



REGIONAL COURSE ON HYDROLOGICAL AND AGRO-ECOLOGICAL MODELING

The Building Stronger University Project at Sokoine University of Agriculture (SUA) under the Agroecology thematic area is announcing a Regional Course on Hydrological and Agro-ecological Modeling using Open source modeling tools (i.e. QGIS, QSWAT and SWATCUP) from September 25th - 29th, 2017 in Morogoro, Tanzania.

Past efforts which approached agricultural production, environmental protection, water management, and/or rural development as separate issues within narrowly-defined sectoral goals have demonstrated the limitations inherent in such siloed approaches. Recent development in simulation models, such as SWAT, the Soil and Water Assessment Tool, now describe a comprehensive array of interactions between agricultural management, natural resources and climate, which prompt possibilities for enhanced understanding and quantification of these interactions. It further provides the opportunity for informed decision making at local, regional and national scales. Potential far-reaching and expensive management actions may first be tested and optimized in simulation before being implemented in the real world. In this training we will use state-of-the-art, open source and freely available software only (e.g., QGIS and QSWAT), meaning that the software will be available and participants will be to use them back home.

Course contents: Software Installation and Basic watershed theory; About QGIS and exercise on Data visualization in QGIS, Data preparation for QSWAT and exercises on data preparation, QSWAT Model set up and running, Evaluation and visualization of model outputs, QSWAT Model calibration and Validation using SWATCUP, Scenario simulations using SWAT, and Discussion on potential model applications.

Target group: Master and PhD students, Researchers from Research and higher learning Institutions, relevant Ministries, Officers from Water Basin Offices, and any other parties interested in increasing their knowledge in hydrological modeling.

Application: Email to apply to Prof. Reuben Mwamakimbullah through mwama60@yahoo.com and cc to Nyemo Chilagane and Kassim Ramadhani through nchilagane@yahoo.com and kassimr@gmail.com, respectively. The deadline for application is 8th September, 2017.

Course materials, lunch and other refreshments will be made available for accepted applicants but **participants are expected to meet transport and living costs in Morogoro**. Candidate must come with laptops and more details will be provided after finalizing the participants list.

The training fee for this course is **400,000 Tsh** for Tanzanians and **400 USD** for non Tanzanians. Certificates will be offered to all candidates upon successful completion of the training.

In case you need any further clarification, please do not hesitate to contact us through: email contacts provided or Tel.+255 782 620 260 or +255 784 658969.