

Bewuket Tefera

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[LinkedIn Profile](#), [Google Scholar](#)

Education

- **Ph.D. Student (08/2022 – 05/2023 and expected spring 2026).**
Department of Geography. University of Florida, Gainesville, FL.
- **MSc in Agricultural and Biological Engineering. 08/2021 -05/2023.**
Thesis: Salinity mitigation strategies for salt-affected soils.
University of Florida, Gainesville, FL 32611, USA.
- **MSc in Water Science and Engineering. (10/2014 – 04/2016).**
Thesis: Integrated analysis of saltwater intrusion in Laizhou Bay using MODFLOW/SEAWAT.
UNESCO-IHE Institute for Water Education, Delft, Netherlands.
- **BSc in Agricultural Engineering and Mechanization. (09/2006- 07/2010).**
Hawassa University, Ethiopia.
Thesis: Irrigation performance analysis for a small-scale irrigation system in Hawassa.

Professional experience

- **Graduate Research and Teaching Assistant.**
University of Florida. (08/2021-Present)
- **Researcher Head.**
Miles Africa Consulting, Addis Ababa, Ethiopia. (10/2020 - 08/2021)
- **Subcontractor**
Elshine Trading PLC, Addis Ababa, Ethiopia. (09/2018 - 08/2021)
- **Lecturer**
Water Resources Engineering Department (10/2010 - 08/2021). Adama Science Technology University, Ethiopia.
- **Site Engineer.** Yikeber Hunegnaw General Contractor, Addis Ababa, Ethiopia (08/2016 - 03/2018).

Skills and proficiency

- **Hydrology Models:** MODFLOW/SEAWAT, SWAT+, MIKESHE, HEC families, and more.
- **Programming:** R, Python, Google Earth Engine, and NetLogo,
- **Others:** Machine/ deep learning, ArcGIS Pro, QGIS, Remote sensing

Languages

- English: Fluent
- Amharic: Native

Conferences and trainings

- Groundwater Dynamics in Stellenbosch, South Africa: A Machine learning approach. WaterSciCon 24, AGU. St. Paul, Minnesota, USA. June 26, 2024.
- Refinement of Satellite Precipitation Estimates Using Hybrid Downscaling and Machine Learning in the Upper Awash River Basin, Ethiopia. 78th Annual Meeting of the Southeastern Division of the AAG 2023.
- Spatial and Temporal distribution of Groundwater salinity in South Florida (2022, Baltimore, MD). American Society of Agronomy Annual Meeting.
- Spatial distribution of shallow groundwater quality in the upper Awash River Basin aquifer, Ethiopia, 2022. 77th Annual Meeting of the South-eastern Division of the AAG.
- 2nd International INOWAS Summer School on Managed Aquifer Recharge 2017 from September 04- 10 in TU- Dresden, Dresden, Germany.
- Tefera, B. B., Bayabil, H. K., Tong, Z., Teshome, F. T., Wenbo, P., Li, Y. C., Hailegnaw, N. S., & Gao, B. (2022). Using liquefied biomass hydrogel to mitigate salinity in salt-affected soils. Chemosphere, 309, 136480. <https://doi.org/10.1016/j.chemosphere.2022.136480>

Focus area.

- Earth System Science
- Sustainability & Global Environmental Change
- Geospatial Analysis and Techniques

Research Interests

- Human Impact on Natural Resources
- Remote sensing
- Land use and land cover analysis.
- Hydrology: surface water and groundwater
- Contaminant transport modeling
- GeoAI
- Machine/deep learning
- I like field work and lab work.

Memberships

- American Geophysical Union, USA.
- American Geographical Society, USA.
- International Association of Hydrogeologists