

Master theses or internship grants for research in sustainable catchment management in Rwanda and Ghana (2024)

Background

Productive and climate resilient agricultural and forestry landscapes are under pressure in many parts of the world, not the least in regions with a need for accelerating food production. Water and land (soil) resources are often core to both support agricultural production and to ensure sustained and equal opportunity to benefits, in terms of yields (income), healthy landscapes and ecosystems, and voice in its governance

MSc thesis/internship opportunity

We offer MSc thesis or internship grants to contribute research projects in collaboration with the International Water Management Research Institute ([IWMI](#) – West Africa office) and partners in Rwanda and Ghana during 2023-2024. The key topics relate to

- Evaluation of land and water management options for mixed cropping systems in Akagera and Rusizi watersheds in Rwanda (literature review and/or water balance modelling)
- Review on citizen science-based approaches for building climate resilience through water management in agricultural landscapes
- Review on incidence and risk of natural hazards, flood and drought, erosion and landslide in Rwanda (poss. Burundi, Congo): Social and physical response systems for resilience

Methodology will include literature review and if desirable, field visit and data collection in country (but not a requirement). Each study will be designed with supervisor at SLU and IWMI jointly. Estimated time in the field is recommended 2-10 weeks, depending on study design.

Supervision will be offered at SLU by Professor Jennie Barron (agricultural field and landscape water balances), Ass. Professor Aida Tobella (agroforestry, forestry), Ass. Professor Marcos Lana (crop production, agronomy), Ass. Professor. Harry Fischer (social network). Supervision in the Ghana and Rwanda field sites will be provided by IWMI Dr Seifu Tilahun and/or colleagues and partners in location.

Terms and conditions

- The candidates should have at least year 3 and commencing MSc, up to newly graduated at MSc, with fluent English .
- Studies should be related to agricultural-forestry soil and water management and crop production, water engineering, natural resources management, rural development or related topics.
- The travel grant will cover travel, medicals and insurances, plus field data collection cost. Budget is developed with supervisors
- Each study grant will be reported for completion as a report or thesis.
- We strongly support candidates who combine field study with a MSc thesis at SLU, but this is not a requirement

Supervisor and contact:

Main contact at SLU and supervisor: Professor Jennie Barron, Department of Soil and Environment (SLU Uppsala), jennie.barron@slu.se

Other resources:

Associate Professor Marcos Lana, Department Crop Production and Ecology, SLU-Uppsala

Associate Professor Aida BARGUES Tobella, Department of Forest Ecology and Management, SLU-Umeå

Associate Professor Harry Fischer, Department of Urban and Rural Development, SLU Uppsala

Dr Seifu Tilahun, Senior Researcher, International Water Management Institute (IWMI-Ghana)

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