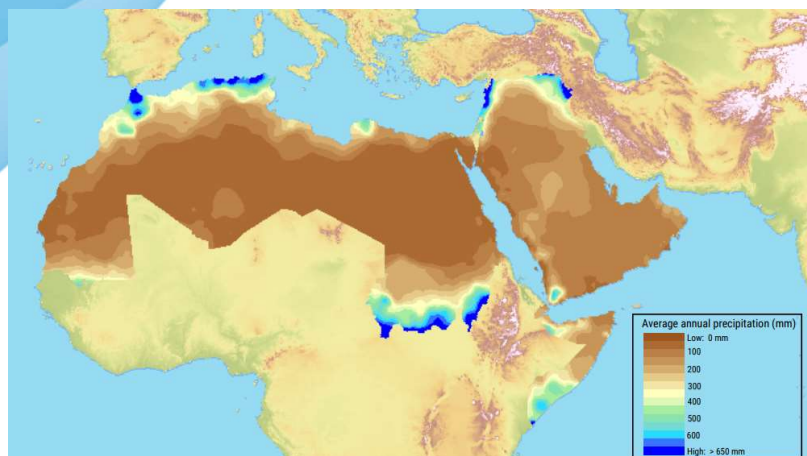




Water financing challenges and opportunities for MENA countries in a context of climate change and water scarcity

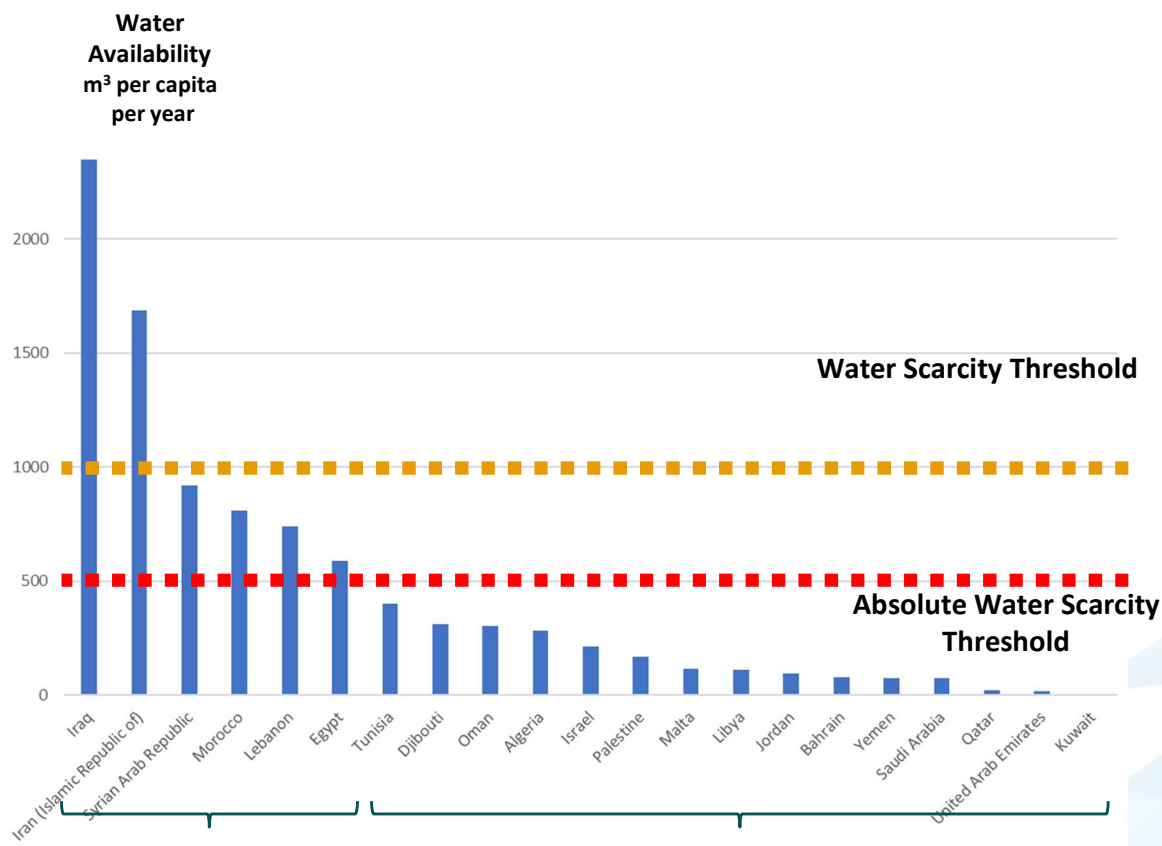
Safaa Bahije (Water resources specialist)

Climate change will severely exacerbate existing water scarcity....



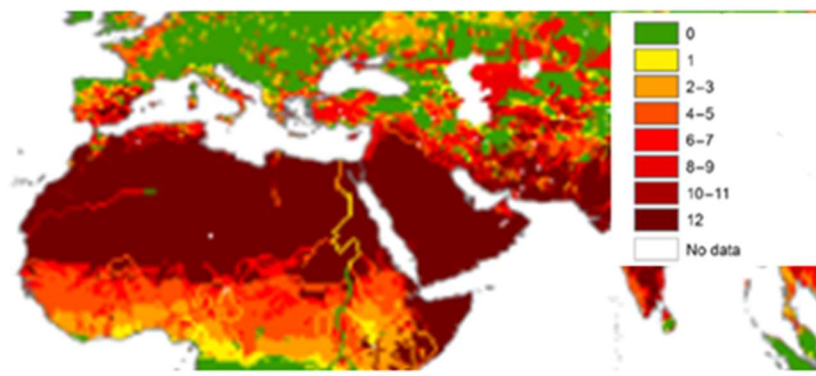
Courtesy: RICCAR. Arab Climate Change Assessment Report. 2017

IPCC studies predict a rise in temperature between 2 and 4° C and a 10 to 30% drop in rainfall by 2080–2099 in the Maghreb.



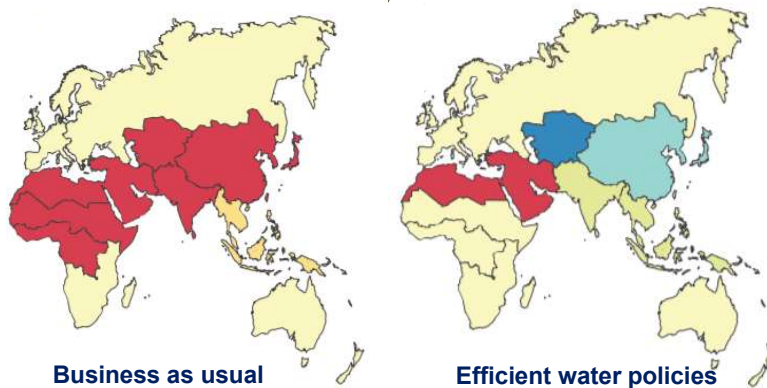
Source: [AquaStat](#)

Number of months in which water scarcity is > 100%

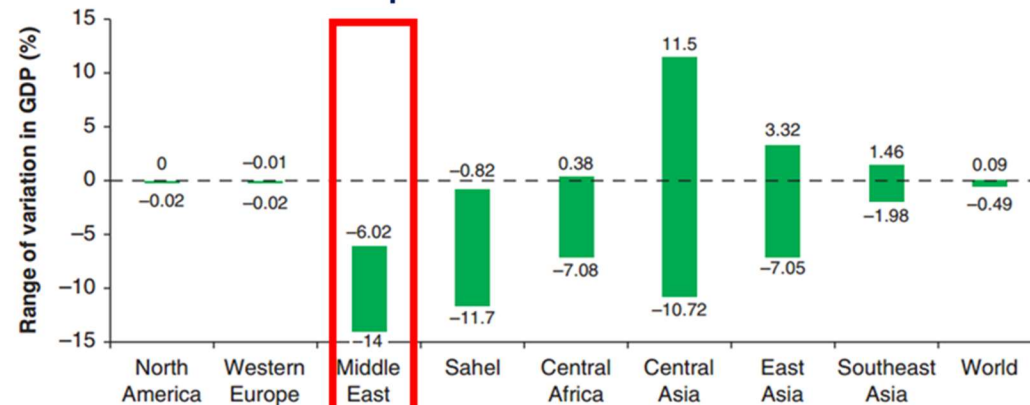


....with significant socio-economic consequences

The estimated effects of water scarcity on GDP in Year 2050



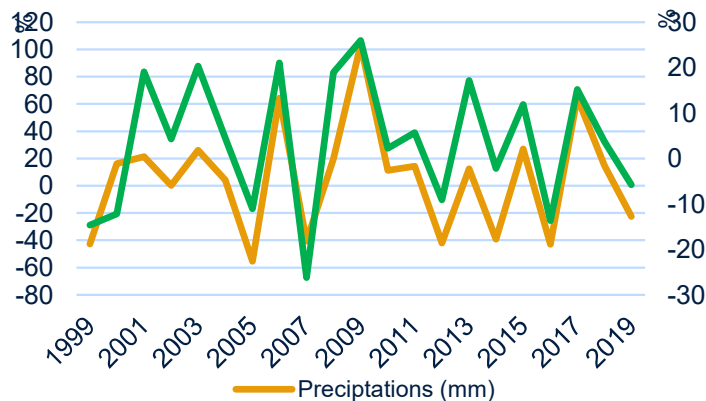
Climate change effects on water will have the greatest negative impacts on MENA's GDP



Source: World Bank 2015a.

- **Climate change** would reduce regional **GDP by 6%**
- **60%** pop exposed to **high/very high surface water stress** vs 35% globally & population to double by 2050
- **Water productivity** half of world average, with 60% transboundary resources
- **Food security** dependent on water, which contributes to displacement and migration

Strong correlation between rainfall and agricultural added value in Morocco

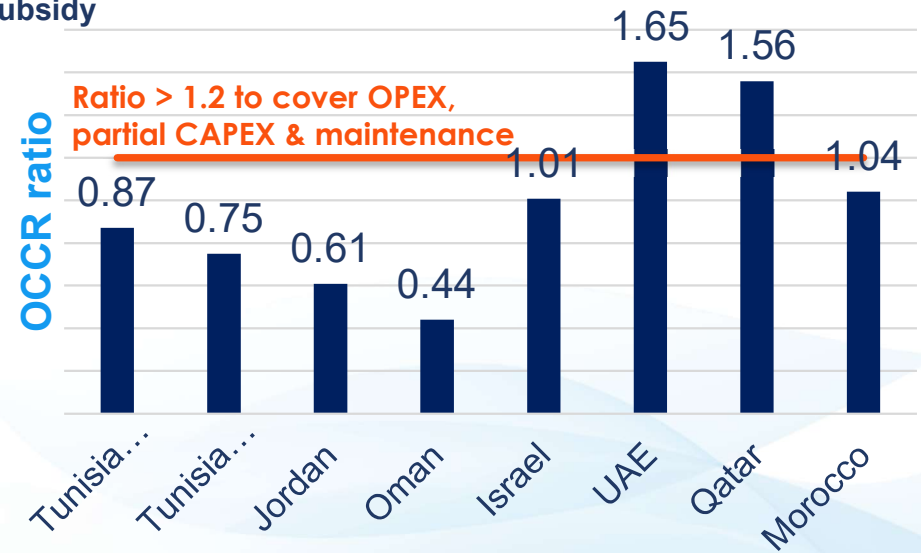


Resources are not valued accordingly

▶ Leading to poorly performing utilities

Utility finance indicators

Operating Cost Coverage w/o subsidy



7. More capital expenditure to restore system efficiency

1. Low tariffs => financing gaps => more Public funds

2. Public funds are insufficient & poorly timed

3. Maintenance neglected

4. Technical performance worsens

5. Customers don't pay for poor services

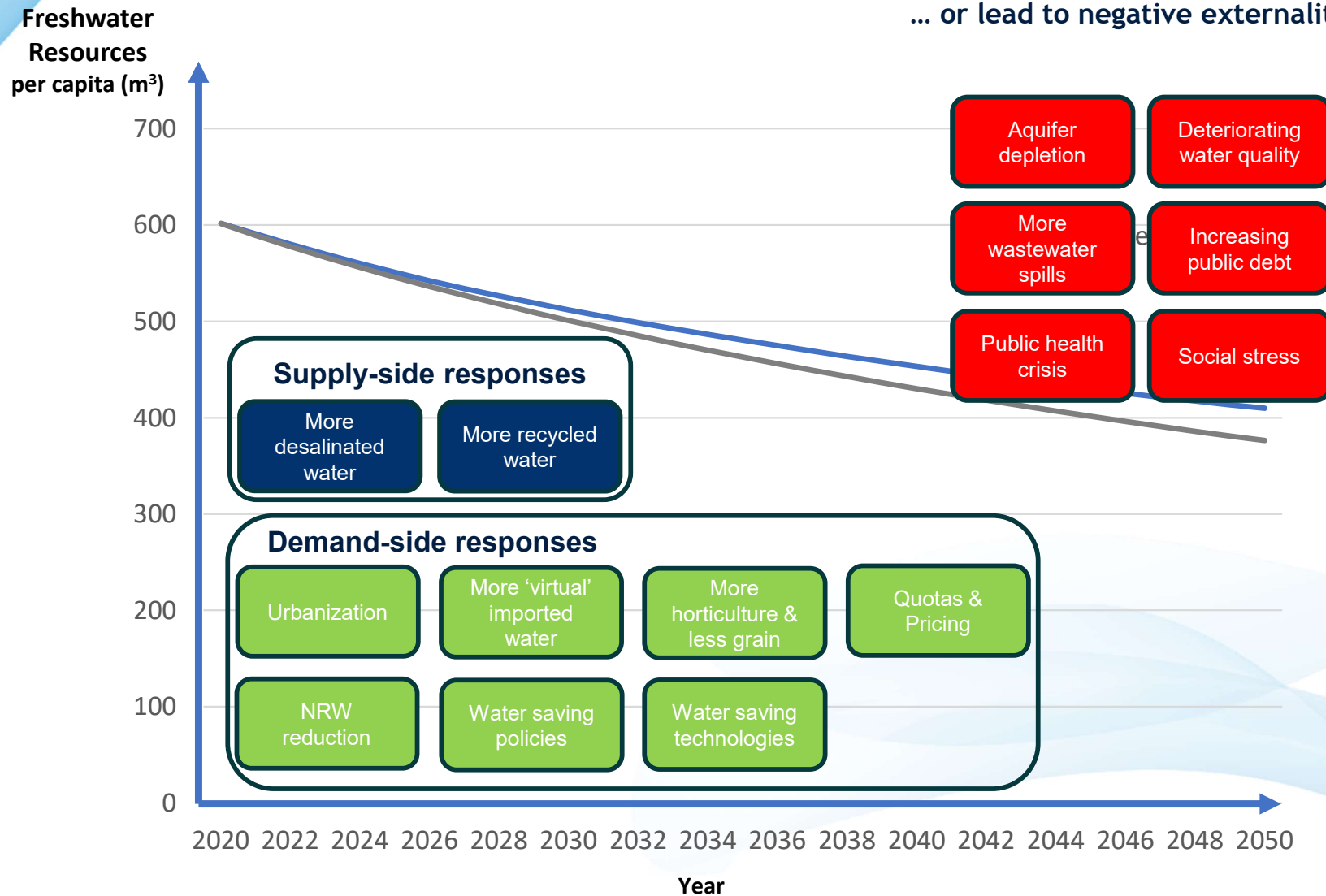
6. Poor technical performance => poor financial performance

Utility vicious cycle driven by low tariffs

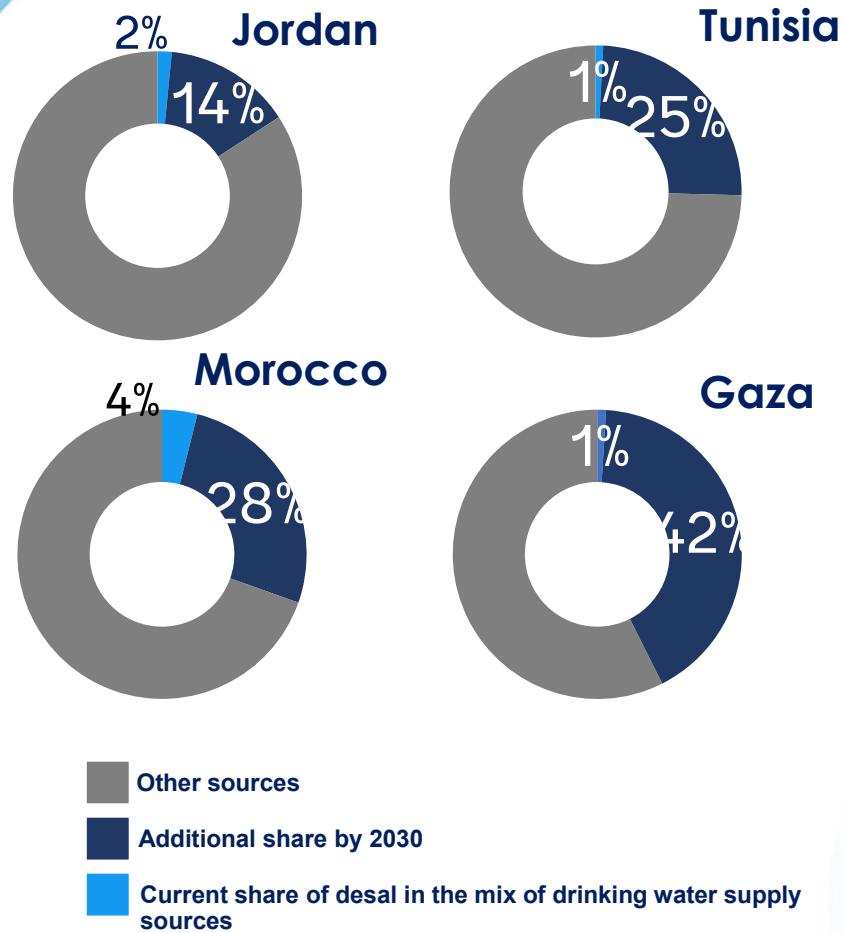
- MENA has the **Lowest** water tariffs; and
- **High** proportion of GDP (2%) spent on water subsidies

Water scarcity will force continued adaptation ...

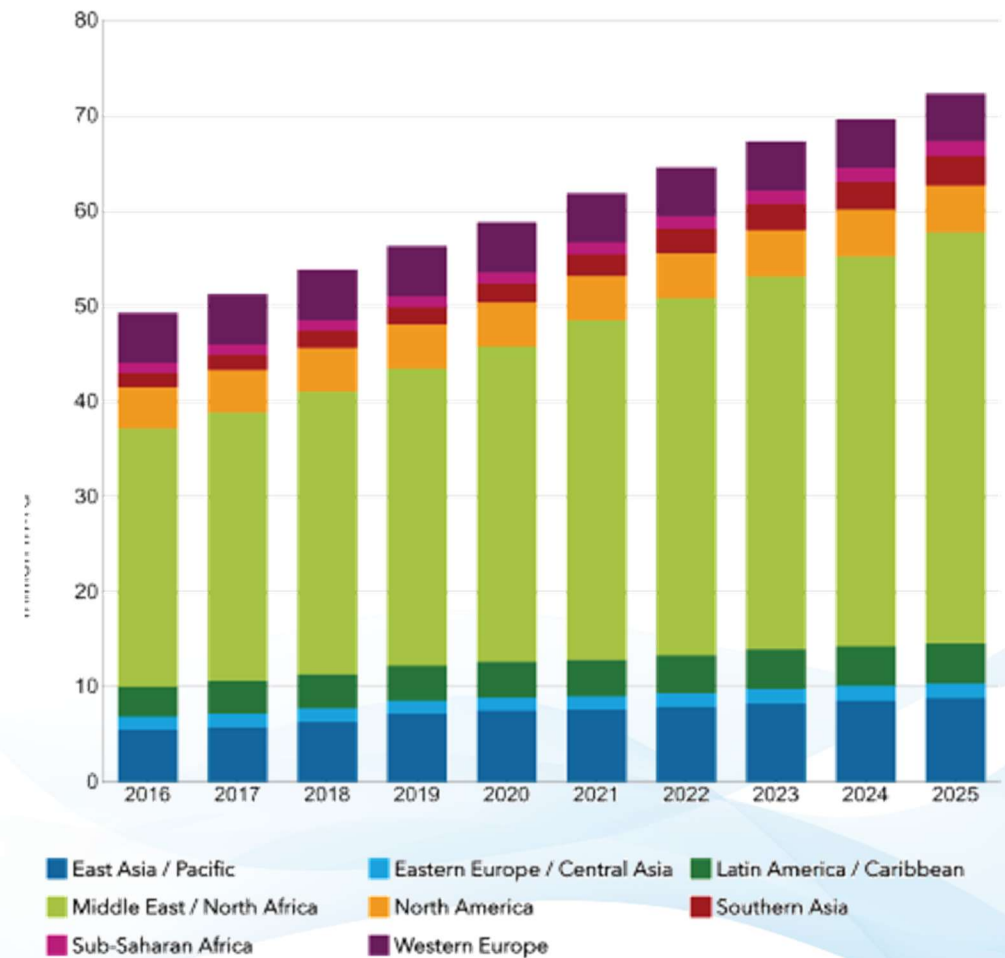
... or lead to negative externalities



Desalination keeps transforming the water sector

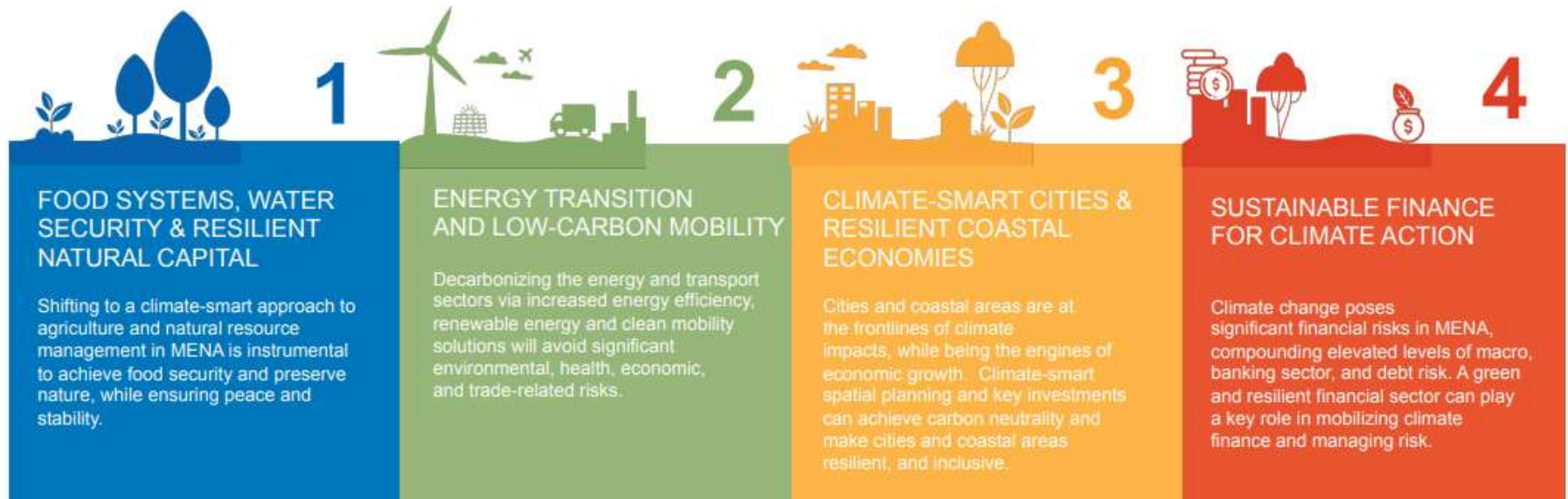


Operating desalination capacity by region, 2016-2025



This transformation requires adequate financing

The World Bank Climate Change Action Plan 2021-2025



CROSS-CUTTING CONSIDERATIONS

Whole of Government Approach, Social & Spatial Inclusion, Citizen Engagement, Just Transition, Fragility, Conflict & Violence, Private Sector Mobilization, Climate Data & Digital Innovation, Regional Integration

...through innovative tools for Climate Action...

Climate Co-Benefits

35% of total Bank Group financing over the next 5 years will go to support investments in adaptation and mitigation

Concessional Finance

Targets high-impact projects responding to globally significant development challenges from climate change mitigation and resilience to water sanitation

Green Loans

Green loans can help finance the transition to a low-carbon economy and is led by IFC / supporting private sector

Sustainable Development Bonds

support the financing of the WB projects in developing countries related to the SDG, ex. Botswana : \$145.5 million to Improve Water Availability in Drought Vulnerable Areas

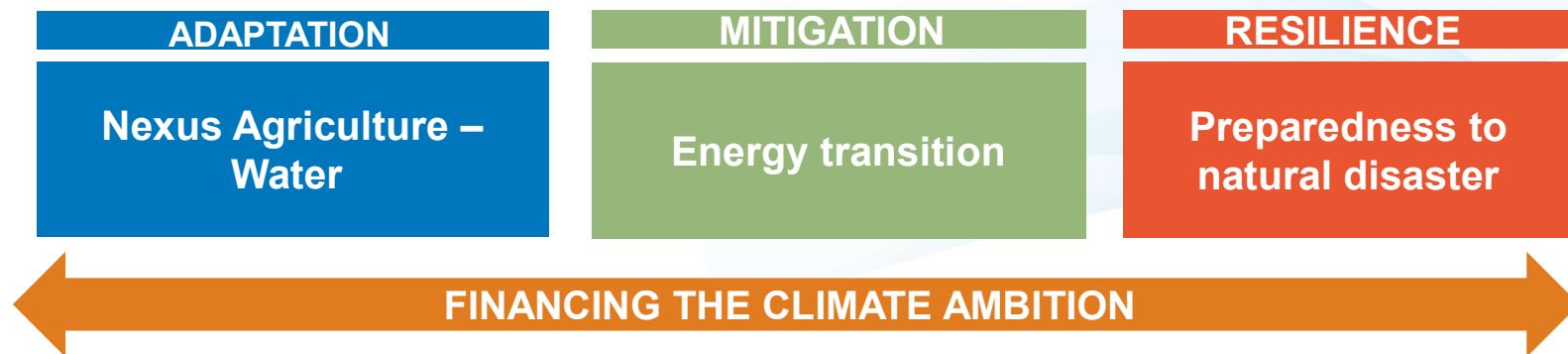
..and deep knowledge for comprehensive solutions

- **Advisory Services and Analytics** to support countries addressing water related issues and ensure a comprehensive design of the solution

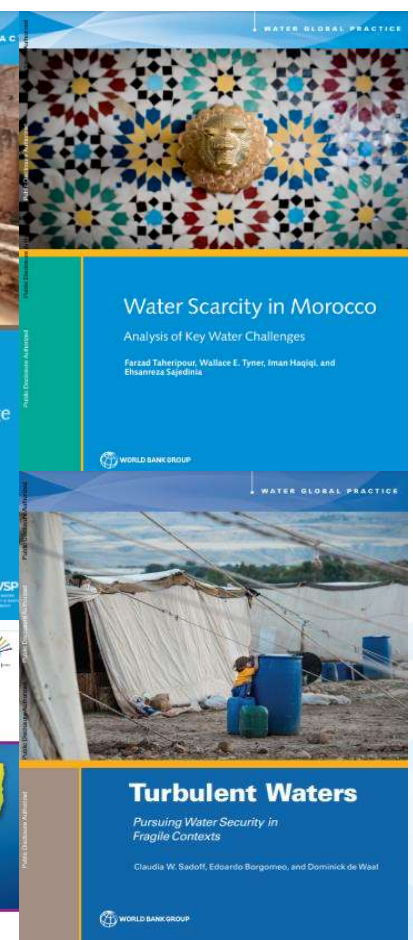
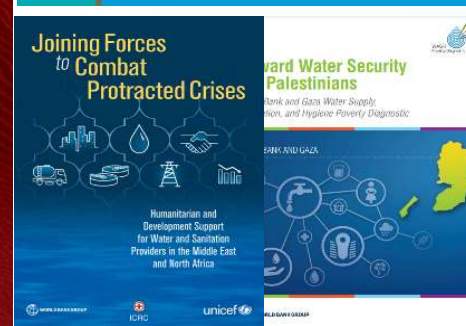
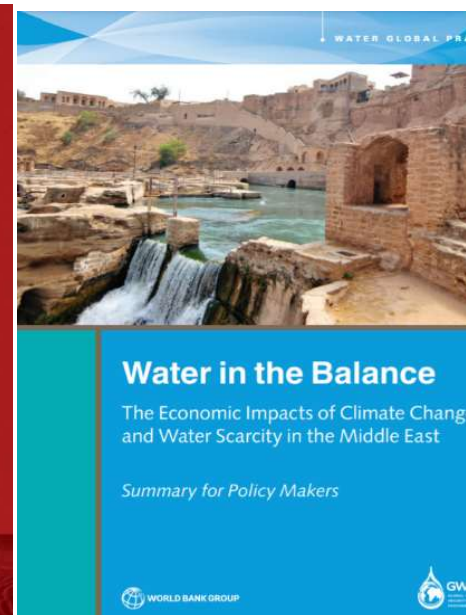
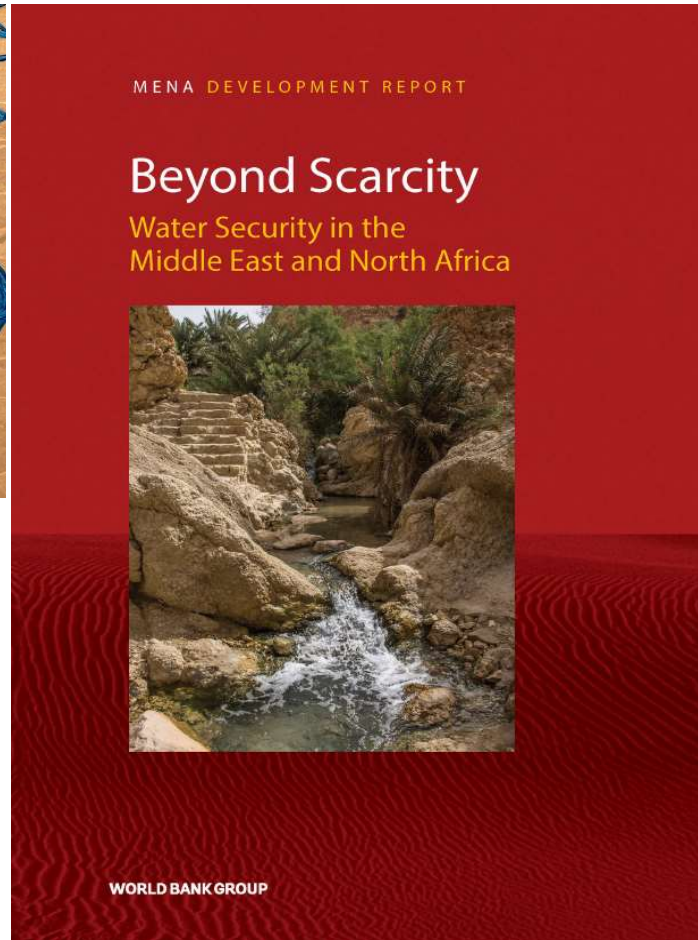
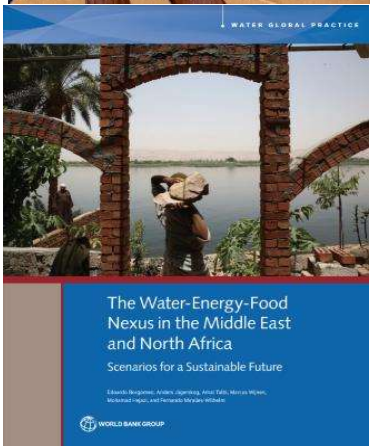
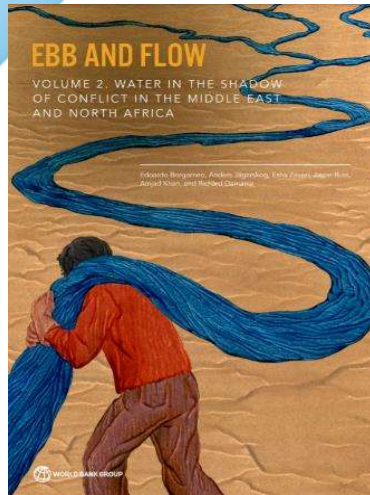
Ex. Country Climate and Development Report (2022) 20 countries among which Egypt, Jordan, Morocco

CCDRs will explore 3 broad policy spaces :

- Look at **sectoral and macroeconomic policies** and **investments**
- Examine potential **trade-offs between policies and investments needed** to achieve certain climate objectives
- explore **opportunities, reforms, and policy instruments** to leverage private sector resources and solutions



Ex. reports, best practices and guidelines to provide analysis on major issues : groundwater, water-energy nexus, financial and economic appraisal for desal, transboundary WRM...



Recommendations : What should we focus on ?

1. Strengthening water governance

- Strong institutions
- Fair intersectoral allocations
- Robust planning and data

2. Valuing water

- Improve water efficiency
- Improve economic and financial viability of the sector
- More space and incentives for private actors

Thank you!