



**INSTITUTE OF ENVIRONMENTAL SCIENCES**

**ANALYSIS OF THE ADOPTION OF SOIL AND WATER CONSERVATION  
TECHNOLOGIES IN SELECTED SUB-COUNTIES OF MOUNT ELGON REGION,  
UGANDA**

**Supervisor: Dr. Csorba Ádám**

**Head of Institute: Prof. Erika Micheli**

**Created by: Mirembe Staden**

**Neptun: H7HZJO**

Full-Time

**Gödöllő**

**May 2023**

The high rates of land degradation viewed as the main cause of declining soil fertility and subsequently reduced agricultural productivity have become a major concern in Sub-Saharan Africa (SSA). To mitigate this unfortunate scenario, Soil and Water Conservation (SWC) measures have been advocated for in various parts of SSA. Despite this advocacy, the adoption rate of these technologies remains low. This research, therefore, sought to

1. find out the SWC technologies practiced by farmers along the eastern slopes of Mt Elgon Uganda,
2. Establish the factors influencing the adoption of these technologies,
3. The challenges faced by farmers in the adoption of Soil and Water Technologies (SWCTs).

The study employed a descriptive explanatory research design where a survey of 139 farmers was carried out and the data analysed at a 95% confidence interval and 5% error value. Data collected was collated, coded, and analyzed using the SPSS version 27 to answer the three research objectives. Spearman correlation coefficient was used to answer objective three.

Study results were presented using tables, charts, and verbatim quotations. The key findings indicate that farmers in the Mount Elgon region practice various Soil and Water Conservation Technologies (SWCTs), such as mulching (47.5%), agroforestry (5%) and terracing(4.3%). Adoption of SWCTs is influenced by factors including farmer education level, access to credit, extension services, and land tenure system.

Based on the study's findings, the study recommends that policymakers prioritize education and extension services to encourage the adoption of SWCTs among farmers in the Mount Elgon region. Access to credit should also be improved to finance the implementation of conservation practices, and secure land tenure policies should be put in place to encourage investment in conservation practices.