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Towards Regional Water Security & Public Awareness

Water Scarcity Challenges in the Middle East

Webinar Speech

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The Middle East Water Forum (MEWF)

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INTRODUCTION

The ME and in particular the Arab Region is one of the scarcest areas in the world. The region is now facing multisectoral pressures associated with significant risks to its water resources sustainability because of demand increase due to socioeconomic development, COVID-19 pandemic, poor water governance, climate change, over pumping of its precious groundwater resources, influx of refugees, regional conflicts over transboundary water resources and most recently the Russia-Ukraine war . Due to the above reasons, 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

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INTRODUCTION

The region struggling to conserve its resources and avoid water scarcity due to serious challenges "in addition to the ones mentioned earlier" e.g., lack of financing, water losses in municipal networks and inefficient water uses especially in irrigated agriculture, inadequate institutional capacities, pollution, and lack of sustainable WASH infrastructure in a harsh arid to semi-arid environment

Source: Lifegate[19]

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WHY WE NEED TO ACT ?

- Water demand projected to continue to grow faster than supply. World Bank projections, which including climate change impacts, suggest that total water demand in MENA, in particular the Arab Region, would grow by about 58 percent from 2010 to 2050[1].

- 12 out of the 17 most water-stressed countries in the World are in MENA. 18 out of 22 Arab States stand below the renewable water resources scarcity annual threshold of 1,000 m3 per capita, placing 362 million people under water scarcity[2,3].

For these countries food-self sufficiency is out of question!!

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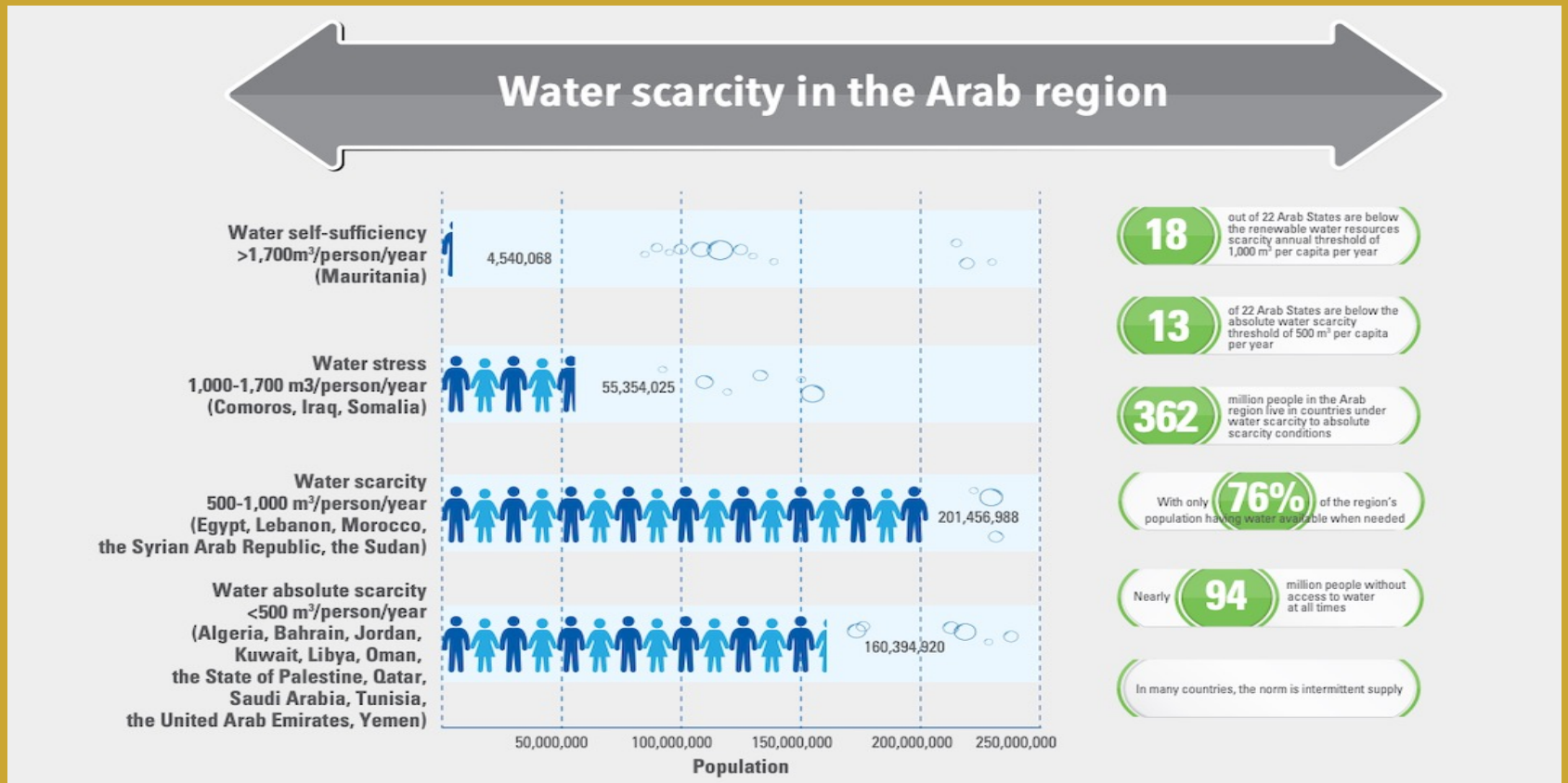
WHY WE NEED TO ACT ?



ESCWA (2019)

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WHY WE NEED TO ACT ?

- "Roughly two thirds of the Arab World's surface water supplies originate outside the region" [4]. Despite all of these, the region is the least prepared to cope up with water scarcity challenges.

- Although the region known for water scarcity challenges, but recently the scale of water scarcity is now unprecedented as it starts to impact on WASH services for children, the poor, the marginalized and the most vulnerable communities.

- **(The Syrian Al Hasakah and Basra of Iraq Water Crisis)**

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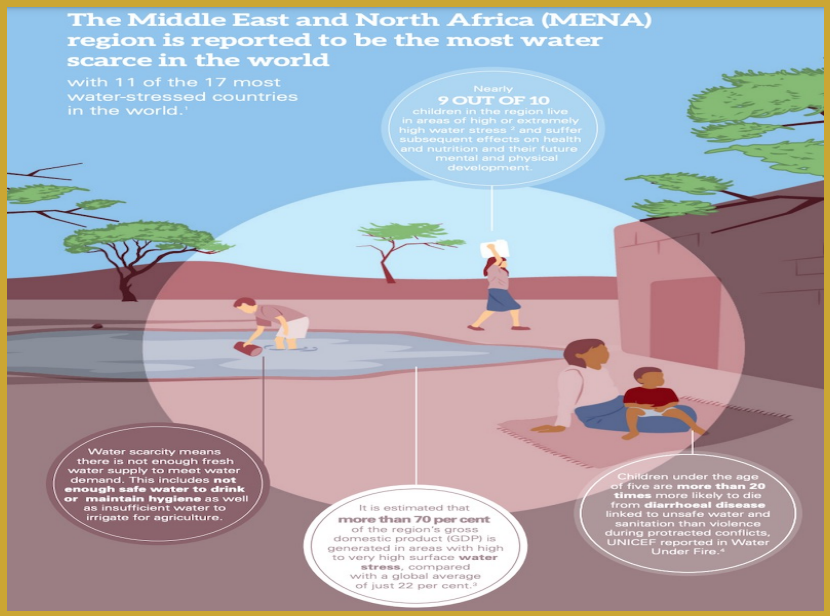
WHY WE NEED TO ACT ?

Source: World Bank infographics



Source: UNICEF (2021)

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WHY WE NEED TO ACT ?

- Climate projections indicate that the region will continue to experience an increase in its mean temperature, and that this rise could be as high as 1.5 times the increase in the global mean temperature by the late 21st century [6] (UNEP). In addition, precipitation is projected to fall, particularly in the rainy season in the eastern Mediterranean (al-Mashreq) and Mediterranean North Africa (al-Maghreb and Egypt).

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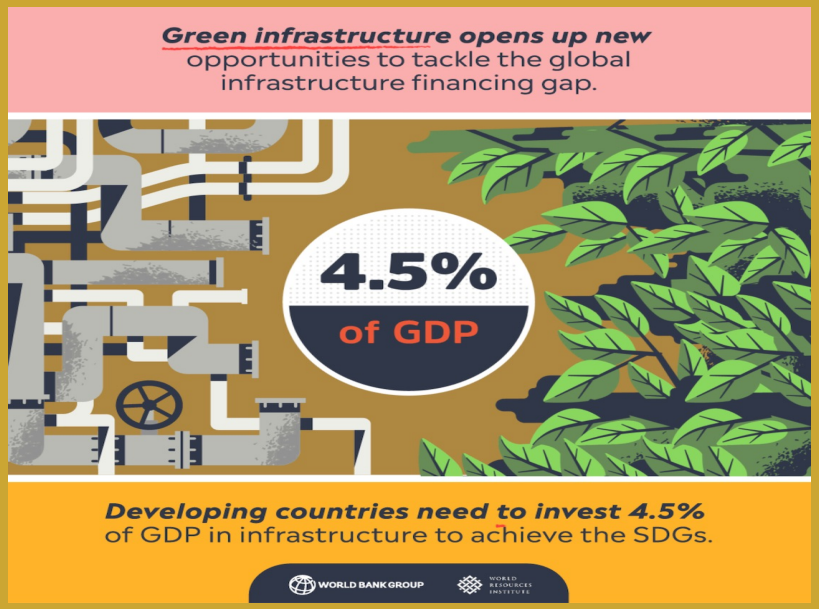
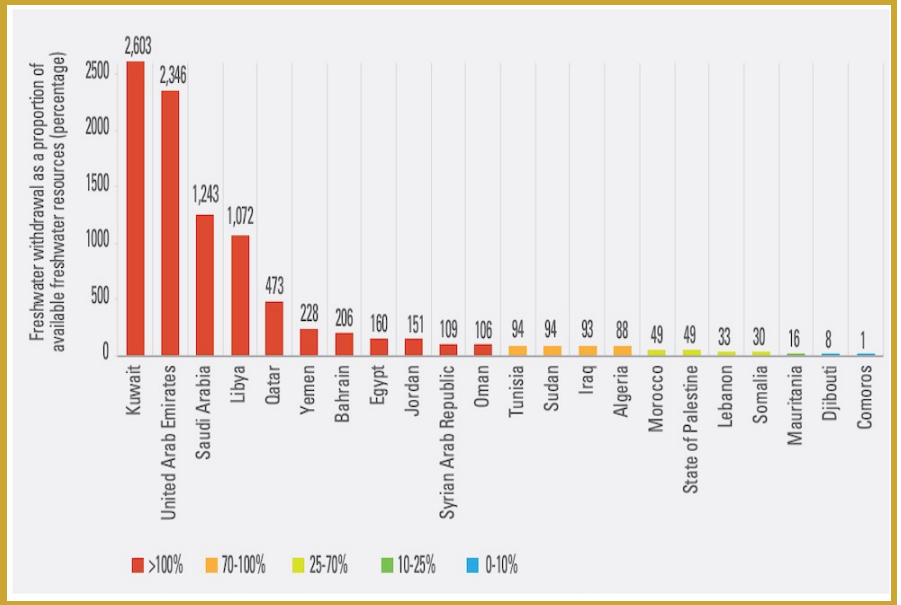
WHY WE NEED TO ACT ?



Source: World Bank Group



UN DESA data base for level of water stress in the Arab region[3]

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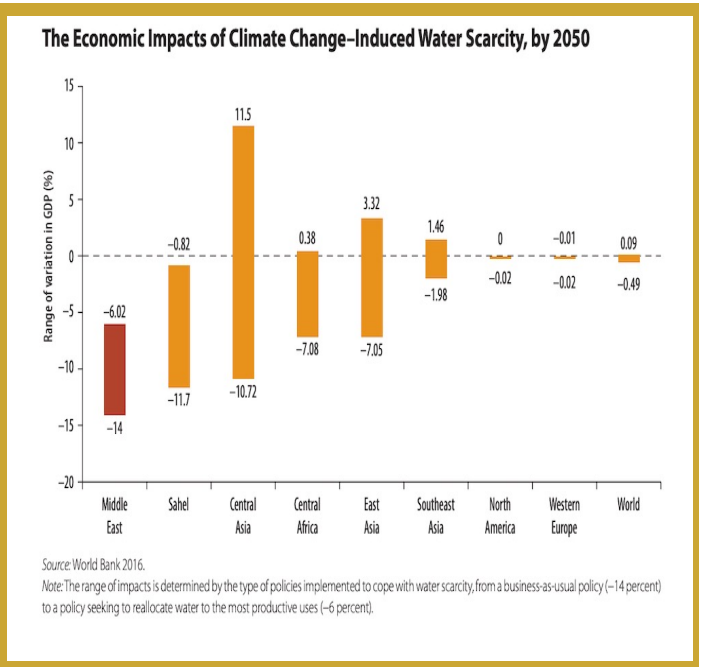
WHY WE NEED TO ACT ?

- As water cost per unit increases due to water scarcity, the World Bank estimated that MENA with the mostly affected is the Arab Region, has the greatest expected economic losses from climate-related water scarcity, estimated at 6-14% of GDP by 2050 [8].



- 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 partial [9].

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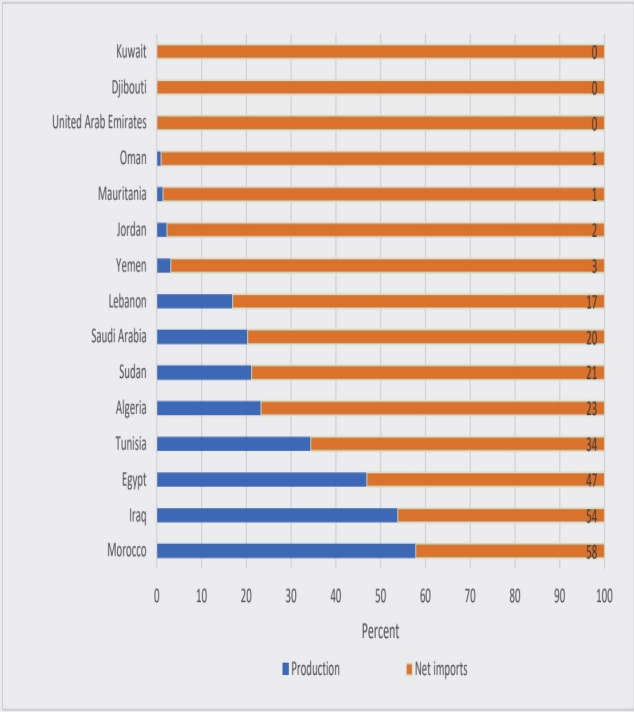
WHY WE NEED TO ACT ?

- 84% of total water withdrawals used by agricultural sector [13, 14]. With a very low irrigation water-use efficiency where 50% of the water lost[9], the region has also the highest dependency on food imports.

- Interlinkages across sectors (water, food, energy, ecosystem) and the natural resources base (water, land, soils) are understood but not adequately reflected in policies and practice.



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

Source: FAO FAOSTAT, 2020.

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WHY WE NEED TO ACT ?

- Accelerated transboundary water conflicts increasingly becoming a source of tension to regional countries. Thus, high dependency on shared resources complicates the task of achieving water security in many countries, potentially hindering attainment of the SDGs [4].

Climate Change fears are currently fuelling transboundary conflicts!!

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RESPONSE & PRIORITIES TO ADRESS SCARCITY

The challenges that the state of the region's freshwater resources pose to its present and future prosperity need to be addressed to avoid significant harmful consequences through:

- Increase visibility of the water scarcity crisis for the region's governments, civil society and development partners.

- Enforce water-energy-food nexus, including desalination, nonconventional water resources, irrigated agriculture, encourage solar-powered plants to achieve better water supply, energy and food security, and more protection to our environment

(Water-Energy-Food Nexus)

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RESPONSE & PRIORITIES TO ADRESS SCARCITY

- Engage community approach in WASH to better understand the context and empower community leadership. Community resilience should be right-based, gender transformative and anchored at genuine community engagement.

- Raise awareness and initiate programs among community about potential threat as a result of water Scarcity and possible degradation of WASH services.

- Introduce as much as possible good water governance and integrated water resources management principles (IWRM) into all water resources protection, development and use, including management of scarce water resources in chronic emergency contexts.

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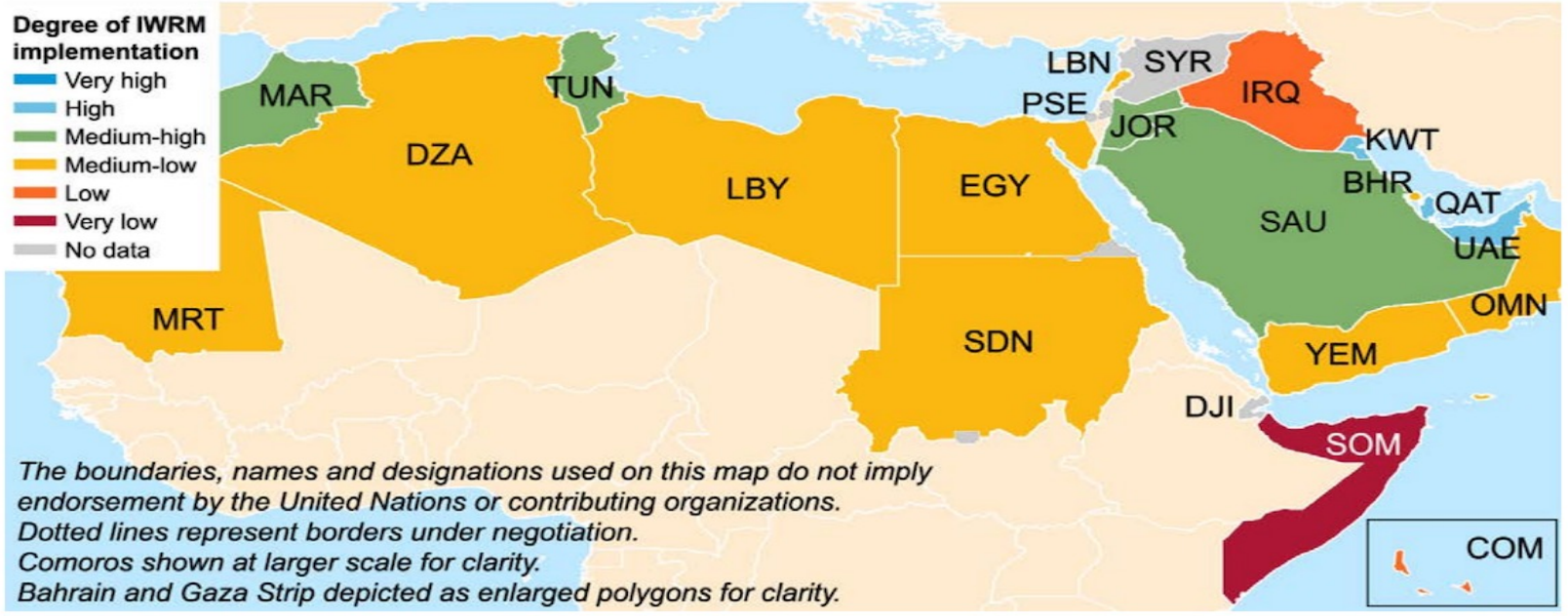
RESPONSE & PRIORITIES TO ADRESS SCARCITY



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.

Source: ESCWA (2019)

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RESPONSE & PRIORITIES TO ADRESS SCARCITY

- Develop proper institutional capabilities of staff and organizations which is a key to successful and concrete actions to solve water scarcity problems.
- Promote water innovation being a game- changer to the growing problem of water scarcity in the region.
- Consider treatment of wastewater as a real substitute to fresh water resources and an opportunity to satisfy demand especially in irrigated agriculture as 82% of which is not being recycled [9].

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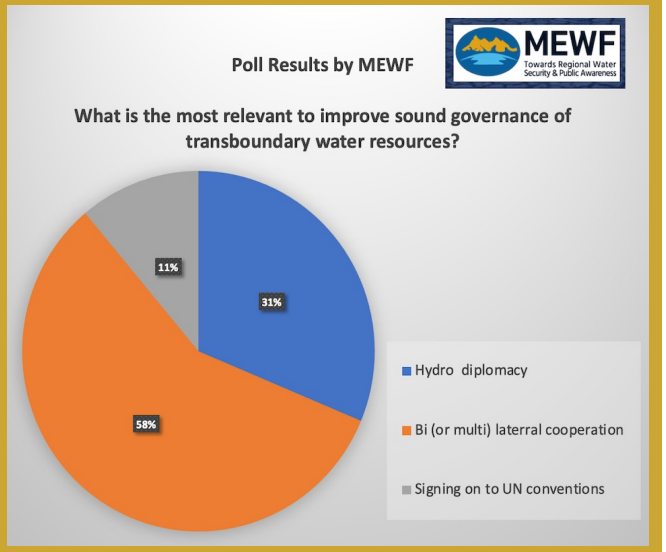
RESPONSE & PRIORITIES TO ADRESS SCARCITY

- Prepare resilience and adaptation plans to combat climate change

- Apply hydro-diplomacy to bilateral and multilateral negotiations on transboundary water issues between and among states.[11].

- Involve PSP to increase efficiency and attract finance, as most utilities in the Arab World still managed by governments and public owned utilities[12].



- Assess eeconomic impacts of water scarcity on water cost, affordability and food shortages.

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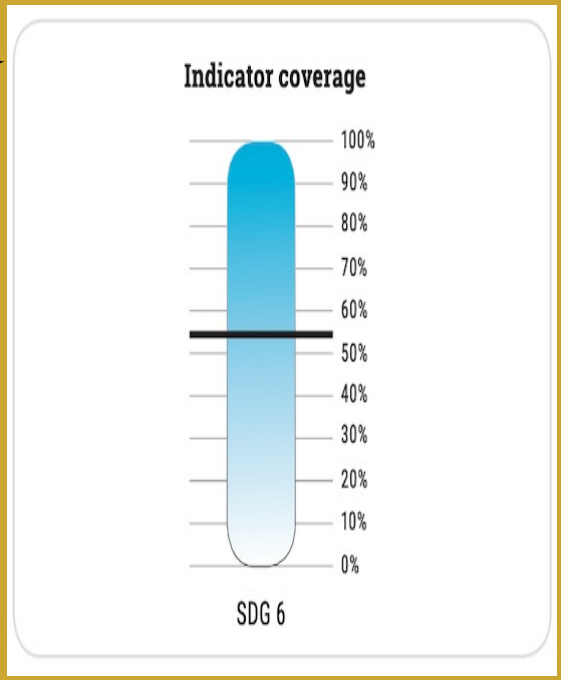
RESPONSE & PRIORITIES TO ADRESS SCARCITY

- Engage in WASH issues through improving physical access and behavioral change which will lead to decreased disease, better health and poverty reduction.

- Work in achieving the target 6.4 that addresses water scarcity to ensure there is sufficient water for the people, the economy and the environment by increasing water-use efficiency across all sectors and securing environmental water requirements, which is essential to increase resilience towards climate change and thus, securing more water.



Financing gap to achiev SDGs in AR is estimated to be $230 billion annually [7]

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Thank you for your attention !

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