

Food and Agriculture Organization of the United Nations







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High-Level Meeting Within the 13th Session of the Arab Ministerial Water Council

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International Water Management Institute





Shared Prosperity Dignified Life



High-Level Meeting within the 13th Session of the Arab Ministerial Water Council WATER SCARCITY: A CHALLENGE TO SUSTAINABLE DEVELOPMENT IN THE ARAB REGION



INTRODUCTION

- The first joint Arab ministers of agriculture and water in 2019 adopted
 "Cairo Declaration".
- Arab governments and partners are called to coordinate and harmonize policies across both sectors within the Arab Region (AR) to face the impacts of climate change, land degradation, and water scarcity.

INTRODUCTION

- AR one of the scarcest areas in the world, is facing multisectoral pressures to its water resources sustainability due to increasing demand, inefficient water uses, COVID-19 pandemic, poor water governance, climate change, overpumping groundwater resources, influx of refugees and transboundary issues.
- Our region has become a well know place worldwide for unsustainable water use, with more than half of current water withdrawals in most of the countries exceeding the amount naturally available.

INTRODUCTION



VATER SCARCITY: A CHALLENGE TO SUSTAINABLE DEVELOPMENT IN THE ARAB REGION Water scarcity in the Arab region out of 22 Arab States are below the renewable water resources scarcity annual threshold of Water self-sufficiency 00000 >1,700m³/person/year ,000 m³ per capita per year 4,540,068 (Mauritania) of 22 Arab States are below the absolute water scarcity threshold of 500 m³ per capita per vear Water stress 😫 👱 💄 1,000-1,700 m3/person/year 55,354,025 million people in the Arab region live in countries under water scarcity to absolute (Comoros, Irag, Somalia) scarcity conditions Water scarcity **5%** of the region's 500-1,000 m³/person/year With only M M 201,456,988 ble when neede (Egypt, Lebanon, Morocco, the Syrian Arab Republic, the Sudan) million people without access to water at all times Water absolute scarcity Nearly <500 m³/person/year 0 (Algeria, Bahrain, Jordan, 160,394,920 Kuwait, Libya, Oman,

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the State of Palestine, Qatar, Saudi Arabia, Tunisia, the United Arab Emirates, Yemen)

100,000,000

150.000,000

Population

200.000,000 250,000,000

In many countries, the norm is intermittent supply

ESCWA (2019)¹

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WHY ARAB REGION NEEDS TO ACT?

- Water demand projected to continue to grow faster than supply.
- Imminent climate change impact, precipitation projection to fall. Droughts affected over 44 million people and caused economic damages of \$11.7 billion from floods and storms ^{2,3}.
- 18 Arab States stand below the water poverity line of 1,000 m3 per capita, placing 362 million people under water scarcity. ^{2,3}

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WHY ARAB REGION NEEDS TO ACT?

- Recently the scale of water scarcity is unprecedented as it starts to impact on WASH services for children, the poor, and the most vulnerable communities.
- The financing gap for achieving the SDGs in the Arab region is estimated to be at least \$230 billion annually⁷, this also can be an opportunity for investment and economic growth.
- The AR challenges exuberated by an unwelcomed newcomer: The COVID-19 Pandemic.

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WHY ARAB REGION NEEDS TO ACT?



- 82% of wastewater is not being recycled in the region, compared to just 30% in high-income countries.
- This presents a major threat to human and environmental health but also could be a useful opportunity toward water demand satisfaction⁹.
- Non-conventional water uses is less than 10% of total available resources.

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WHY ARAB REGION NEEDS TO ACT?



Note: The SSR is calculated as wheat production x 100/(production+imports-exports).

• 84% of total water withdrawals used by agricultural sector ^{13, 14}.

- Low irrigation water-use efficiency where 50% of the water lost⁹, with high dependency on food imports.
- Interlinkages across sectors and natural resources base are understood but not adequately reflected in policies and practice that links water with food security

Source: FAO FAOSTAT, 2020.

WHY ARAB REGION NEEDS TO ACT?

"Water security is a key driver for sustainable development and for uniting people and societies. Cooperation over water is a precondition to sustainable development, peace and security for all."

Middle East Water Forum

- Accelerated transboundary water conflicts, as 27 shared surface water basins in 14 out of 22 Arab countries, are riparian States associated with disputes and conflicts .
- Thus, high dependency on shared resources complicates the task of achieving water security in many countries, potentially hindering attainment of the SDGs ⁴

- The water scarcity challenges that face the AR need to be addressed to avoid harmful consequences through the following objectives:
- Increase visibility of the water scarcity crisis for the region's governments, civil society and development partners.
- Promote more integrated and harmonized public policies that connect agriculture, water resources, drinking water and sanitation, and other sectors with technology, stahkeholders and promotion of good governance.

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- Enlighten AR on threats, opportunities, priorities and actions (e.g., **TODAY'S HIGH-LEVEL TECHNICAL MEETING**) by focusing on the following issues:
- Economic impacts of water scarcity.
- Challenges and opportunities for the use of non-conventional water resources.
- Management of scarce water resources in chronic emergency contexts.
- Water Scarcity and WASH services at community.

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- Engage community approach in WASH to better understand the context and empower community leadership. Focus on behavioral change to alleminate diseases, better health and poverty reduction.
- Raise awareness and initiate programs among community about potential threats and possible degradation of WASH services.
- Introduce good water governance and integrated water resources management principles (IWRM) into all water resources protection, development and use.

National indicator 6.5.1 scores per IWRM implementation category in the Arab region, based on 19 reporting countries



Note: Score thresholds for IWRM implementation are: very high 91–100, high 71–90, medium-high 51–70, medium-low 31–50, low 11–30, and very low 0–12. Country codes: BHR: Bahrain; COM: Comoros; DJI: Djibouti; DZA: Algeria; EGY: Egypt; IRQ: Iraq; JOR: Jordan; KWT: Kuwait; LBN: Lebanon; LBY: Libya; MAR: Morocco; MRT: Mauritania; OMN: Oman; PSE: State of Palestine; QAT: Qatar; SAU: Saudi Arabia; SDN: Sudan; SOM: Somalia; SYR: Syrian Arab Republic; TUN: Tunisia; UAE: United Arab Emirates; YEM: Yemen.

- Develop proper institutional capabilities of staff and organizations
- Promote innovation as a game- changer to the growing water scarcity in the region.
- Consider treatment of wastewater as a real substitute to freshwater resources and an opportunity to satisfy demand especially in irrigated agriculture as 82% of which is not being recycled ⁹.
- Enforce water-energy-food nexus as water treatment, is usually associated with high cost, therefore, encouragement of solar-powered plants will achieve better water supply, energy and food security, and more protection to our environment.

- Prepare resilience and adaptation plans to combat climate change. This, however, requires the mobilization of new financing to support climate resilience and adaptation programs ¹⁰.
- Apply hydro-diplomacy to bilateral and multilateral negotiations on transboundary water issues between and among states¹¹.
- Involve PSP to increase efficiency and attract finance, as the vast majority of utilities in the Arab World still managed by governments and public owned utilities¹².
- Assess eeconomic impacts of water scarcity on water cost, affordability and food shortages, as the Arab Region is one of the regions with high food (40-90%)¹⁸.

• Ensure lasting impacts of water, sanitation and hygiene (WASH) programs, services and infrastructure on the concept of mainstreaming sustainability sectorwide rather than focusing on individual projects(UNICEF, 2021)¹⁶



Source UNICEF (2021)



- Achieve target 6.4 that addresses water scarcity as it is essential to increase resilience towards climate change and securing more water.
- Collaborate on removing barriers to enhance transformation towards inclusive sustainable development in the Arab region. Barriers include agricultural practices, technological awareness, access to data, private sector engagement, institutional reforms, gender quality and education (ESCWA, 2020)¹⁷.

Source: ESCWA (2020)

THE WAY FORWARD

- Reforms in water sectors should be seen as part of a bigger reform agenda which extends across national sectors' policies of the whole Arab Region. This shall include building institution, removal of distortions and public awareness.
- Water scarcity and sustainable development requires us to continue on IWRM efforts hand in hand with adaptation of technological innovation, involvement of private sector and climate change adaptation to enhance management of water scarce water resources and efficient delivery of WASH services

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