IWRA World Water Day Webinar

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

by
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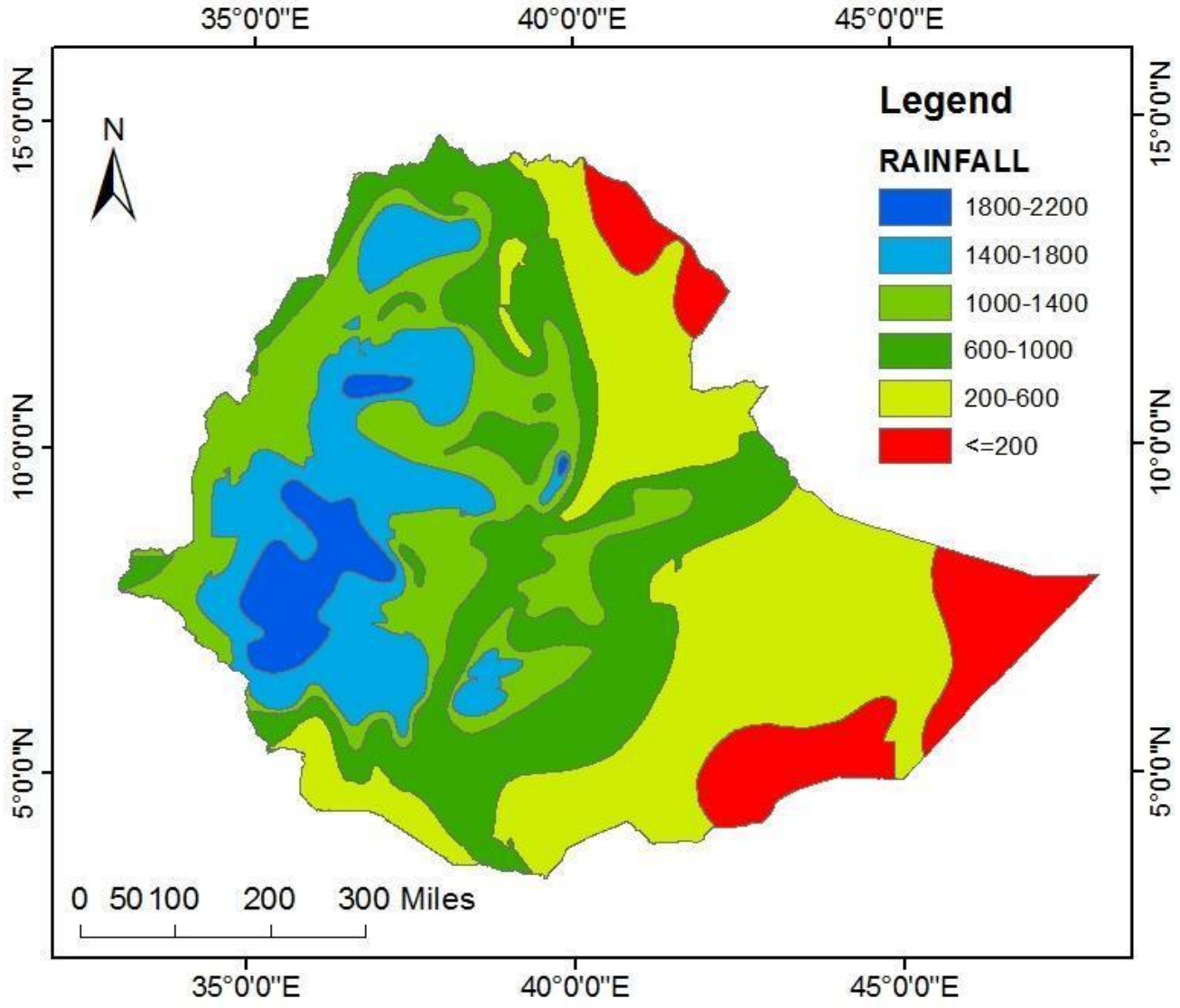
21 March 2024

Ethiopia – Rainfall: Water, Energy and Food Geography and nature variability.



Background

① Eastern Ethiopia ~ 40 % country arid (avg. 400 mm/yr) – where crop mostly cannot grow without irrigation.

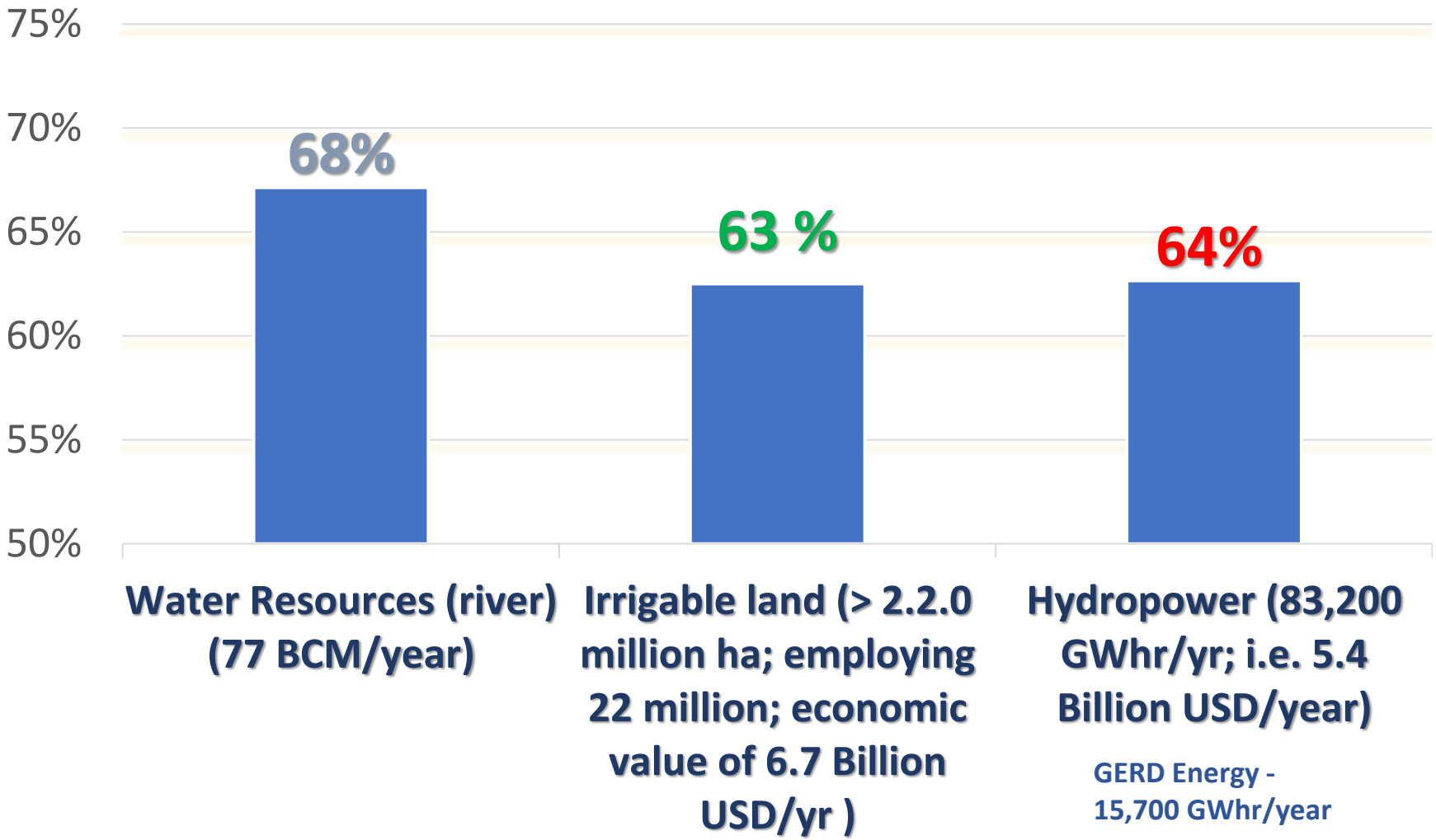
② ~ 3-4 months rainfall, 9-8 months basically dry. What is rained, 75-85% is consumed by evapotranspiration & recharge (crops, vegetations, grass, soil)

③ Recurrent drought (5-10 yrs) damage rainfed production and pastoral system – sometimes in most reliably crop producing areas.

Drought creates devastating shocks in crop yield, pastoral economy, dinking water: leading to economic decline and its consequences. We must harness rivers (storage) for water supply, irrigation, hydropower, …

(Abay / Blue Nile (50%), Baro Akobo (12%) and Tekeze (8%)) as percent of Ethiopia water endowment

Why is it imperative for Ethiopia to utilize its Nile WR? Population & development drive – creating job opportunities – using its strategic natural resources



Additional Benefits - Water for domestic and industry, Fishery, Recreation, …

Prepare for Drought –
The Value of GERD for Peace and Stability

(a) Drought event is known at the end of September if it occurs;

(b) Ethiopia, Egypt and Sudan water interest in drought period basically aligns (to release water from GERD reserves for HP generation and to d/s Sudan and Egypt); Egypt and Sudan also invokes their drought management rules. As the event happens, the three countries will discuss, in good faith, on how to jointly mitigate drought – year by year.

© Future release from GERD, in drought and non-drought years, cannot put in legally binding rules because the future storage in GERD depends on the annual inflow into GERD which is dependent on future hydrology, upstream of GERD WR development (water right and allocation issues), and risks of next year drought occurrences. When the countries enters water allocation agreements, however, the binding rules for drought and non-drought periods releases from GERD / Blue Nile can be developed.

Regional energy trade may change the way the countries negotiate over the management of the Nile.

- **Regional energy fair trade (market based) creates cooperation and build confidence among the countries;**
- **Allows utilization of wind and solar energy (while load fluctuations is supplied from the hydropower grid which has fast response time).**

The above is well facilitated considering:

- **The synergy and uses of Nile water for water supply, hydropower, irrigation and other uses considered fairly in both upstream and downstream countries when dealing regional energy trade.**
- **Sustainable rule based regional energy trade will flourish provided the Nile basin countries enter water allocation agreements.**

Excellencies, Distinguished Guests,

Ladies & Gentlemen

Thank You for Listening