



Regional Bureau
for Science in the
Arab States

United Nations
Educational, Scientific and
Cultural Organization

المكتب الإقليمي للعلوم
في الدول العربية

منظمة الأمم المتحدة
للتربية والعلم والثقافة

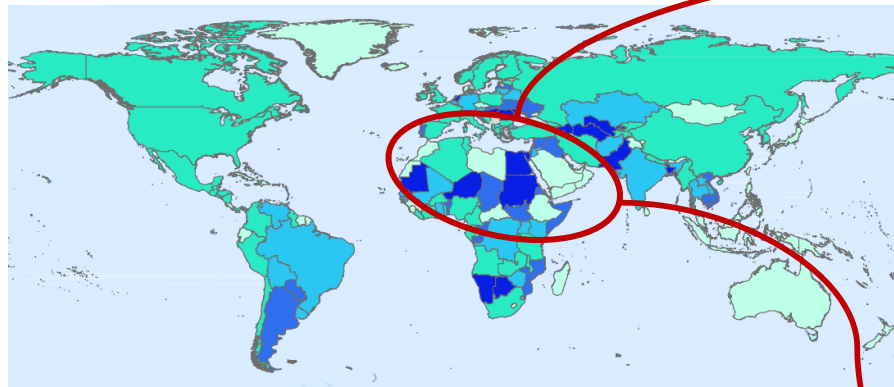
القاهرة-Cairo

Enhancing Cooperation o Shared Water Resources

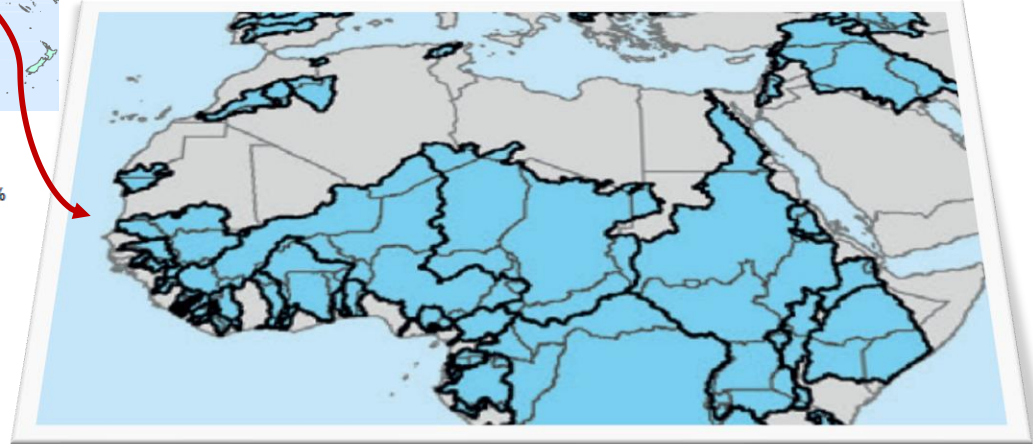
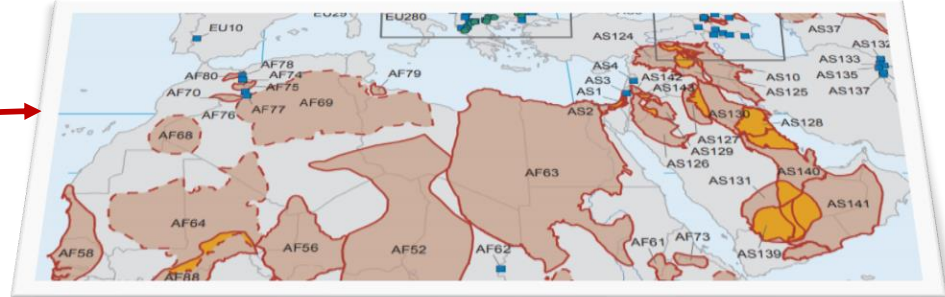
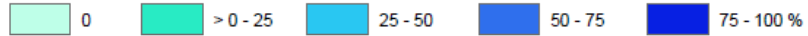
Bisher Imam

Regional Preparatory Meeting on Water Issues for the 2018 AFSF and HLPF
UN House, Beirut, Lebanon, 28-29 March, 2018

The Setting: High transboundary water dependency



Dependency ratio



The Tigris Euphrates River Basin: Are bilateral agreements enough

1946
Treaty of Friendship
Iraq/Turkey

- regulation of both Tigris and Euphrates
- Commitment to prior notification

1980
Protocol for Tech./Econ. Cooperation
Iraq/Turkey

establishment of joint technical committee on regional water issues

1987
Protocol on Economic Cooperation
Syria-Turkey

16 BCM (minimum) release from Turkey to Syria (500 cms) Euphrates only

2001
Joint Communique
Syria-Turkey

Turkey's GAP administration to conduct joint projects

2008
High-Level Strategic Cooperation Council

Cabinet level coordination/meetings including on shared water

2009
Protocol on Water
Iraq-Syria MoU

- Hydrologic data sharing
- Sharing expertise

1975
Shared watercourses
Iraq-Iran
Division of Tigris Tributaries

1983
Protocol for Tech./Econ. Cooperation
Tri-lateral
Syria signs on the protocol

1990
Water Sharing Agreement
Iraq-Syria
Flow at 42% 58% ratio

2002
Iraq-Syria Agreement
Establishment of pumping stations

2009
Syria-Turkey Strategic Cooperation Council Agreement
Water (inter-alia) is a focus for joint cooperation (water quality, pumping stations, joint dams, and joint policies)

Challenges

Significant differences in definitions and legal interpretations

Bilateral agreements exist, but no functional regional coordination mechanism

War worsened conditions

No regional science diplomacy initiative to date

“Water security refers to the availability of an acceptable quantity and quality of water for health, livelihoods, ecosystems and production, coupled with an acceptable level of water-related risks to people, environments and economies”

The Global Shared Vision: Sustainable Development



**8 Goals directly linked to water
SDG is also an agenda of science
SDG is an integrative agenda.**

**Target on IWRM
transboundary cooperation**

**Target on international
cooperation and capacity-
building support to
developing countries in
water**

Does the SD-Agenda affect our definitions of

1- Water Security

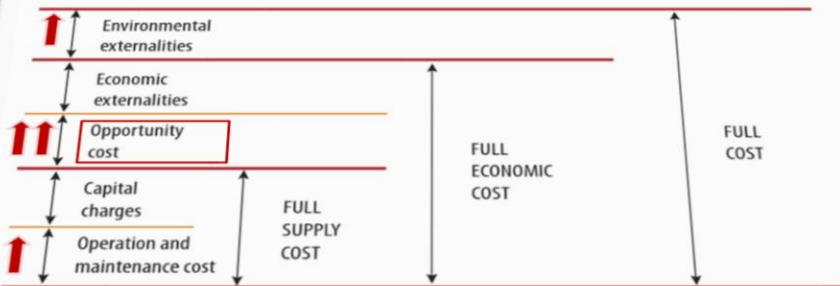
2- Water Rights @ states and individual levels

Water Rights, Legal Doctrines

Economic Valuation, Reasonable Use, Livelihood, Development and Equitable use

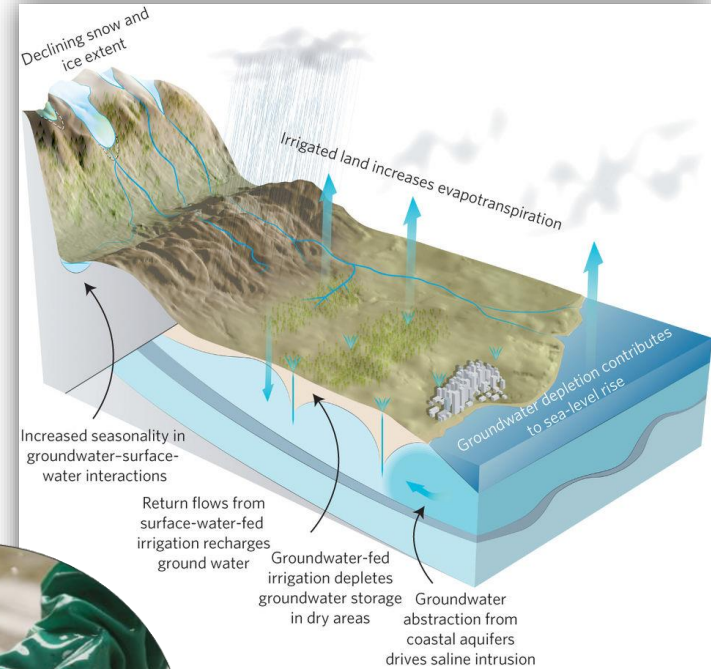
FIGURE 3.8

Components of the Full Cost of Water



Source: Agarwal et al. 2000.

Surface Water/Groundwater systems?



Allocations?

Disasters & Climate Change



Allocations
Water Quality?

Is Sustainable development achievable under existing legal arrangements/Institutions/doctrines

Instruments

Convention on the Law of the Non-Navigational Uses of International Watercourses

The Law on Transboundary Aquifers
GA/71st Session → Principles and guidance

International Treaties on Armed Conflicts

Multi-lateral agreements/protocols and frameworks, Joint Authorities

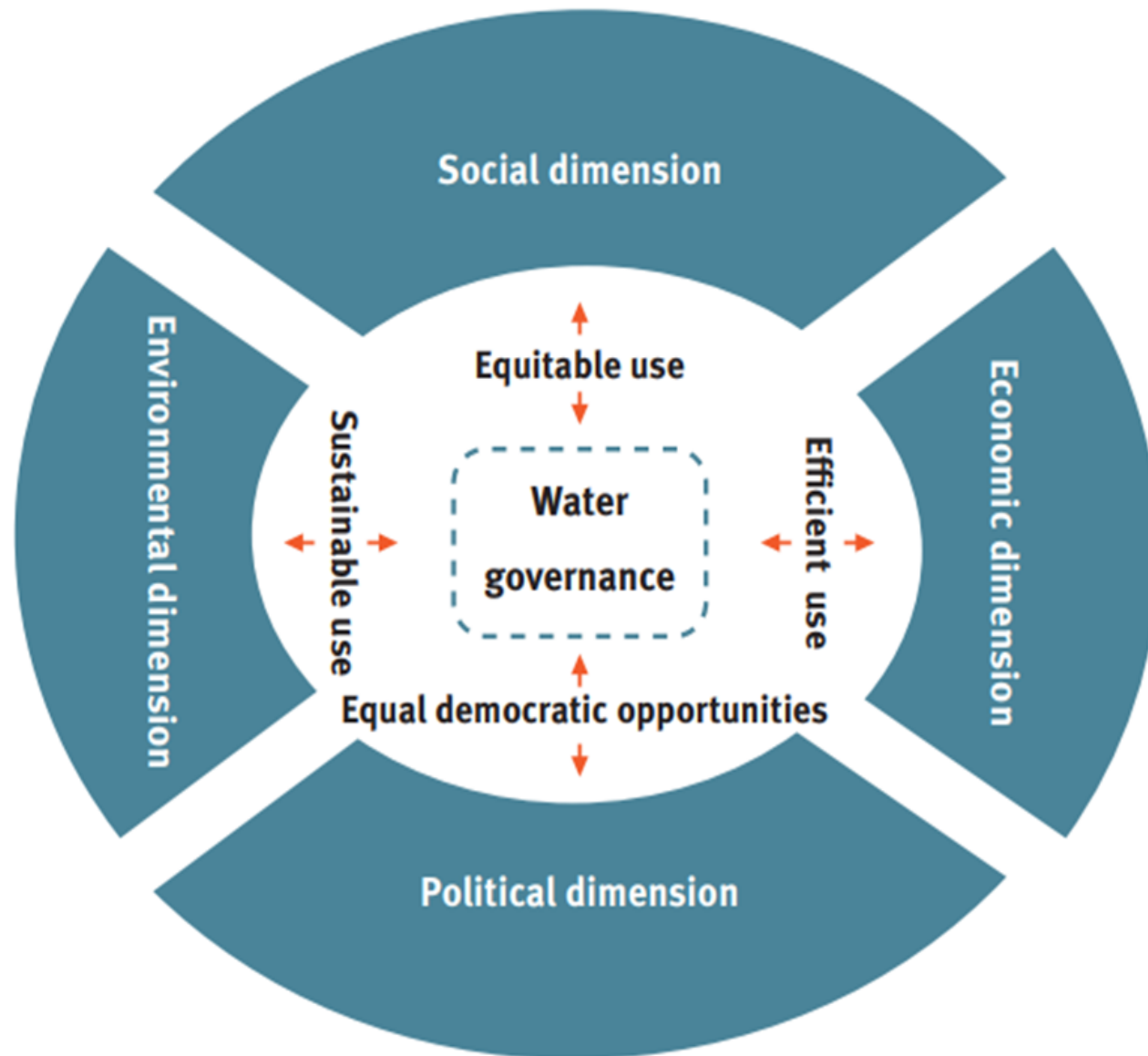
National Water Laws + Environmental laws and regulations

Paris Agreement, Sendai framework

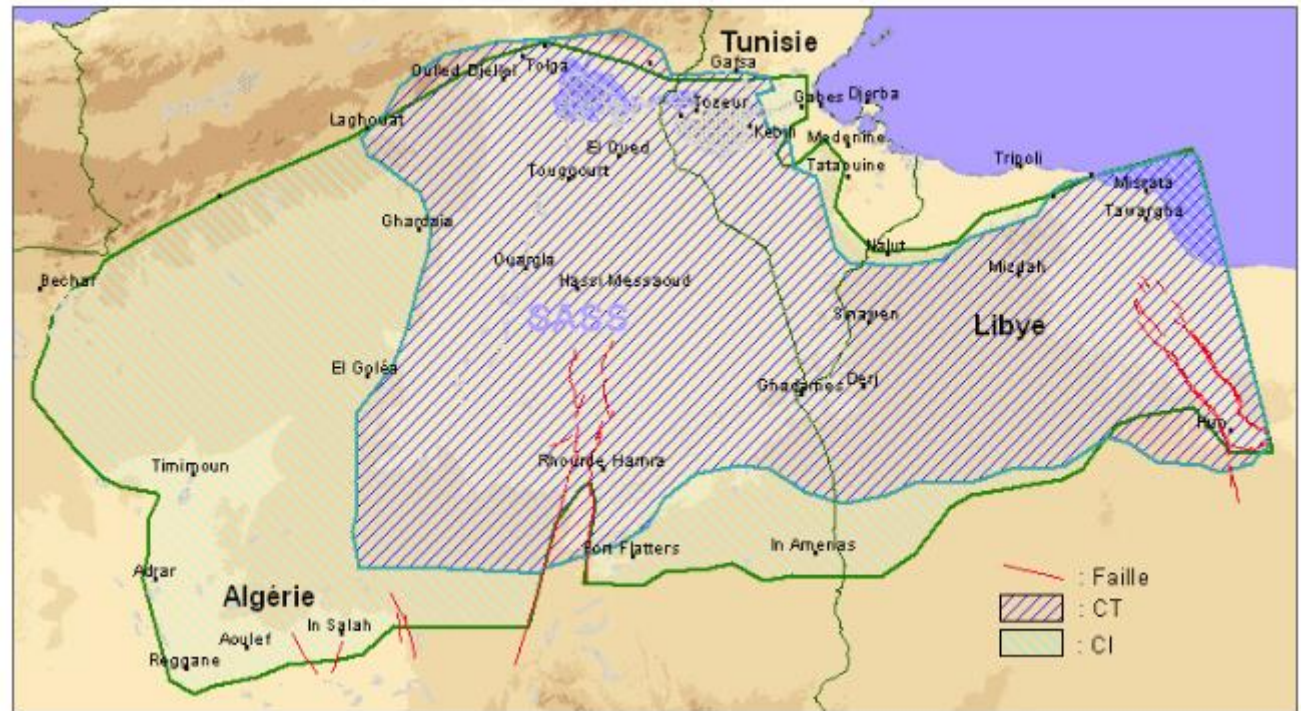
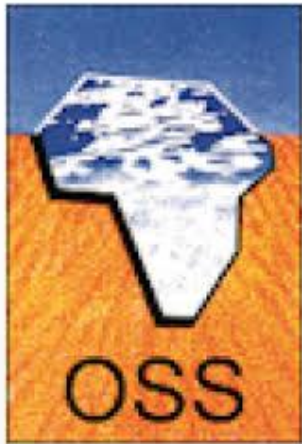
**Regional
Comprehensive
assessment**

**Regional cooperation framework on shared water resources
governance, with →**

Instruments



The Northwestern Sahara Aquifer Project (GEF): Social Dimension



Phase 1: (1999–2002)
Knowledge improvement;

Phase 2: (2003–2007)
Consultation mechanism

Phase 3: (2009–2014)
Strategy for a sustainable
management-Focus on
challenges facing users

Means of Implementation: The Northwestern Sahara Aquifer Project (GEF)

Significant Accomplishments

- Better understanding of the aquifer
- Socio-economic issues addressed
- Joint science (models, data)-- Exchange
- Relevant sectors and stakeholders engaged

Significant Challenges

- Over-exploitation continues with major environmental threats:
- Long-term shared vision is yet to be developed
- Pilot study scaling up requires more political commitment



Actionable science supports dynamic evolution of science diplomacy initiatives

Consideration of socio-economic issues promotes better stakeholder engagement

Means of Implementation: regional SDG anchored initiatives

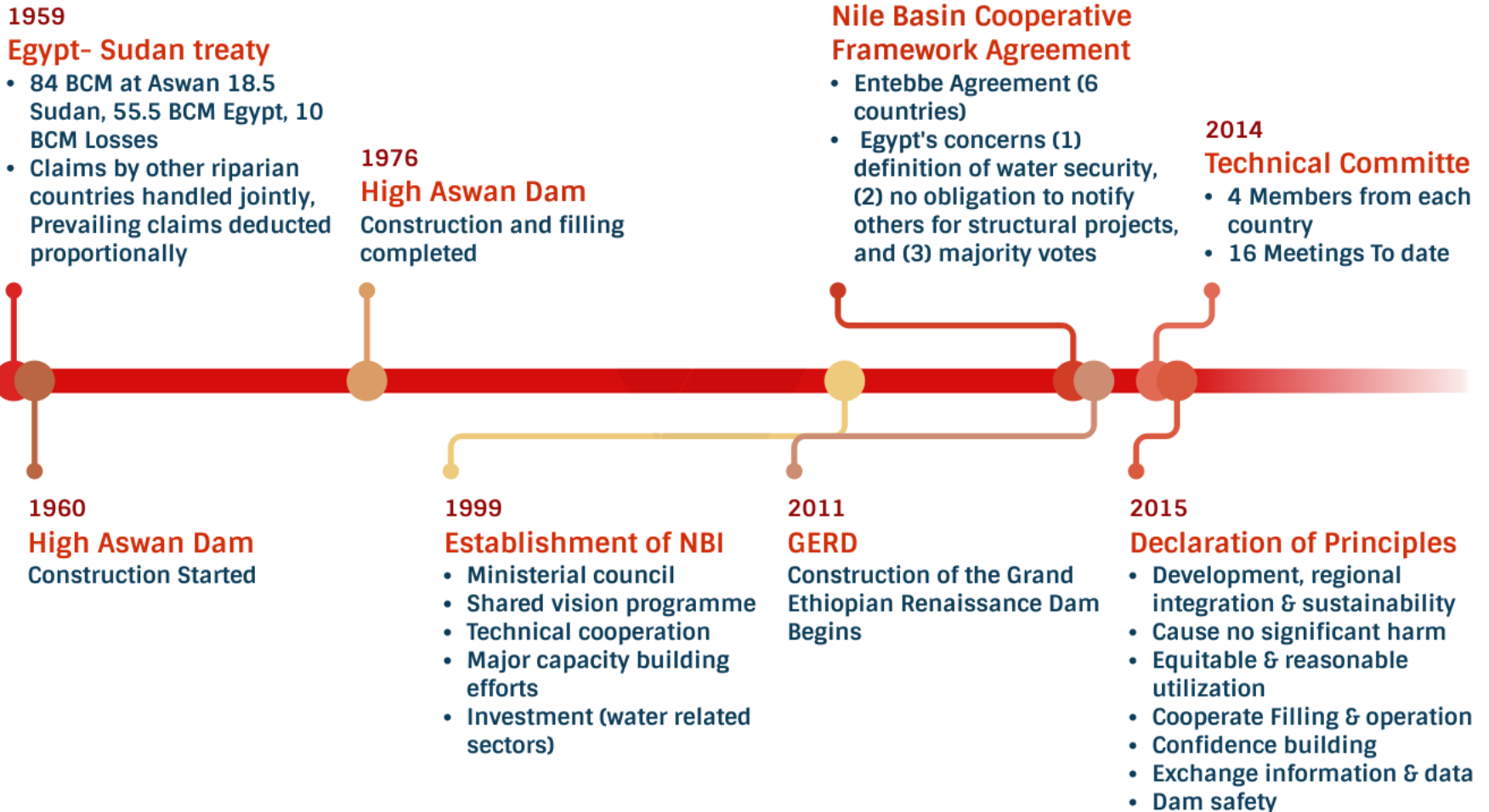
With achievement of the globally endorsed SDGs providing the overall umbrella, a regional cooperation initiative approach is anchored to the major pillars of:

- using the development/joint mutual-benefit investment agenda as the entry point and objective of all science/water diplomacy initiatives
- deployment of science and technology to address the pressing science/water challenges;
- promotion of effective water governance to guide and control suggested interventions; and
- trust building as an unavoidable prerequisite for any science/water diplomacy initiative.

UNESCO Water Security for All Regional Initiative



Nile Basin: Cooperative Milestones



The Jordan River Basin

