to safe water and proper sanitation facilities, increasing their vulnerability to illness and disease. Occupation continues to deprive the Palestinian people of access to basic WASH services.



Women and girls: Adequate and gender-responsive WASH services can reduce school dropout rates for girls, maternal morbidity and mortality, and food security, and promote sustainable livelihoods through agriculture. Moreover, women and girls often spend more time than men on unpaid WASH-related work, and rarely participate in water-related policymaking and governance. However, available data are not sufficiently disaggregated to portray a clear gender divide.



Persons with disabilities: Persons with disabilities face additional challenges in access to WASH services, including physical, social and institutional barriers. In many Arab countries, persons with disabilities are also less likely to live in households with access to improved sanitation services compared with persons without disabilities. Moreover, inaccessible WASH facilities in schools hinder the ability of children with disabilities to learn.



Migrant workers: Certain categories of migrant workers, particularly low-skilled workers, face discrepancies in access to WASH services. Their exclusion from some labour laws is associated with subpar remuneration, poor work conditions, and weak labour inspection, which often restrict access to water and sanitation.



People in Arab LDCs: The proportion of the population using improved WASH services is significantly lower in Arab LDCs, in part owing to insufficient investment and inadequate or collapsing infrastructure.



Informal settlement dwellers often live in precarious conditions with limited access to safe WASH services, and often need to pay more for water than residents in wealthier areas.

Policy recommendations for ensuring an inclusive recovery and achieving SDG 6 by 2030

To achieve SDG 6 and realize its promise of ensuring the availability and sustainable management of water and sanitation for all, Arab countries must adopt proactive policy approaches and strengthen regional cooperation. The Arab Sustainable Development Report 2020 identified a series of recommendations to accelerate the achievement of SDG 6, which remain pertinent today. They can guide the region's efforts to build back better from COVID-19, and bolster resilience against future shocks.

In preparation for the midterm comprehensive review of the Water Action Decade, which will take place at the United Nations 2023 Water Conference, Arab countries have reviewed regional progress and consolidated priorities, including integrated water resources management, access to water and sanitation (especially in crises), water-use efficiency, transboundary water cooperation, climate action, and connecting water across sectors. Accelerators for the achievements of the Decade's goals are also of crucial importance for the region, including water financing, innovation, knowledge promotion, networking and capacity-building.

Increase investment and funding in infrastructure, technology and capacity building:

 Increase foreign and domestic funding to rebuild, upgrade and scale up WASH infrastructure, especially in rural areas, and improving water-use efficiency.



• Increase capacity-building efforts, including by promoting a framework for integrated water resources management and strengthening water accounting capacity.

Strengthen effective and inclusive water governance, and enhance coherence and coordination across related social and economic sectors:

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- Operationalize a human rights-based and gender-responsive approach to WASH to ensure the coherence of policies and actions at the national level, and to improve living conditions and well-being.
- Expand and ensure adequate access to WASH services across subnational regions, in rural areas, and in informal settlements.
- Strengthen the implementation of integrated water resources management through improved policies and improved institutional and legal frameworks.

Adopt and operationalize an integrated nexus approach linking water, energy, food security and ecosystems:



• Consider the implications of water strategies, programmes and technologies on livelihoods, the gendered care-work burden, food security, energy consumption, and environmental sustainability.

Enhance intraregional and interregional coordination:

• Promote cooperative policy frameworks and platforms for improving shared water resource management and overcoming water scarcity.



- Improve knowledge exchange, learning and partnerships, including by strengthening and building on existing regional coordination mechanisms and networks.
- Enhance the capacity of Arab States to negotiate shared water agreements.

Empower stakeholders, especially women and people in rural areas:

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- Build the capacity of local communities, especially farmers and women, in the efficient use and effective management of the water supply, including through the transfer of knowledge and technology, and the harvesting of local knowledge and traditional practices for more sustainable management of water and sanitation.
- Review policies, regulatory arrangements, strategies and implementation models to ensure that they are inclusive and gender sensitive. Implementation approaches must lead to the empowerment of women, including through their meaningful participation in decision-making and governance.

Collect disaggregated data to inform evidence-based decisions and target the neediest groups:



- Collect disaggregated data on access to WASH services by vulnerable groups, including women, persons with disabilities, persons living in informal settlements, and refugees and the displaced; and use such data to inform policies and programming that leave no one behind.
- Collect and use gender-disaggregated data on water collection (including time spent) and participation in decision-making in WASH utilities and governance institutions.



	Indicators	Arab region	World
6.1.1 Water resources management	Proportion of population using safely managed drinking water services (percentage), 2020	76.6	74.0
6.2.1	Proportion of population using safely managed sanitation services (percentage), 2020	33.4	54.0
Handwashing facility	Proportion of population with basic handwashing facilities on premises (percentage), 2020	86.7	71.0
Open defecation	Proportion of population practicing open defecation (percentage), 2020	4.6	6.0
6.4.1	Change in water-use efficiency over time (dollar/m³), 2019	10.1	19.4
6.4.2 ()) Freshwater withdrawal	Level of water stress: freshwater withdrawal as a proportion of available freshwater resources (percentage), 2019	120.8	18.6
6.5.1 Water resources management	Degree of integrated water resources management implementation (0–100), 2020	49.6	57.0
6.5.2 Water resources management	Proportion of transboundary basin areas with an operational arrangement for water cooperation (percentage), 2020	30.0	58.1
	Proportion of aquifers transboundary basin area with an operational arrangement for water cooperation (percentage), 2020	30.1	41.5
	Proportion of river and lake transboundary basin areas with an operational arrangement for water cooperation (percentage), 2020	28.1	65.1

Source: ESCWA, Arab SDG Monitor. Accessed on 15 January 2023.

