KABI RAJ KHATIWADA

PhD Student, Environmental Dynamics
Department of Biological & Agricultural Engineering, University of Arkansas
University of Arkansas, ENGR 228, Fayetteville, AR 72701
Email: kabik@uark.edu; Phone no: 479-601-9380

RESEARCH INTERESTS

greenhouse gases, methane emissions, climate change, modelling, data science

PROFESSIONAL EXPERIENCE

Aug 2022 – Present	PhD Student, Graduate Research Assistant, Environment Dynamics, Supervisor: Dr. Benjamin Runkle University of Arkansas, Fayetteville, AR, USA
Dec 2018 – Jul 2022	Water Resources Analyst, International Centre for Integrated Mountain Development (ICIMOD), Nepal
Apr 2018 – Nov 2018	Hydrological modeler, Consultant, ICIMOD, Nepal
Feb 2018 – Nov 2018	Research Associate, The Small Earth Nepal (SEN), Nepal
May 2016 – June 2018	Individual consultant
Aug 2014 – Oct 2015	Research Intern, SEN, Nepal

PROFESIONAL PREPARATION

2011-2016	**M.Sc. Environmental Science**, Central Department of Environmental Science, Tribhuvan University (TU), Nepal. *Master's dissertation: Climatic Variability and Its Impact on Hydrology of the Karnali River Basin, Nepal, 2016,* Advisor: Dr. Santosh Nepal
2008-2011	**B.Sc. Environmental Science** Tri Chandra Multiple College, TU, Nepal

PROFESIONAL ACTIVITIES

Society membership American Geophysical Union**,** Fluxnet Early Career Network

PEER-REVIEWED PUBLICATIONS

- Ross SK, Klauss N, Miles M, **Khatiwada KR**, El Masri B, Runkle BRK, Stinchcomb GE, Moon JB (2025). Bald Cypress (Taxodium distichum) Knees Are Methane Sources Controlled by Geomorphology, Climate, and Hydrologic Extremes. *J. Geophys. Res. Biogeosciences* 130, e2025JG008996. https://doi.org/10.1029/2025JG008996
- **Khatiwada, K. R.,** Pradhananga, S., & Nepal, S. (2024). Inferring the impacts of climate extreme in the Kabul River Basin. *Regional Environmental Change,* 24(1), 17. https://doi.org/10.1007/s10113023-02167-3

- Nepal, S., **Khatiwada, K. R.,** Pradhananga, S., Kralisch, S., Samyn, D., Bromand, M. T., ... & Chevallier, P. (2021). Future snow projections in a small basin of the Western Himalaya. *Science of The Total Environment*, Volume 795, 148587. https://doi.org/10.1016/j.scitotenv.2021.148587
- **Khatiwada, K. R.,** & Pandey, V. P. (2019). Characterization of hydro-meteorological drought in Nepal Himalaya: A case of Karnali River Basin. *Weather and Climate Extremes*, 26, 100239. https://doi.org/10.1016/j.wace.2019.100239
- Panthi, J., **Khatiwada, K. R.,** Shrestha, M. L., & Dahal, P. (2018). Water poverty in the context of climate change: a case study from Karnali River basin in Nepal Himalaya. *International Journal of River Basin Management*, 17(2), 243-250. https://doi.org/10.1080/15715124.2018.1531421
- **Khatiwada, K. R.,** Panthi, J., Shrestha, M. L., & Nepal, S. (2016). Hydro-climatic variability in the Karnali River basin of Nepal Himalaya. *Climate*, 4(2), 17. https://doi.org/10.3390/cli4020017

PRESENTATIONS

- **Poster: Khatiwada, K. R.,** Moon J.B., Stinchcomb, G. E., El Masri, B., Runkle B.; Extreme environmental conditions and their role in carbon dioxide and methane fluxes in forested wetlands. In American Geophysical Union (AGU) annual meeting, 16 December 2025, New Orleans, LA, USA
- **Poster: Khatiwada, K. R.,** Tang R., Moon J.B., Stinchcomb, G. E., El Masri B., Runkle B.; Towards a generalized model to represent the complexities of methane flux processes in forested wetlands, In AGU annual meeting, 9-13 December 2024, Washington, D.C. USA
- **Poster: Khatiwada, K. R.,** Tang R., Moon J.B., Stinchcomb, G. E., El Masri B., Runkle B.; Understanding the role of environmental drivers in determining methane flux in forested wetlands, In American Society of Agricultural and Biological Engineers (ASABE) State Section meeting, 4 October 2024, Fayetteville, AR, USA

More at [Google Scholar]

AWARDS

- FLUXNET Secondment 2025 from FLUXNET Coordination Project ($7598).

  Spent four weeks in the tropical forests of French Guiana studying carbon flux dynamics within a rainforest environment.

Experience blog at [fluxnet.org]

GRANTS

- Travel Grant from Graduate School and International Education (GSIE), University of Arkansas, ($1500) for AGU annual meeting, 11-19 December 2025, New Orleans, LA, USA.
- Travel Grant from Graduate & Professional Student Congress (GPSC), University of Arkansas, ($750) for American Geophysical Union (AGU) annual meeting, 11-15 December 2023, San Francisco, CA
- Student Travel Award from Department of Energy's Environmental System Science (ESS) Program, (~$1250) for annual Principal Investigators (PI) Meeting, 16-17 May 2023, Bethesda, MD

Example at [Arkansas News]

THESIS CO-SUPERVISION

- Prabesh Dhungana, M. Sc. thesis 2019, Central Department of Hydrology and Meteorology, Tribhuvan University, Nepal. *Thesis title: Contributions of snow and ice melt in the flow regime of Khumbu catchment, Mt. Everest region*
- Bashudev Neupane, M. Sc. thesis 2018, Central Department of Environmental Science, Tribhuvan University, Nepal *Thesis title: Water Availability and Impacts of Landuse Landcover change study in Marshyangdi River Basin*

GUEST SPEAKER

- **Guest lecture:** Application of hydrological modeling in the context of changing climate, and water resource management in the Himalayan Basin, at Central Department of Environmental Science, TU, Nepal, during February 2020.
- **Classes** on Fundamental and application of Modelling to IV Semester M. Sc. Environmental Science, 2022, Central Department of Environmental Science, TU, Nepal (~20 Lecture hours)

TEACHING EXPERIENCE

- Spatial and temporal climate change analysis using CORDEX regional climate models over South Asia for professionals from the for professionals from Bangladesh Meteorological Department, Bangladesh during 7-11 March 2022.
- Resilient watersheds for integrated river basin management during 06-16 October 2020 for the technical staff from the Department of Forests and Soil Conservation (DoFSC), Nepal.

Digital version with extended information of this CV is available at:
[GitHub Page: kabiraj404.github.io/CV/]