EXPLORING THE OPTIONS FOR SUSTAINABLE USE OF THE NILE WATERS

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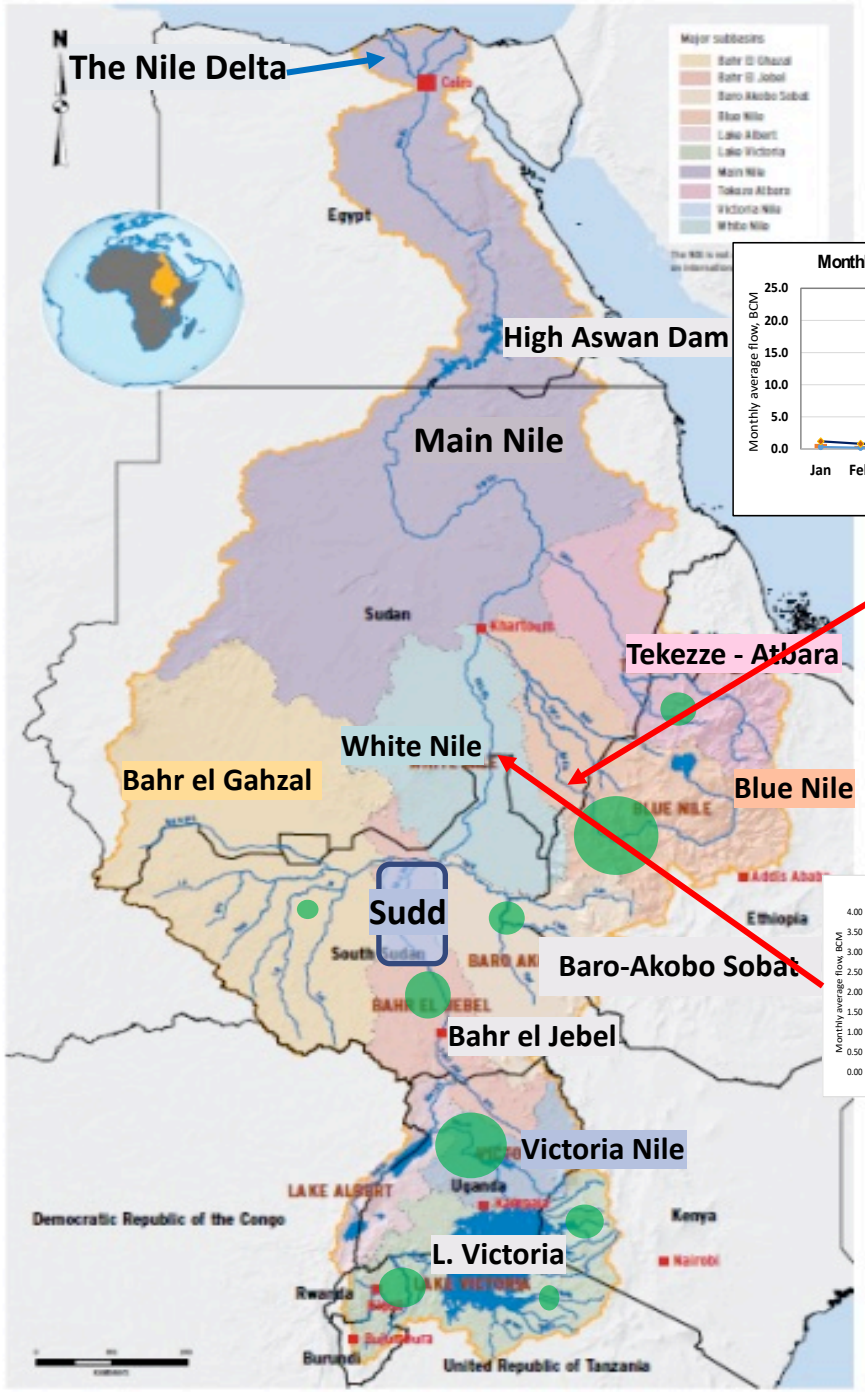
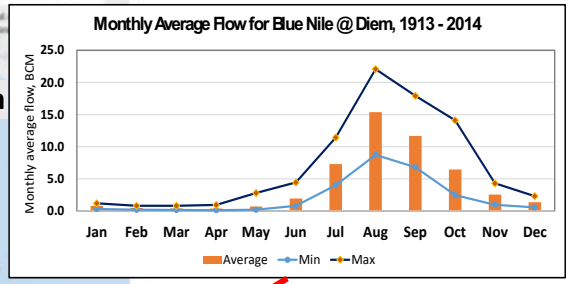
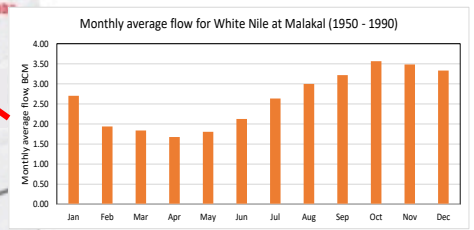
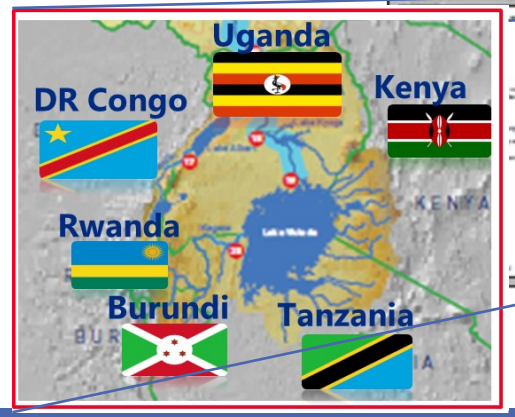
The Nile Basin

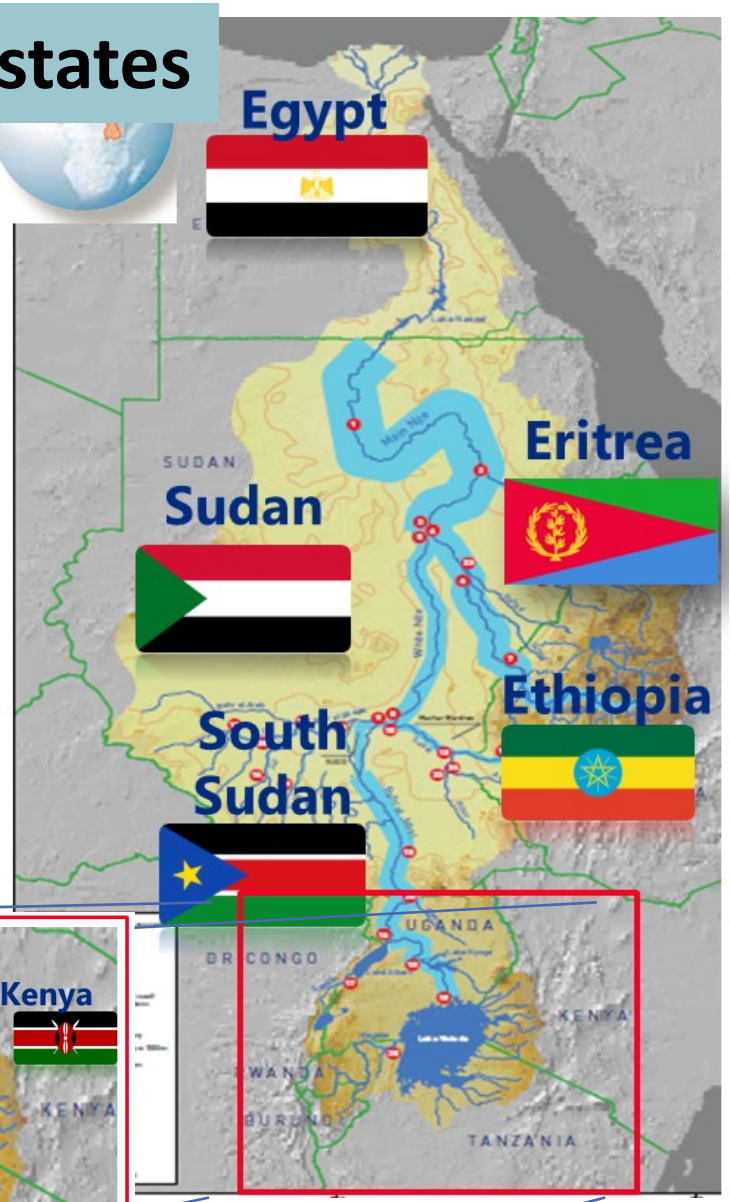






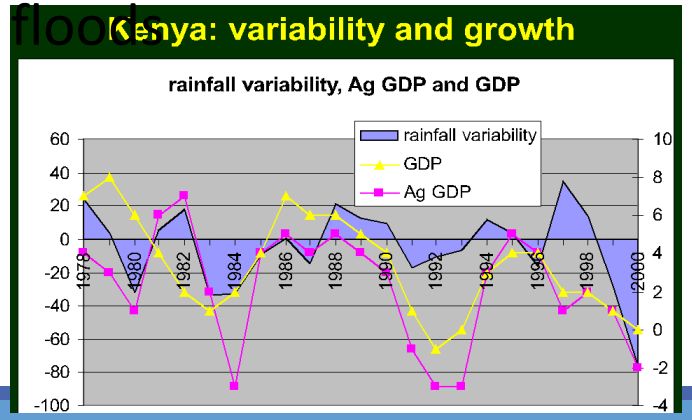
The riparian states

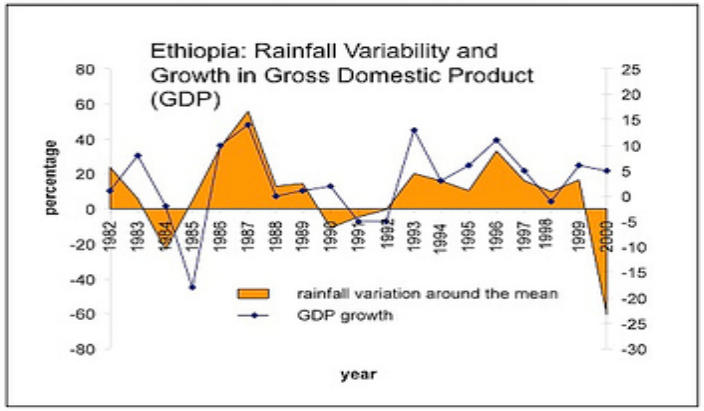




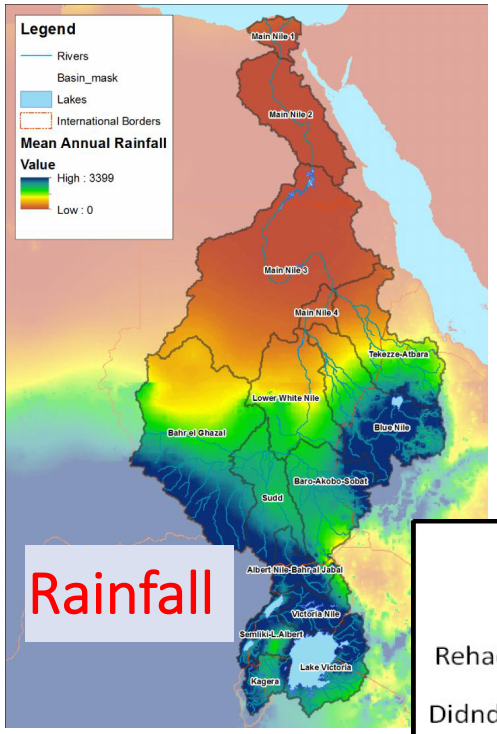
Rainfall distribution

- There is substantial variation in rainfall distribution in the basin
- Upstream parts of the basin receive annual average rainfall that ranges from 1500 – 2000 mm; in some locations > 2000 mm
- Downstream parts of the basin have very little rainfall → negligible internally generated river flow → nearly totally dependent on Nile waters (*irrigated agriculture is a must*).
- Economies of most upstream countries are highly dependent on rainfall (rain-fed agriculture) → frequently exposed to drought and floods

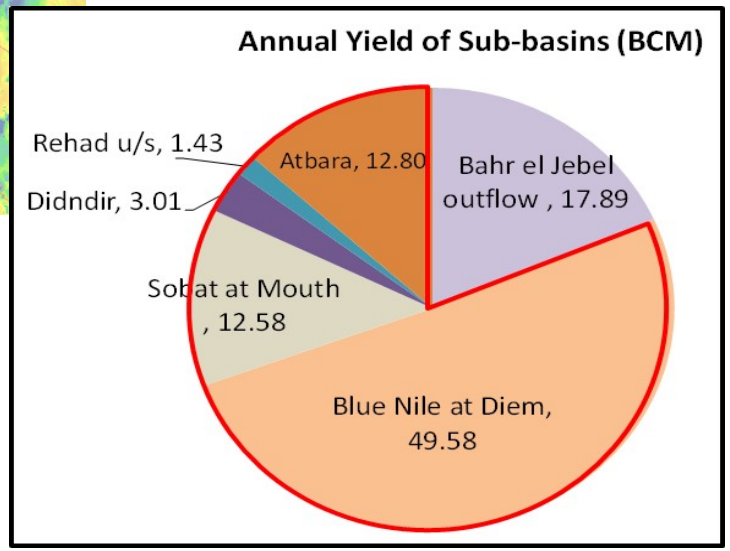




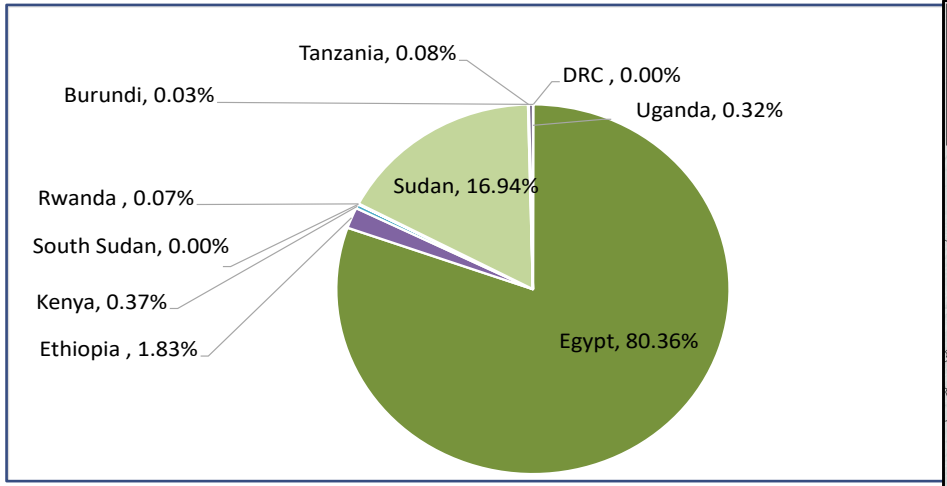
Where the river flow is generated

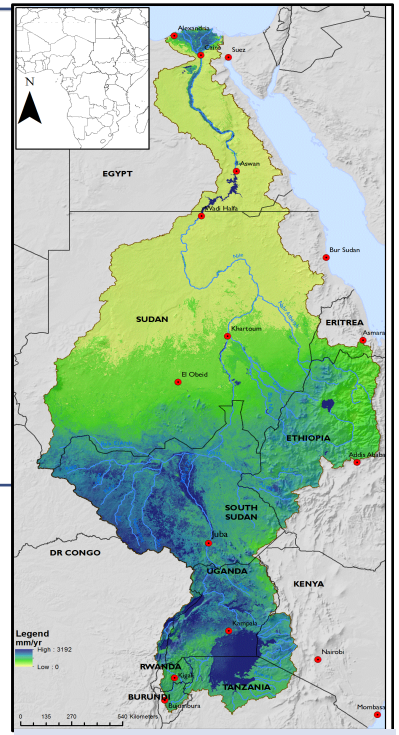


Rainfall

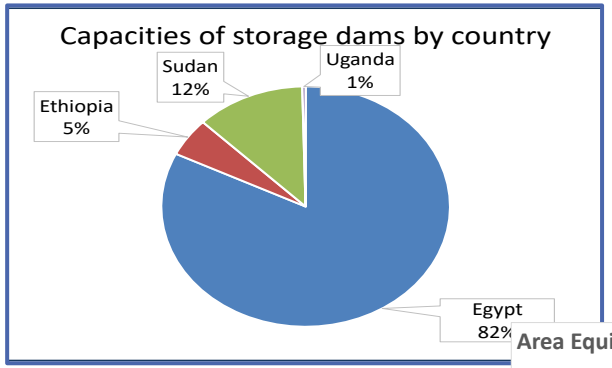


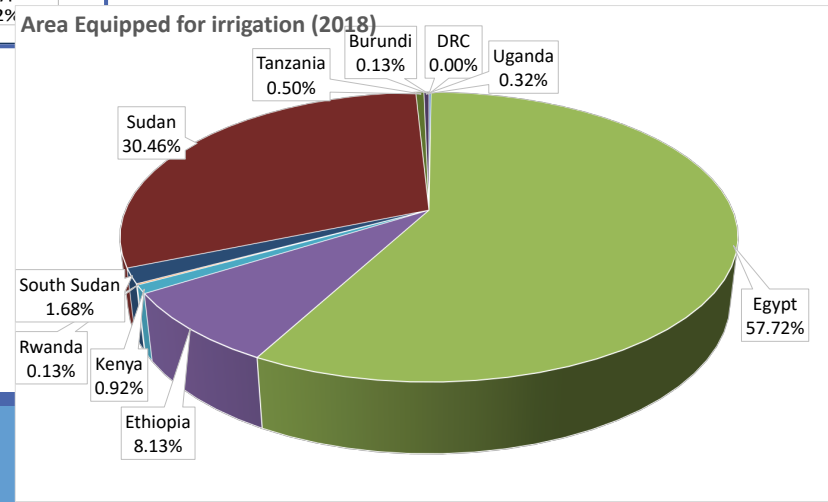
Where the river flow is used…



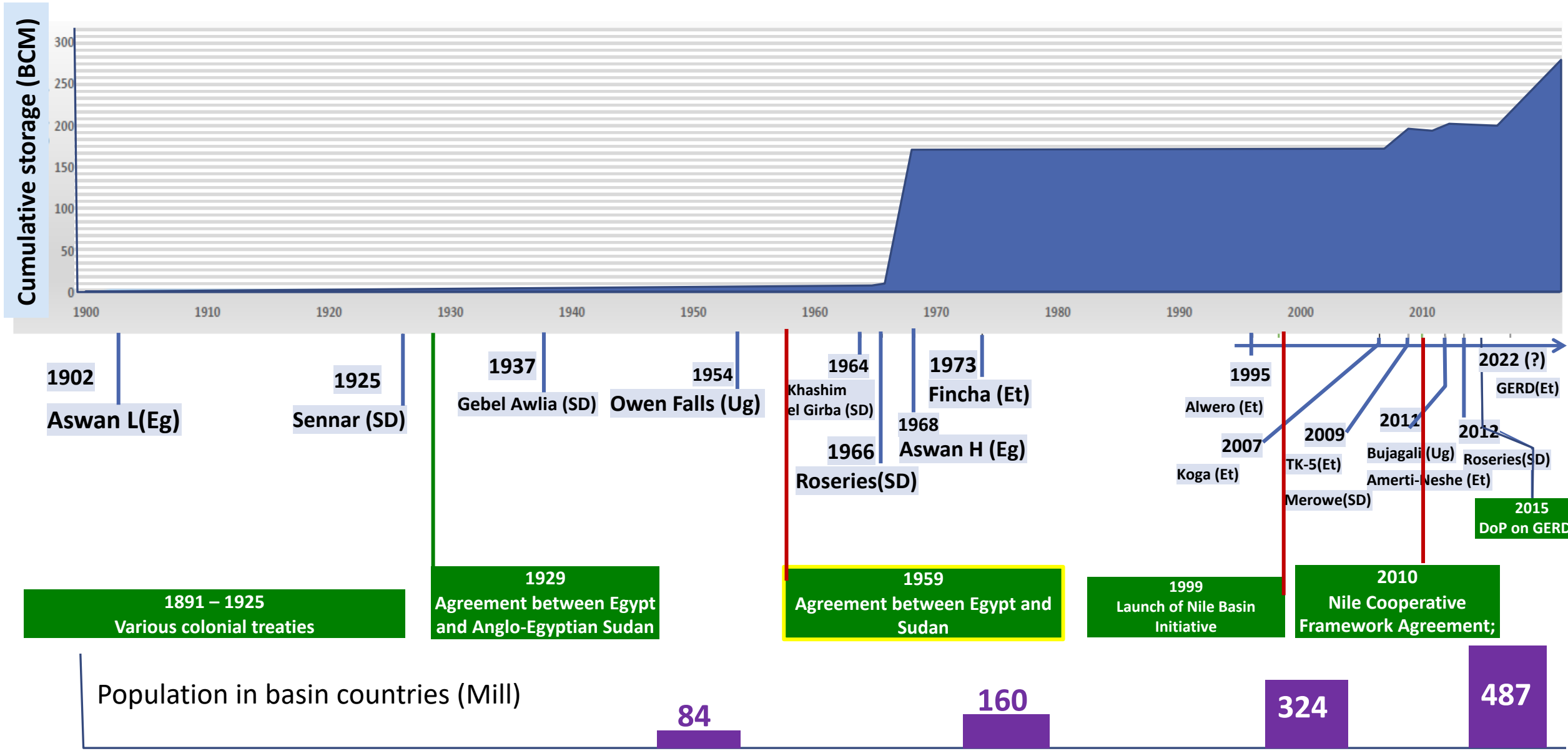


EvapoTranspiration

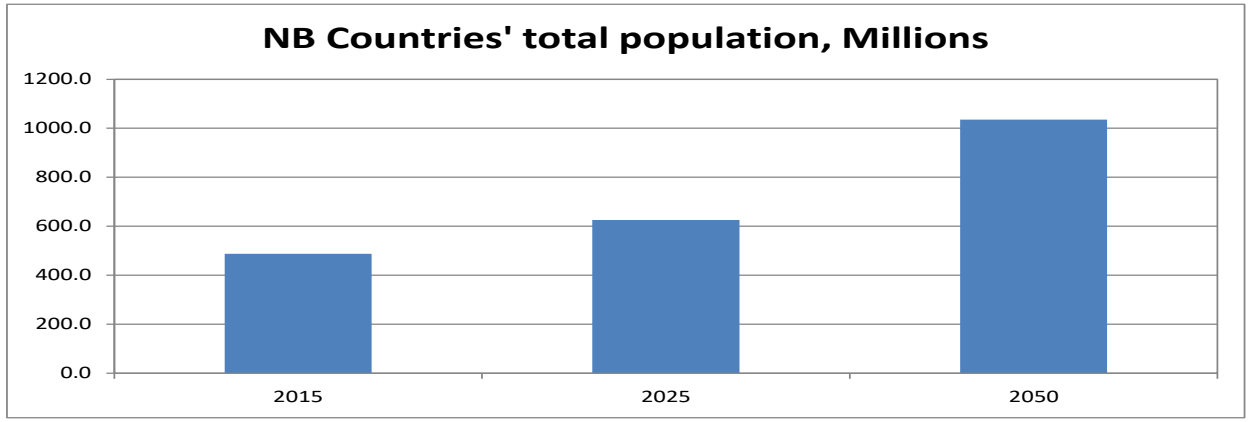


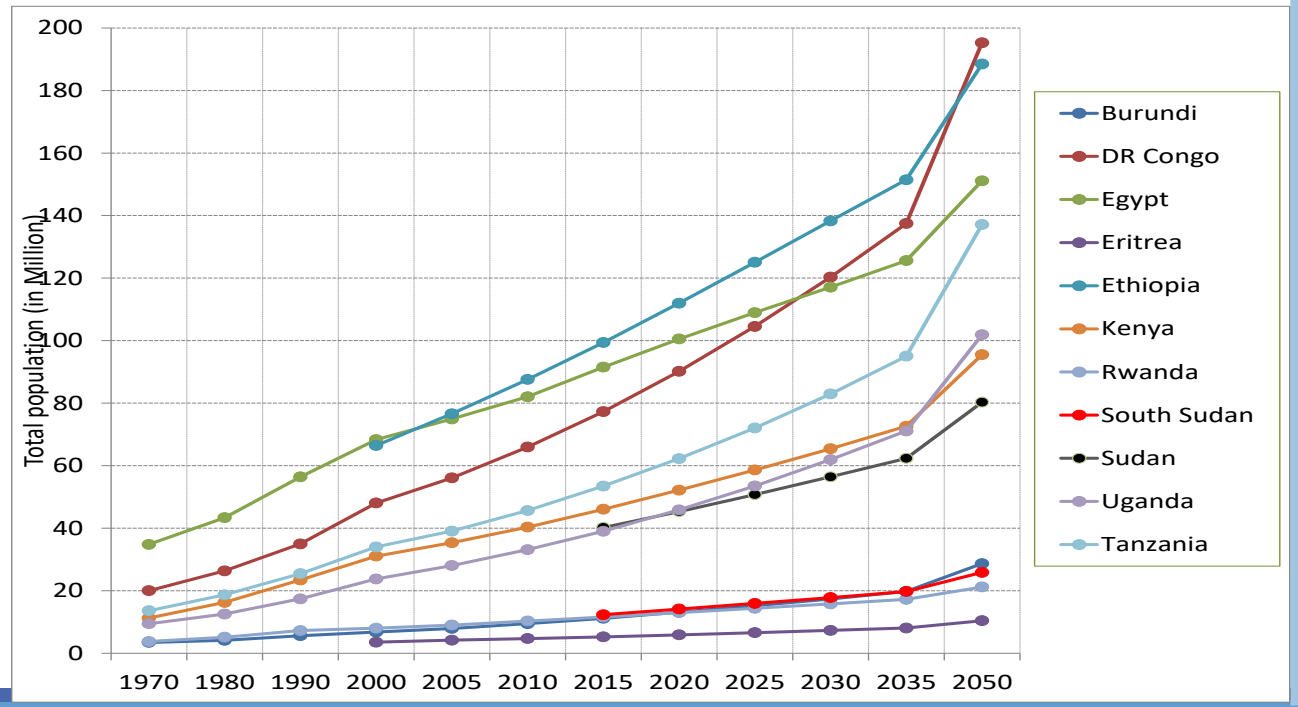


How the Nile Basin evolved: timeline of key water development projects and agreements



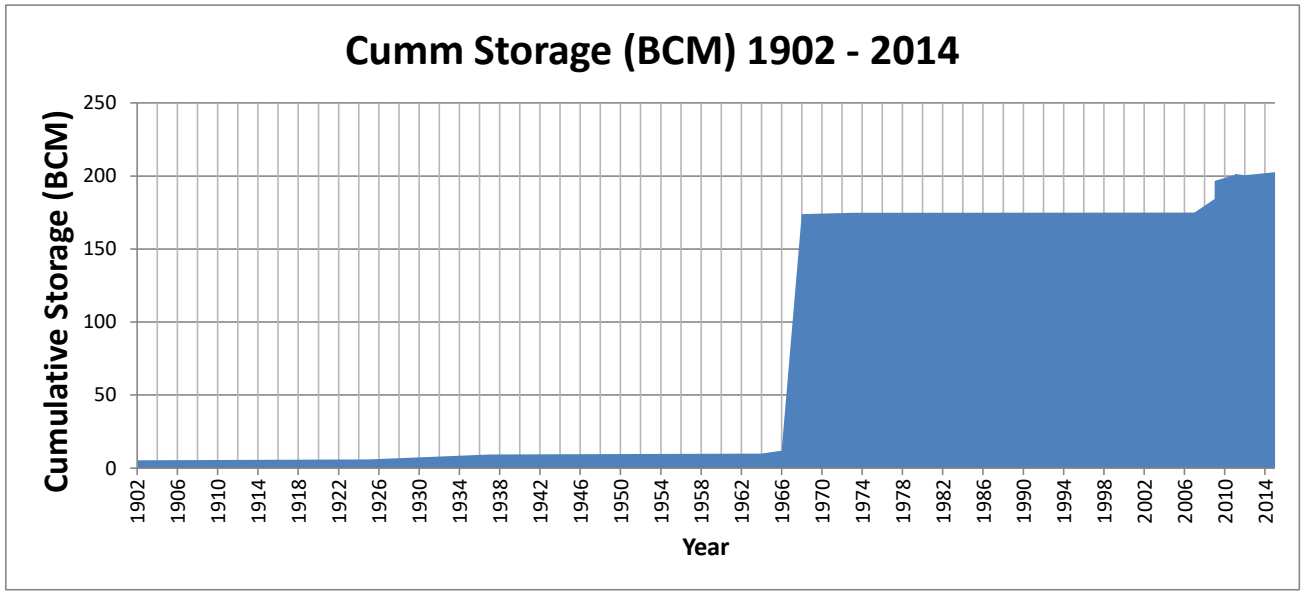
Future outlook: Water demand in the Nile Basin is rising rapidly

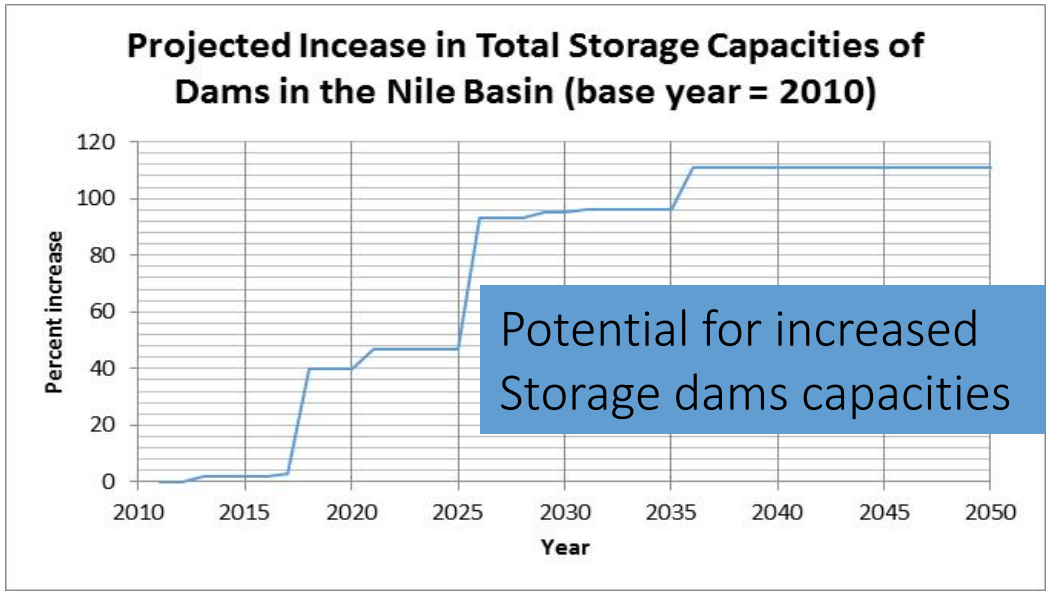


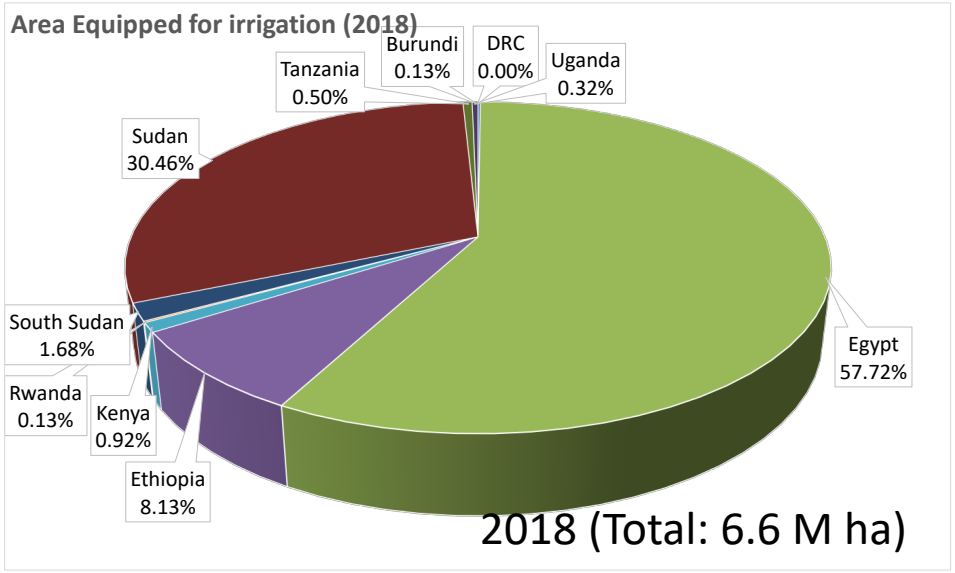


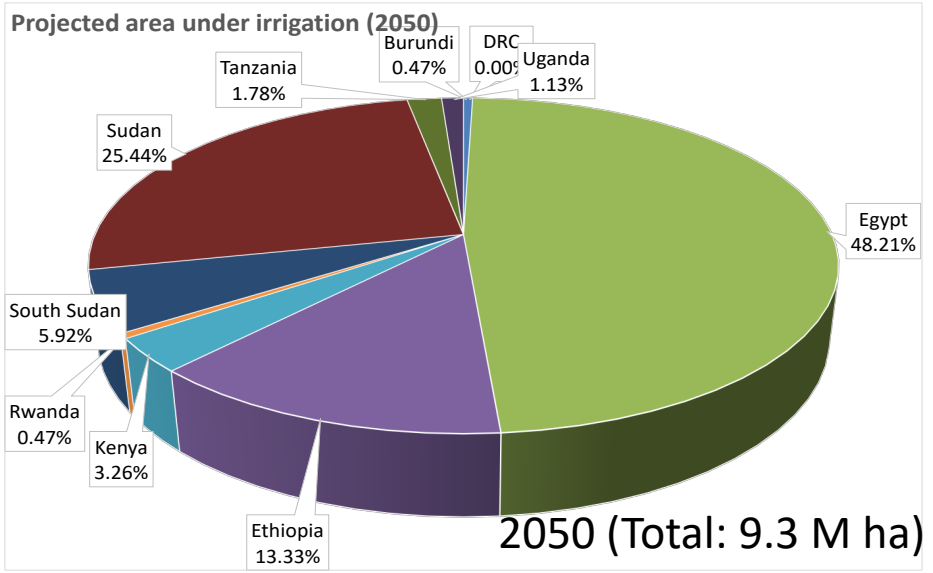
- *Rapidly increasing water demand for consumption, food and energy production*
- *Decreasing per capita water availability*

What has the future in store: country plans



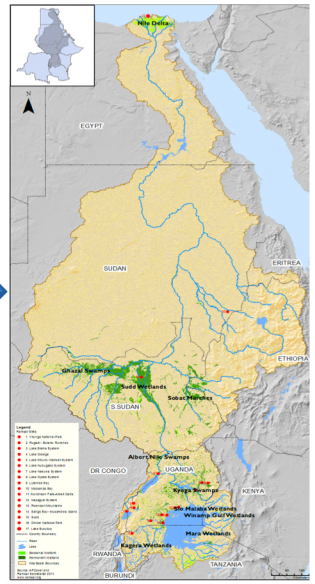






Facing the challenges ….

Rapid population increase
Rapid economic growth
Uncertain climate
Increased water demand
Expanding water infrastructure and (consumptive) water uses



A basin at risk!

Rapid population increase
Rapid economic growth
Uncertain climate
Increasing water demand
Nearly totally Nile dependent economy
Favorable colonial and post-colonial treaties

Lack of basin-wide legal regime

The Search for Common Ground : Reconciling Water Allocation and Sustainability Imperatives : *what do we learn from the CFA and GERD process?*

CFA process

Agreed core principles

Equitable and Reasonable Utilization
Obligation not to cause significant harm
Duty to cooperate

Key differences

Current uses and rights
vs
Water security of riparian states

GERD process

Agreed core principles

Equitable and Reasonable Utilization
Obligation not to cause significant harm
Duty to cooperate

Sticking points

Guaranteeing minimum flow/natural flow release;
future upstream water resources development

Unresolved Water Allocation vs. Regionally optimized cooperative WR investment: Lessons from [the unrealized] flagship program, the EN Joint Multipurpose Program

- **EN JMP** was an ambitious cooperative WR investment program of Egypt, Ethiopia and Sudan launched in 2006.
- **S**coping study concluded that the 3 countries could embark on joint multipurpose WR infrastructure development in the Blue Nile/Abbay in Ethiopia and that JMP will confer win-win outcomes to all 3 countries, paving the way for future ….more regionally optimized investments
- The JMP was caught up in the disputes over the then parallel CFA Negotiations among 9 MS to establish a new Nile Treaty …. which ended in Sudan and Egypt freezing participation in both NBI … and the JMP

➔ *This challenge seems to acquire a recurring nature going forward . . In the search for common ground*

The search for common ground : Plausible options scenarios (?)

Scenario 1: DO NOTHING

- *The current status continues → no effective measures taken to narrow the differences.*

→ Status quo = unilateral development = [from a basin-wide perspective] suboptimal development and utilization of the scarce Nile water resources

Scenario 2: NO NILE BASIN WIDE AGREEMENT

- Upstream water source countries ratify the CFA and form the Nile River Basin Commission without Egypt and Sudan.
- The Basin will be governed by two TB legal regimes concurrently: – the CFA for all (or most) upstream countries and pre-existing (1959) Agreements for Egypt and Sudan.

→ *the core issue of water allocation between the riparian countries will not be resolved. In a way, the impasse will continue.*

Scenario 3: PROJECT-by-PROJECT APPROACH

- *Failing to have a basin-wide legal regime, countries, attempt to secure sub-basin or project-based agreements;*
- *Possibly less complicated but without addressing the issue of water allocation, the piecemeal will not address the core issues*

→ *More tension, more conflict, impasse will continue*

Scenario 4: ALL ON-BOARD: incremental adjustment

All riparians adopt a commonly agreed upon approach to address the water security concerns of all riparians,

- Incremental adjustment the water resources system in downstream countries to reduce vulnerability due to u/s water abstractions
  - Incremental development upstream → paced development to make increasing reductions in river less 'painful' downstream;

→ Core issues unresolved, but space created for more amicable and trust based lasting solutions

A possible way forward (Scenario 4): **Bringing all riparians on board**

While studies by NBI show promising technical solutions that can be further studied in detail and implemented to address the core problem of ensuring water security of all countries, they need adjustments from both upstream and downstream sides. The proposed solution has three pillars as described below:

Pillar 1: **Incremental Downstream Adjustments** ➔ to gradually fine-tune downstream utilization to accommodate upstream (consumptive) water uses and to inclusion of additional water sources

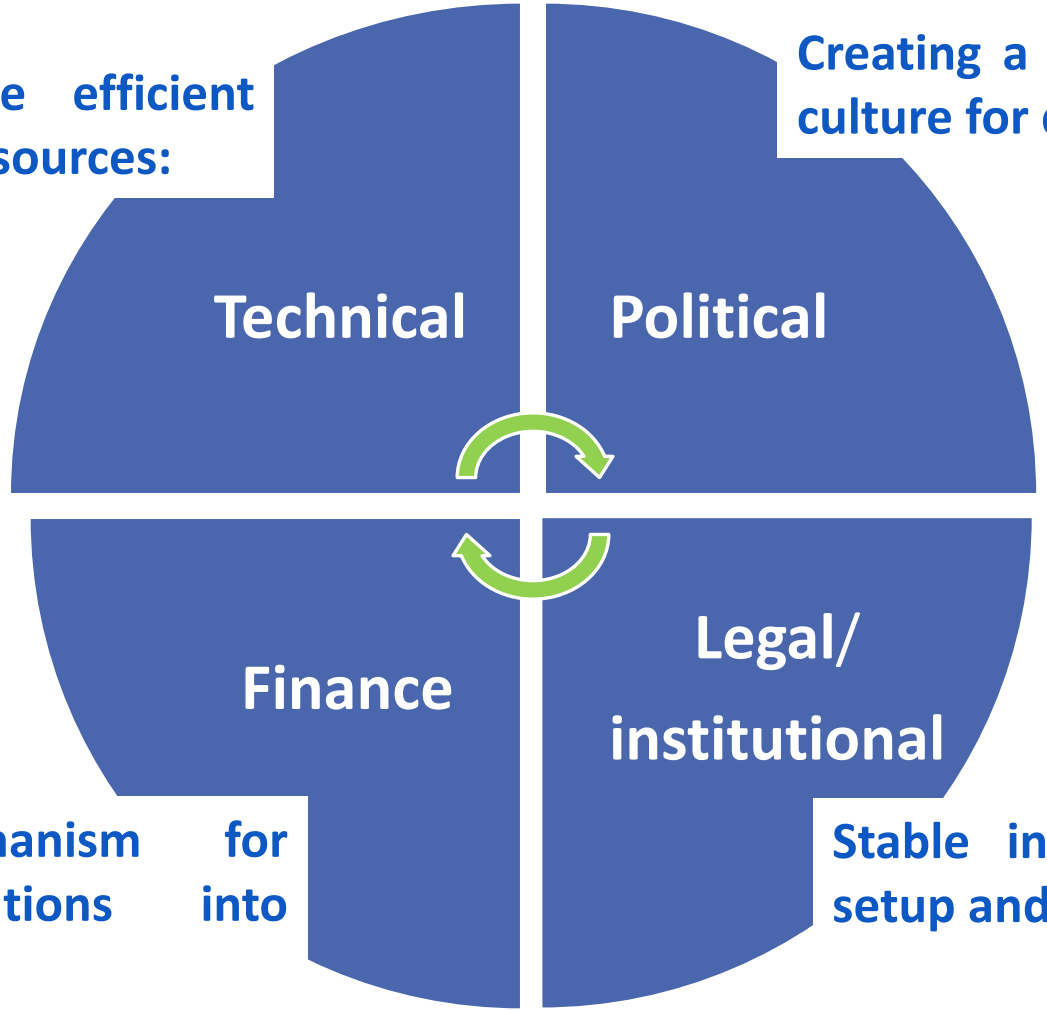
Pillar 2: **Incremental Upstream (source countries) Adjustments** ➔ to gradually make water resources development adaptive to and in sync with downstream adjustment measures.

Pillar 3: Institutional and financial mechanism to support pillars 1 and 2.

What is needed to make this work

Technical solutions for more efficient utilization of available water resources:

: *Increasing water use efficiency and productivity in agriculture; Enhance effective use of rainfall in rain-fed agriculture; bringing more water into the system (desalination, water re-sue)*



Creating a more conducive political culture for dialogue

Adequate financing mechanism for converting technical solutions into investments on the ground.

Stable institutional and legal setup and mechanism

Conclusion (take away messages)

1. The Nile Basin is bearing immense pressure
2. The basin countries have been striving to find a solution that works for all but the attempts haven’t borne fruits
3. The search for common ground is more pressing today than ever before
4. Four plausible options/scenarios presented; each having its limitations
5. As an interim option, Scenario 4 focusing on incremental adjustment is proposed;
6. Four prerequisites (technical, financial, political, legal/institutional) for scenario 4 to work

Thank you