



Makerere University College of Agricultural
and Environmental Sciences



Short Course Announcement on

GIS Based Soil Erosion Risk Modelling

Date: 21st to 22nd February 2019

Introduction

Makerere University (Uganda), University of Natural Resources and Life Sciences, BOKU (Austria) and other partners are implementing a joint project entitled “*Capacity building on the water-energy-food security Nexus through research and training in Kenya and Uganda*” (*CapNex*). The aim of this project is to strengthen the capacities of young researchers from Uganda, Kenya and Austrian Universities to cope with challenges associated to water quality and quantity, energy provision and food security in East Africa. The project is funded by the Austrian government through the APPEAR programme of the Austrian Development Cooperation. Other partners on the project are TU Wien and TU Kenya. Under the framework of the project, a GIS-Based Erosion Modelling short course was conceived and will be implemented at Makerere University.

Training

The thrust of the short course is to equip participants with GIS skills for modelling soil erosion risk. The training will introduce participants into environmental modelling of spatial data using



the open source software R. The training will cover a basic introduction in R and R Studio and a brief introduction in working with spatial data in R. A practical example gives the participants the chance to apply the learned techniques. We will perform a GIS based soil erosion modelling exercise implementing the Universal Soil Loss Equation (USLE). Employing uncertainty analysis, the participants will learn how to interpret results and how to make informed decisions based on uncertain results. It will be a hands-on training. Participant are expected to bring their own laptops for the training. Data and Software will be provided during the workshop.

Application

The training will be limited to 20 participants. Those interested in the training should send a one page application by email indicating your academic and professional background as well as motivation for participating. Send your application to: geog@caes.mak.ac.ug by **Sunday 17th February 2019**.

Logistics

The training is free and the project will cover meals and refreshments. A certificate will be issued to the successful participants. The training will take place in the Department of Geography, Geo-Informatics and Climatic Sciences

