



Photo: de Vries

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## TUM.Africa Newsletter

### Latest news on TUM.Africa

- ▶ Since the last newsletter a number of chairs have established ideas and project proposals to initiate and/or intensify the collaboration with Ghana. It has also increased the internal collaboration potential within TUM for activities in Africa.
- ▶ A TUM delegation consisting of the TUM.Africa coordination team will visit the Kwame Nkrumah University of Science and Technology (KNUST) from 18-21 October 2018. Goal is to establish an agreement of the framework under which TUM and KNUST can collaborate.

### Recent TUM activities in Africa

- ▶ The Land Management Chair delivered research development and research writing workshops in Rwanda, Tanzania and Namibia respectively the context of the **ADLAND project**.
- ▶ In collaboration with GIZ and the NELGA network the Chair of Land Management hosted a [Symposium on Research on Evidence Based Land Governance](#) at TUM on



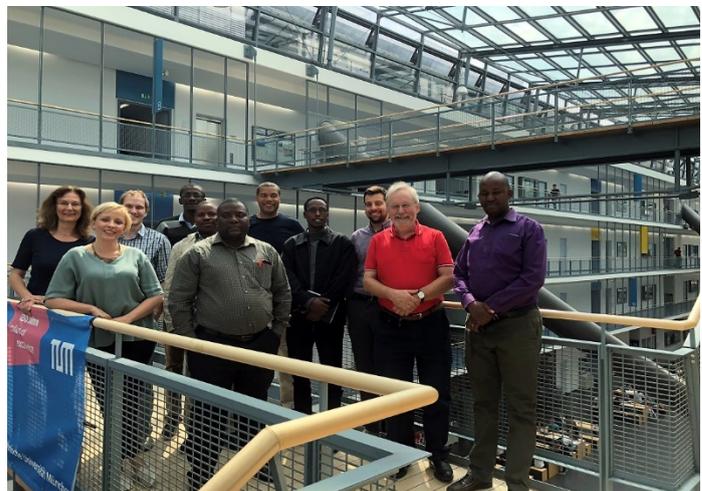
Research Writeshop Workshop at Ardhi University in Dar es Salaam, Tanzania. Photo: Duran

September 13, 2018.

- ▶ The Chair of Agricultural Production and Resource Economics is working on the project **Agriculture-Nutrition linkage; personalized nutrition** – an ICT-based interdisciplinary nutrition-intervention research that has a direct and indirect effect on diet / food choice, nutrition and health improvements of the target population and region. Key research components include agricultural production systems, food choice, anthropometry and biomarkers. The project runs until end of March 2019.

TUM collaborating professors are Prof. Johannes Sauer (Chair, Agricultural Production and Resource Economics) and Professor Hannelore Daniel (Chair Nutrition Physiology). The Partner Institution in Africa is the Institut National des Recherches Agricoles du Benin (INRAB), whereas the Third party funding is from the Federal Ministry of Economic Cooperation and Development (BMZ).

- ▶ The Centre for Global Health is conducting the **CYSTINET-Afrika project**. There has been an IT Meeting at the Chair of Software Engineering and the Center for Global Health. CYSTINET-Afrika is a multi-disciplinary health network on *Taenia solium* cysticercosis / taeniosis, the number one foodborne parasite.



Prof. Andrea Winkler and Prof. Bernd Brügge with members of the CYSTINET-Afrika project. Photo: Winkler

The project held a successful interdisciplinary workshop (Prof. Bernd Brügge and Jan Knobloch, Chair of Software Engineering, and Professors Andrea Winkler and

Clarissa Prazeres da Costa, Center for Global Health, TUM) on July 10 to 11, 2018 with regards to the establishment of a Virtual One Health Teaching Platform. This includes state of the art online lectures in a true One Health manner, not only geared towards academics but also key stakeholders and the involved communities.

Lectures will be complemented with an array of software tools in order to enable interactive exchange and stimulate communication between providers of lectures and their recipients. Partner countries involved are Tanzania (National Institute of Medical Research and Sokoine University of Agriculture), Zambia (University of Zambia) and Mozambique (Eduardo Mondlane University). Please find more information on the [CYSTINET-Africa website](#).

- ▶ The **TUM Chair of Soil Science is working on a DFG Project**: Soil minerals as key components of soil organic matter sequestration in highly weathered tropical soils in Tanzania (Usambara Mountains). The Cooperation consists of PD Dr. Carsten W. Mueller (TUM, Chair of Soil Science), Maximilian Kirsten, Prof. Karl-Heinz Feger, Prof. Karsten Kalbitz (TU Dresden, Soil Science), Prof. Robert Mikutta (University Halle-Wittenberg) and Prof. Didas N. Kimaro (Sokoine University of Agriculture).

The main objective of the project is to identify and quantify important soil components and mechanisms for soil carbon storage and stabilization in highly weathered tropical soils in the

East Usambara Mountains, Tanzania (Fig. 1). Highly weathered soils in tropical Africa are largely affected by land use changes from forests to arable lands. The uncertainty about losses of soil organic matter and the responsible mechanisms have a huge impact because functioning of these tropical soils highly depends on soil organic matter. Therefore, the project will deliver an improved mechanistic understanding of soil carbon storage and stabilization in these highly vulnerable tropical soils. Based on our fundamental research, management strategies can be developed for sustainable land-use planning and good agricultural practice.

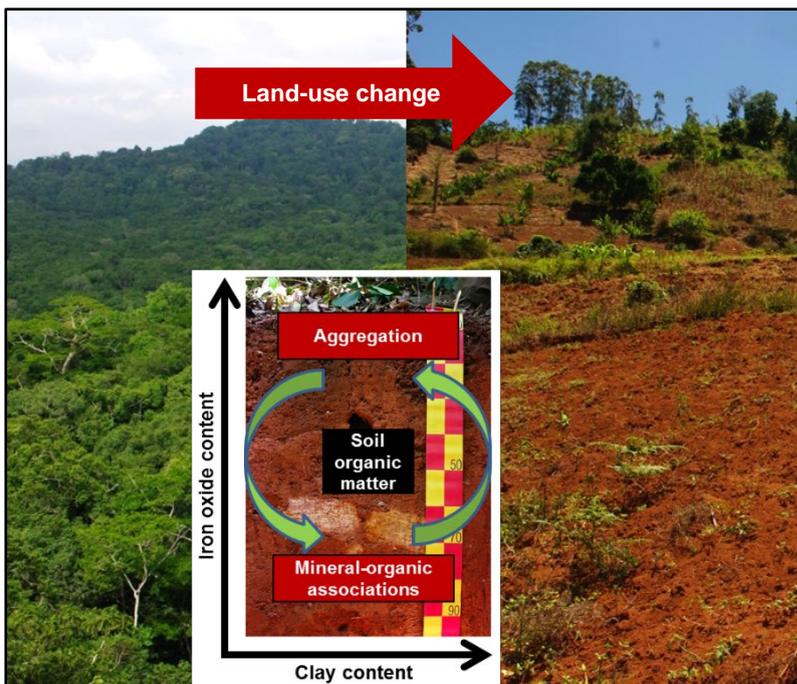


Fig. 1: Project concept

## Upcoming TUM activities in Africa

- ▶ The Professorship of Modeling Spatial Mobility at TUM has been awarded DAAD funding for a **fact finding mission to and from KNUST** to initiate a long-term and contractually-based cooperation between the Focus Area Mobility & Transportation Systems at TUM and the Department of Civil Engineering at KNUST, with the eventual aim of enhancing transport research and teaching.

A KNUST delegation is expected to visit TUM from November 12-14, 2018, and a TUM delegation from four different TUM Chairs (Professur für Modellierung räumlicher Mobilität, Lehrstuhl für Fahrzeugtechnik, Lehrstuhl für Verkehrswegebau, Lehrstuhl Bodenordnung und Landentwicklung) will visit KNUST from December 3-7, 2018.

- ▶ The Lehrstuhl für Hydrologie und Flussgebietsmanagement has a research visitor. **Prof. Dr. Abdella Kemal from Arba Minch University visits TUM** for two months, between October and December 2018, as part of the TWAS-DFG Cooperation Visits Programme for scientists from sub-Saharan Africa. In addition, Dr. Luke Olang, a Humboldt Fellow at the Chair of Hydrology and River Basin management is currently involved on enhancement of “An African Drought Monitor” to allow better prediction of drought for Africa.

## Recent TUM publications on Africa

- ▶ Fenta Mekonnen Dagnenet and Disse Markus (2018). Analyzing the future climate change of Upper Blue Nile River basin using statistical downscaling techniques, *Hydrol. Earth Syst. Sci.*, 22, 2391-2408, <https://doi.org/10.5194/hess-22-2391-2018>, 2018. Bodenordnung und Landentwicklung) will visit KNUST from December 3-7, 2018.
- ▶ Chigbu, U. E. (2019). Concept and Approach to Land Management Interventions for Rural Development in Africa. In El-Ayachi, M. & El Mansouri, L. (Eds.), *Geospatial Technologies for Effective Land Governance*, pp. 1-14. IGI Global: USA. DOI: 10.4018/978-1-5225-5939-9.ch001

## Calls for proposals related to Africa

- ▶ **TUM-IAS Regional fellowships Hans Fischer**  
TUM-IAS will award up to two of the Hans Fischer and/or Hans Fischer Senior Fellowships to candidates from a home institution in Africa and/or Latin America. The current [call for proposals for TUM-IAS Fellowships](#) is open.
- ▶ **Call for Abstracts: Africa Conference, Leuphana University of Lueneburg**  
Leuphana and GIGA invite you to the Conference [Africa and Europe Moving Forward Together– Evidence-based Solutions for African Development](#) which will be held from January 24 - 26, 2019, in Lueneburg, Germany. Submission deadline is Wednesday, October 15, 2018, 5:00 p.m. CET.
- ▶ **German-African Innovation Prize**  
BMBF has published a call for a German-African Innovation Prize. The deadline is January 15, 2019. Please find more information on the [BMBF website](#).

## Upcoming events related to Africa

- ▶ **November 9, 2018** IGSSE Martini Colloquium. The colloquium is designed to foster and nudge cross-faculty networks at TUM on peer-level and to give impulses on research opportunities.

- ▶ **November 16, 2018** Symposium Sustainable development in Africa at TUM Campus Garching. Learn more on the [TUM Emeriti of Excellence website](#).

- ▶ **November 19 - 23, 2018** Continental NELGA Research Event *Strengthening policy-research linkages on land governance in Africa* under the theme “Land governance as a driver for sustainable socio-economic development”. Venue: Bahir Dar. Organized in collaboration with NELGA partners, ADLAND (TUM Chair Land Management), the World Bank and GIZ SLGA.

- ▶ **March 12-14, 2019** *2nd South-East-African and European Conference on Refugees and Forced Migrants: Health in Diversity, Diversity in Health?*, organized by The Max-Planck-Institute for Social Law and Social Policy, the Chair of Sociology of Diversity at the Technical University of Munich, and Pwani University at Pwani University in Kilifi, Kenya.



## Contact

If you would like to contribute to this newsletter, please [send an e-mail to Prof. de Vries](#).  
Deadline for the next issue: December 31, 2018