

You are kindly invited to the public PhD defense of

Anik Juli Dwi Astuti

Connectivity Perspectives on Water and Sediment Flows
in the Gumara and Rib Catchments (Ethiopia)

Time:

Tuesday, 28 May 2024 at 14.00 (CET)

Location:

Ghent University, Campus Sterre, Krijgslaan 281, 9000 Ghent,
Building S8, 2nd Floor, Lecture Room 2.1

or follow the livestream via: <https://ap.lc/RwRUN>

After the defense, you are welcome to attend the reception.
Please confirm your in-person attendance before 23 May 2024 by
email: anikjulidwi.astuti@ugent.be

Supervisors

Prof. dr. Amaury Frankl, Ghent University, Belgium

Prof. dr. Jan Nyssen, Ghent University, Belgium

Examination Committee

Prof. dr. Haosheng Huang, Ghent University, Belgium (Chair)

Dr. ir. Stefaan Dondeyne, Ghent University and Vrije Universiteit Brussel, Belgium

Prof. dr. Kristine Walraevens, Ghent University, Belgium

Prof. dr. Ann Van Griensven, Vrije Universiteit Brussel, Belgium

Dr. Tesfaalem Ghebreyohannes, Mekelle University, Ethiopia

Summary

Land degradation, driven by human activities and climate change, poses a global challenge, notably in upland areas prone to soil erosion, which leads to downstream sediment deposition, impacting socio-economic systems. Understanding water and sediment connectivity is crucial for erosion management. This study aims to develop a Modified Index of Connectivity (MIC) for assessing structural and functional water and sediment connectivity and identifying the potential sediment sources in the Gumara and Rib catchments. The results highlight the efficacy of the Modified Index of Connectivity (MIC) in evaluating water and sediment connectivity and identifying potential sediment sources within catchments. The MIC offers a simplified approach to monitoring potential sediment transport and potential sediment sources.

About the author

Anik Juli Dwi Astuti obtained her Bachelor's degree in Geography and Master's degree in Environmental Science from Universitas Gadjah Mada (Indonesia). In October 2019, she started her PhD at the Department of Geography, Ghent University, funded by the Indonesia Endowment Fund for Education (LPDP).