## 10th NCCR Internship Graduation Ceremony

The 10th NCCR Internship Batch has enrolled 10 Interns from the three Eastern Nile Countries (4 from South Sudan, 3 from Sudan, and 3 from Ethiopia) to the ENTRO Internship and Young Professional Program. These interns have been participating in training and capacity-building activities with the theme "Eastern Nile Drought Assessment" organized at ENTRO for the past three months, starting on November 1<sup>st</sup> to January 31st, 2025.

The main objective of the assessment is to quantify and monitor trends of categorical drought and its spatial and temporal distribution in the Eastern Nile Basin as well as update database at ENTRO for drought assessment. The 10th batch of NCCR interns were engaged in the "Eastern Nile Drought Assessment" project divided into two themes:

## Theme I: Eastern Nile Meteorological and Hydrological Drought Assessment

The assessment has been focused on hydrological and meteorological drought monitoring and trend analysis in the Eastern Nile sub basin, using the streamflow drought index (SDI), standardized precipitation index (SPI), respectively. The Assessment has also looked into the interrelationships between the two drought indicators. The SDI and SPI were calculated using long-term streamflow and precipitation data collected from 1981 to 2021.

## Theme II: Agricultural Drought Assessment (Final report)

This study aims to monitor agricultural drought in the Eastern Nile Basin using satellite-based drought indices from MODIS dataset, given the region's data scarcity. The research primarily utilized NDVI (Normalized Difference Vegetation Index), EVI (Enhanced Vegetation Index), and VCI (Vegetation Condition Index) to monitor agricultural drought. NDVI and EVI were used to analyze temporal drought trends, while an in-depth Spatio-temporal and frequency analysis were conducted using VCI for the four main sub-basins: Blue Nile, Main Nile, Baro-Akobo-Sobat, and Tekeze-Setit-Atbara.

After the Interns complete their work and delivering a presentation, the graduation ceremony was held in the presence of ENTRO technical staff.