

IWRA World Water Day Webinar

Reshaping the Nile: Opportunities and implications of the GERD for Water Security and Peace

21 March 2024

Yasir Mohamed

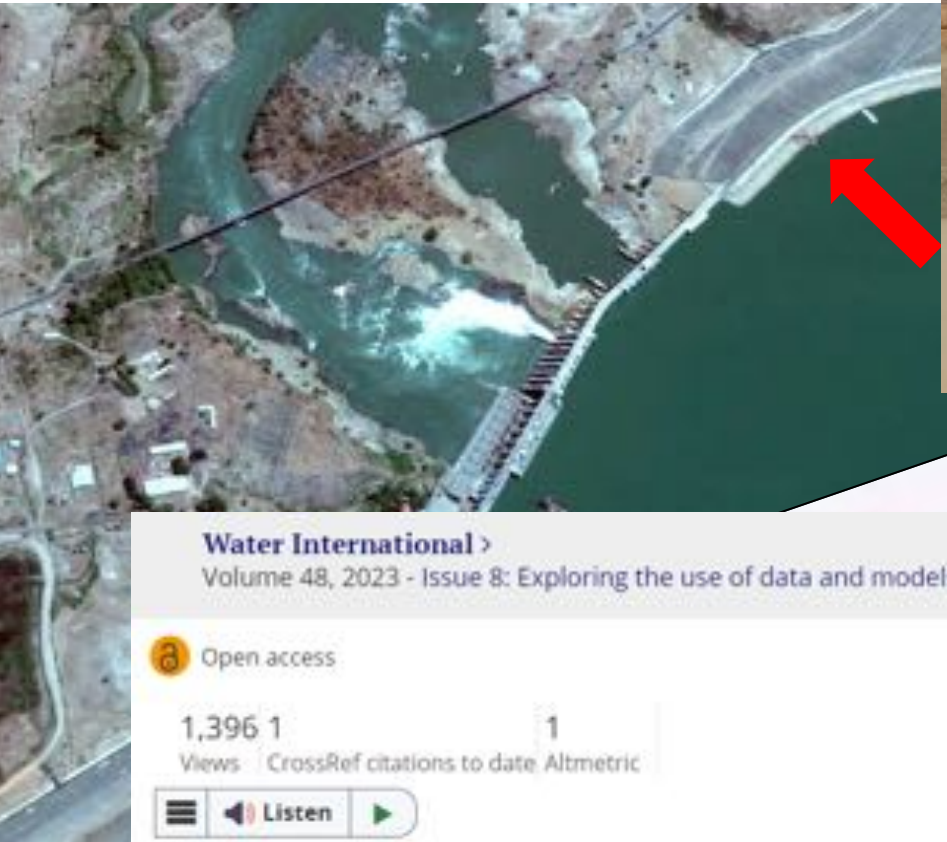
IHE Delft



GERD: from a potential threat to a potential opportunity

- **Inclusive (basin perspective)**
- **Prolonged drought is a rare event**
- **Thanks to the two mega dams**
- **Future: Enlarging the cake**

Questions ?



Dam safety & Data exchange



Water International >
Volume 48, 2023 - Issue 8: Exploring the use of data and models in transboundary water governance

Open access

1,396 Views 1 CrossRef citations to date Altmetric

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Research Article

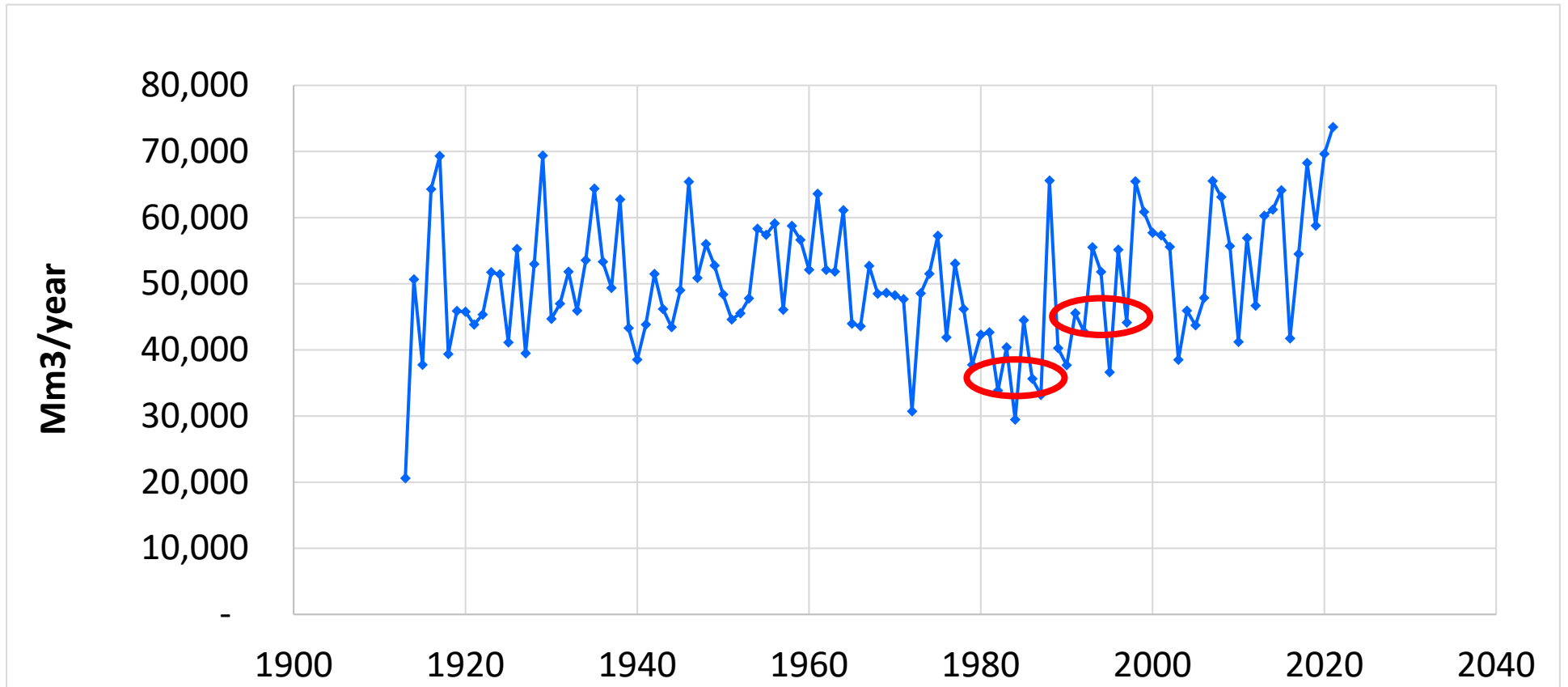
Dam operation using satellite data and hydrological models: the case of Roseires dam and Grand Ethiopian Renaissance Dam in the Blue Nile River

Mohamed A. Hassan, Mahmoud F. Hassan, Yasir A. Mohamed & Wail A. Awad

Pages 975-999 | Received 28 May 2023, Accepted 06 Nov 2023, Published online: 04 Jan 2024

Cite this article <https://doi.org/10.1080/02508060.2023.2286412> Check for updates

Blue Nile flow 1913-2000

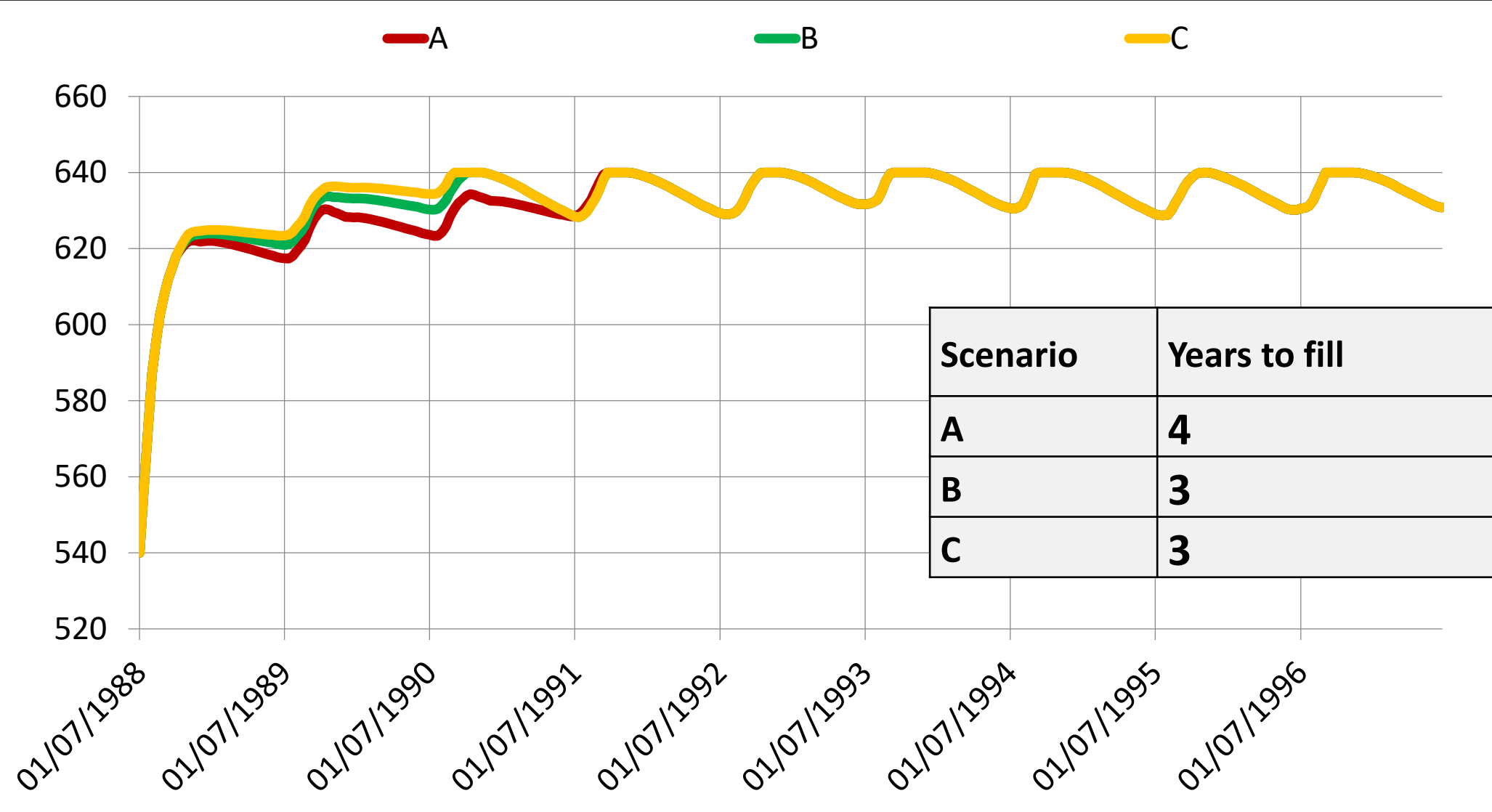


Filling patterns

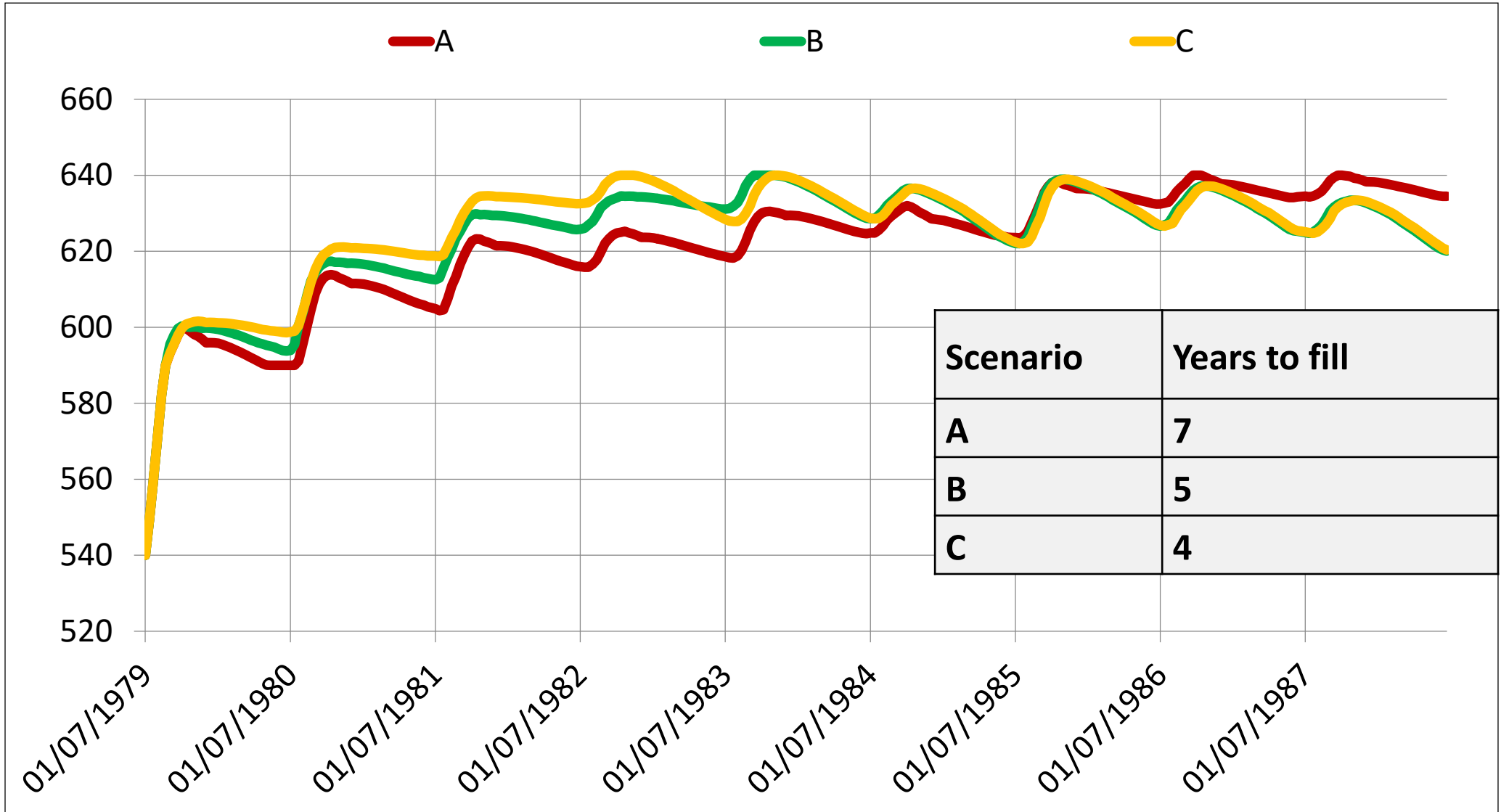
- Average years = 48.2 Bm³/yr (1988-1997)
- Dry years = 37.7 Bm³/yr (1979-1987)

Release pattern	A	B	C
Release (Bm³/yr)	29.7	24.4	20.8
Release (%)	60%	50%	40%

GERD - Average

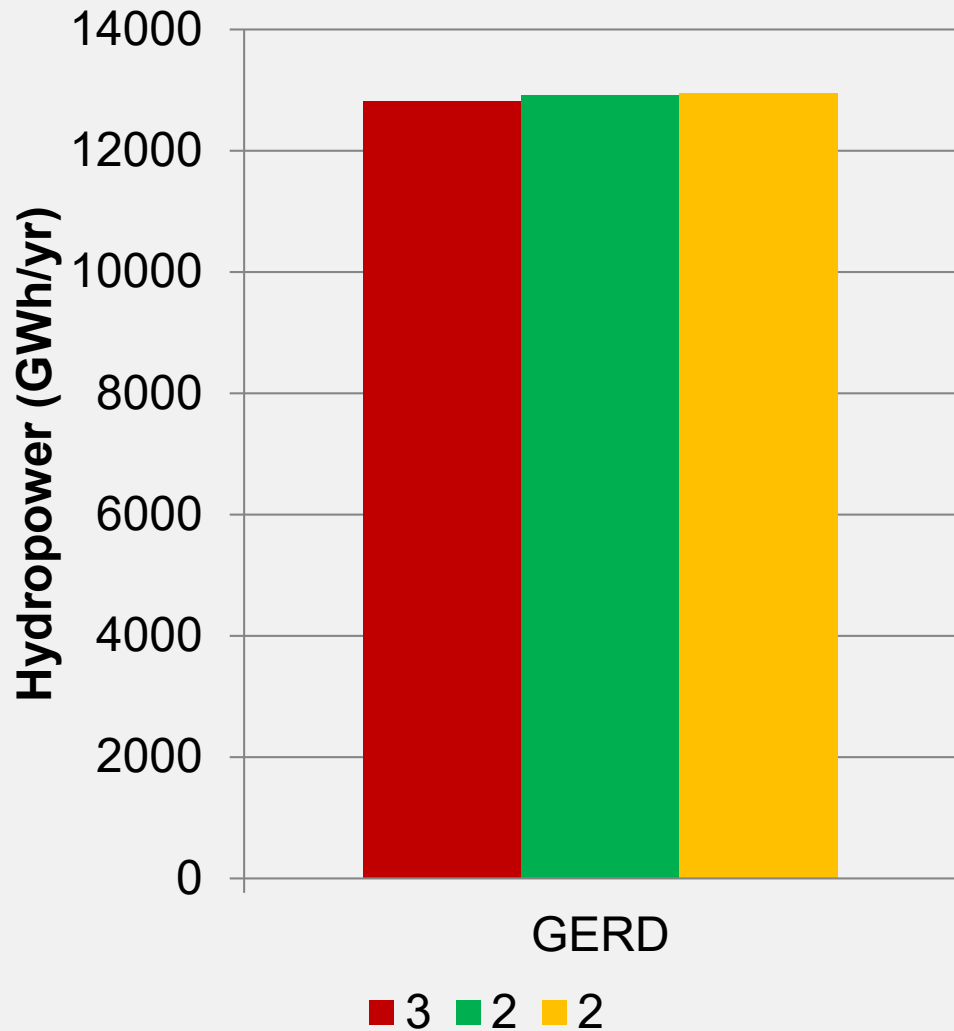


GERD - Dry

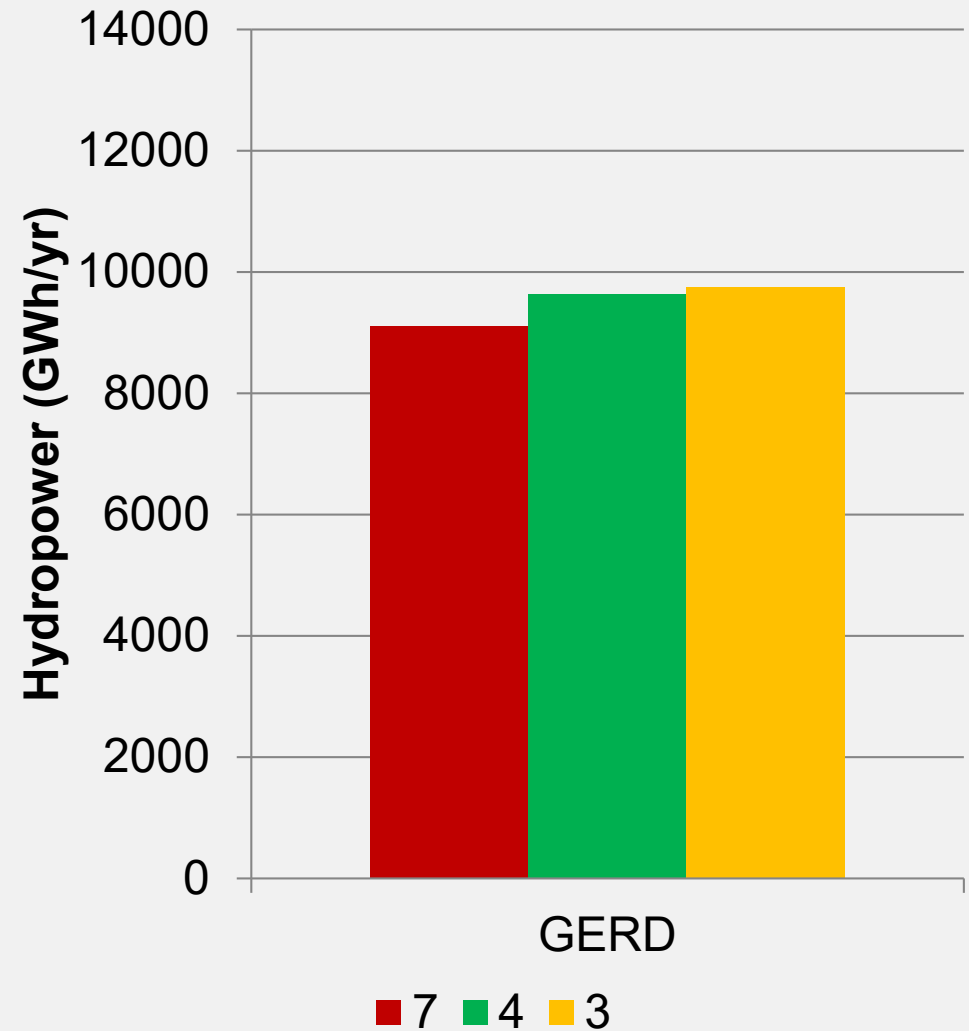


GERD's HP Results

AVERAGE

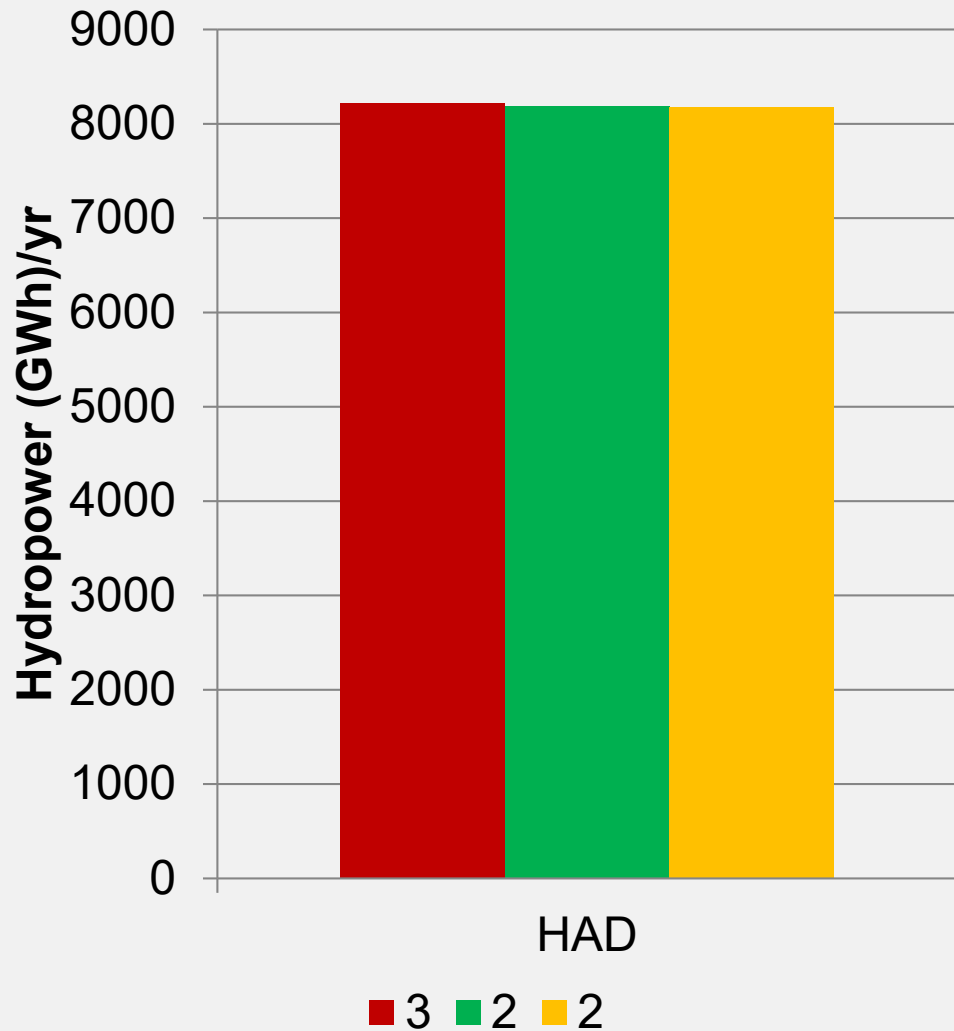


Dry

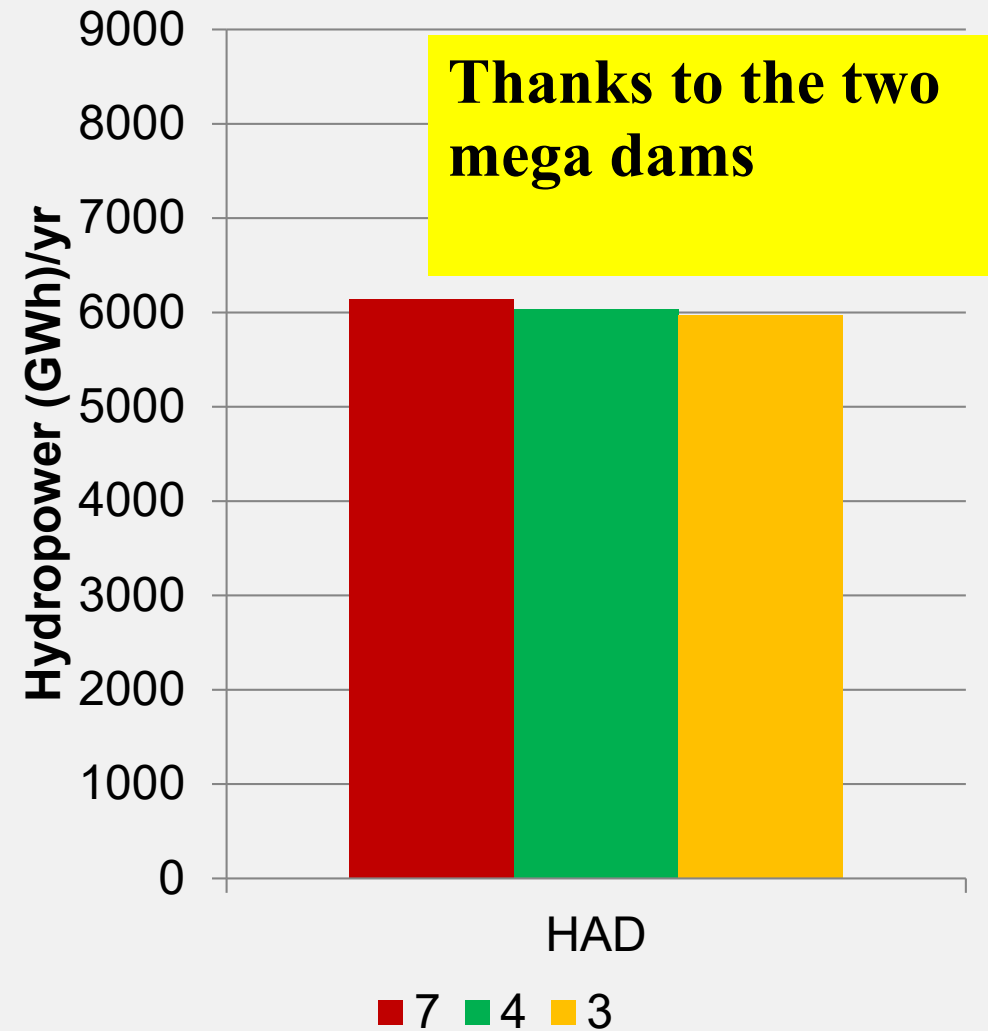


High Aswan Dam HAD's HP Results

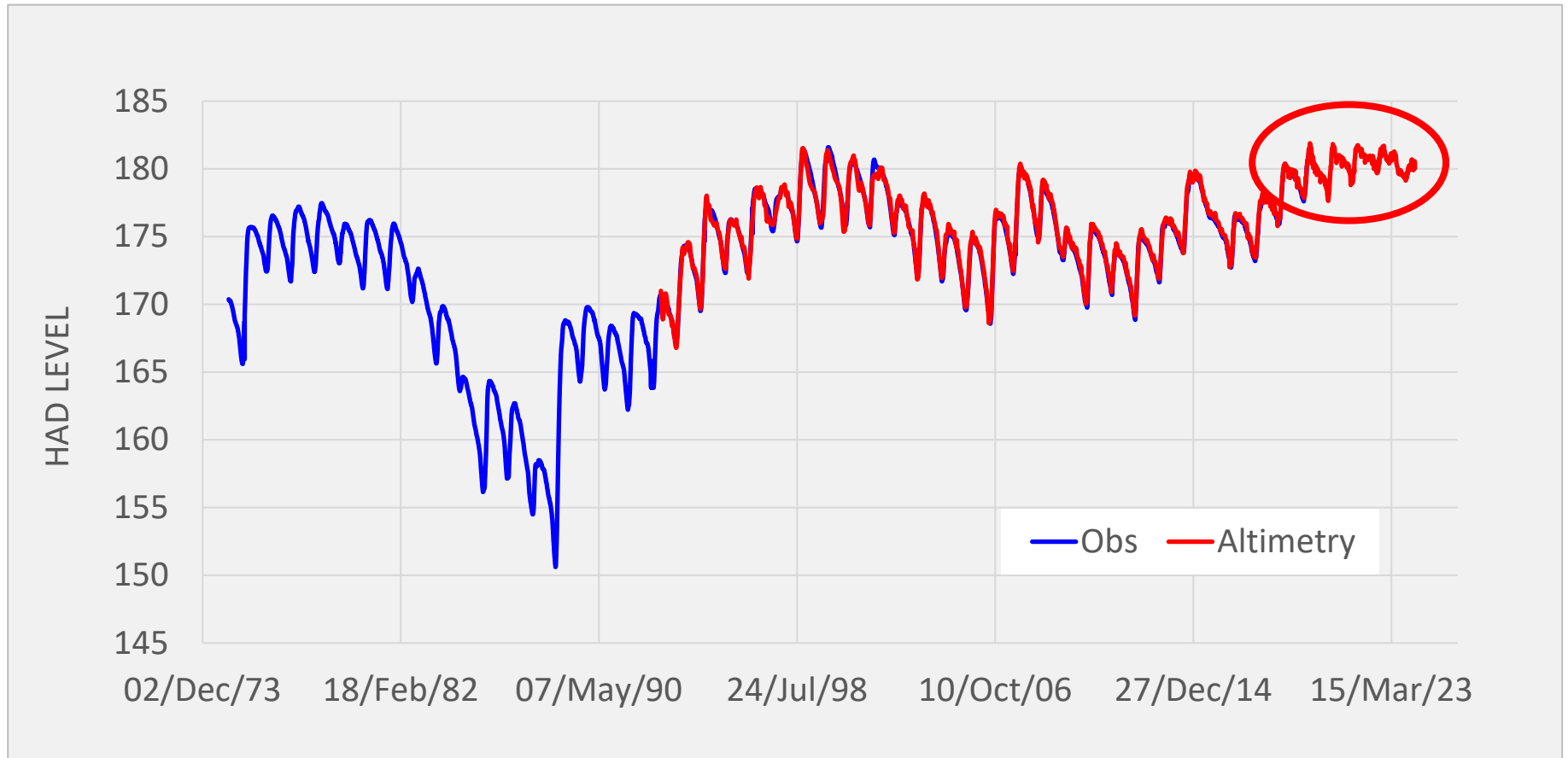
AVERAGE



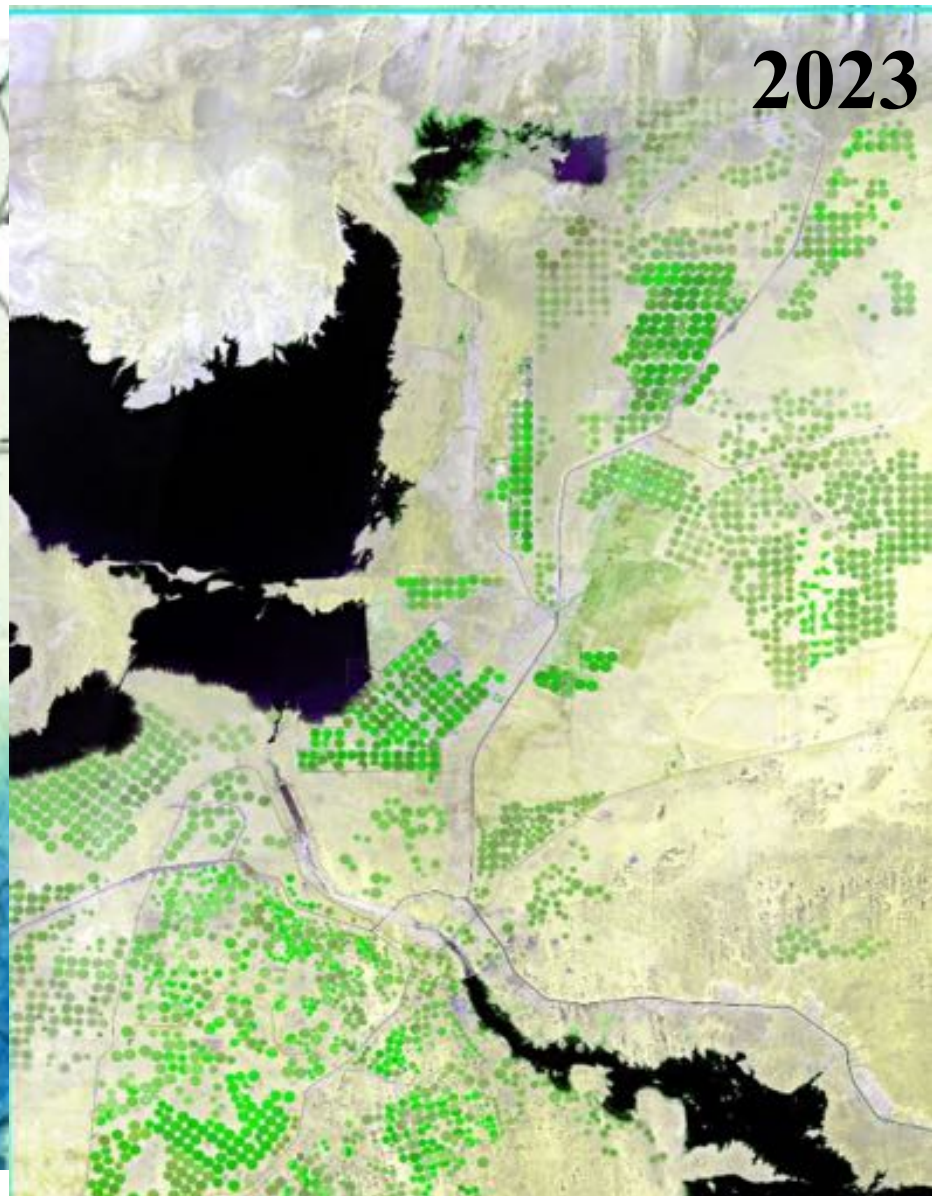
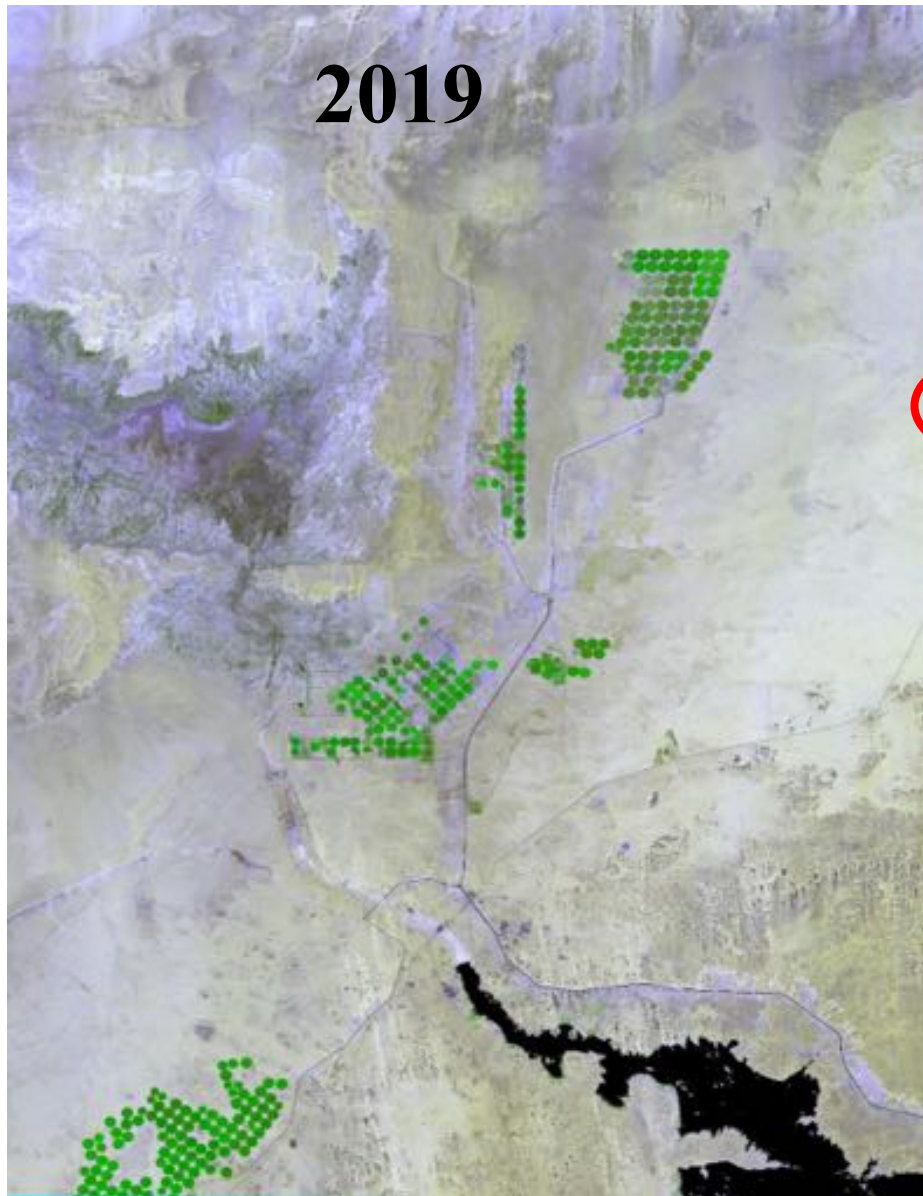
Dry



HAD water level



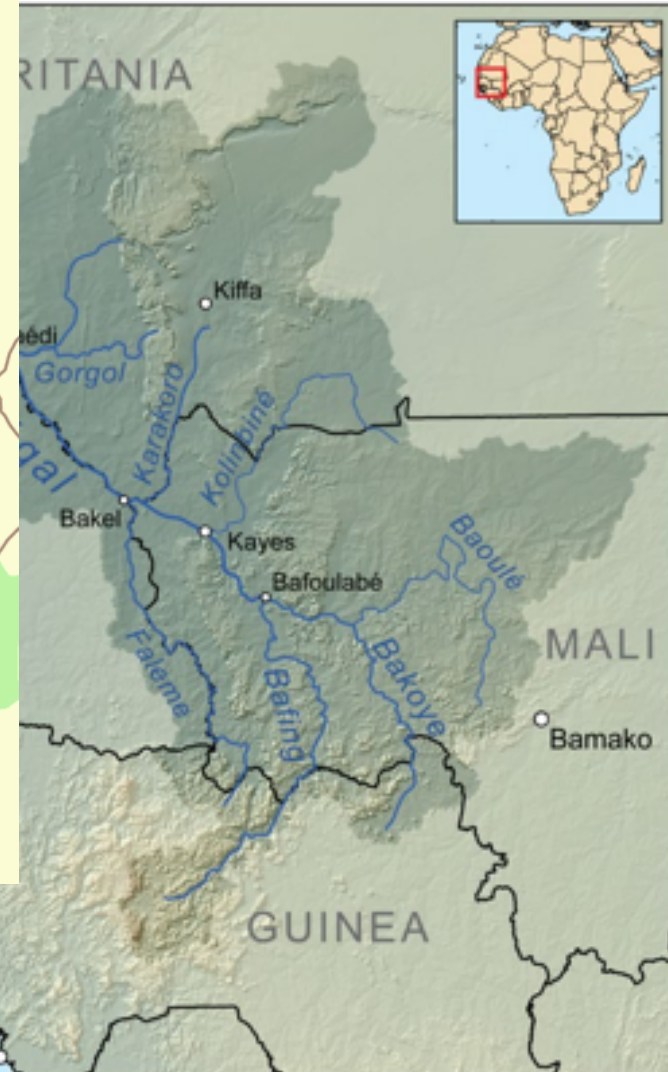
ET in 2023 (WaPOR)



GERD : Future Perspectives

- Depoliticise the GERD → **Enlarging the cake for the people**
→ **Cooperation beyond water**
 - Water – Food – Energy
 - Trade
 - Transport
 - Movement of people
 - Protection of Env.
 - **Regional Stability**
- International law and building on previous treaties

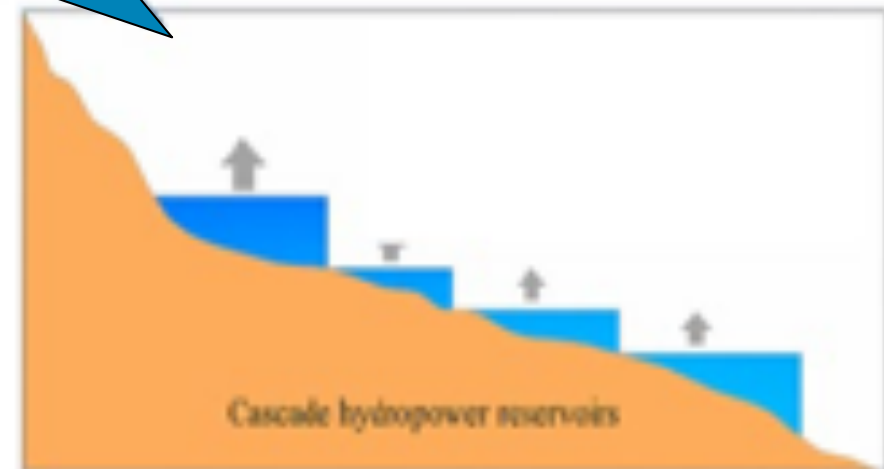
GERD : Future Perspectives



“The more cooperative we are, the more valuable we become. The more adaptive we are, the more productive we become”

Words into actions

**Source: Dr. Belete,
3rd NISRG Meeting
Addis July 2018**



Thank you

