

# **Master thesis Call**

The Leibniz-Centre for Agricultural Landscape Research (ZALF, Germany), Humboldt University of Berlin (HU, Germany) and Swedish University of Agricultural Sciences (SLU, Sweden) are looking for students interested in taking part of two food security projects.

The students have an opportunity to get insight into two multi-stakeholder international research projects:

- Scaling-Up Nutrition: Implementing Potentials of nutrition-sensitive and diversified agriculture to increase food security in Tanzania;
- Trans-Sec: Innovating Strategies to safeguard Food Security using Technology and Knowledge Transfer: A people-centred Approach.

The activities will be conducted in Dodoma and/or Morogoro Regions, Tanzania, between January and March 2018. **The deadline for applications is 30<sup>th</sup> October 2017. Specific topics:** 

- <u>Master thesis topic 1</u>: **Nutrition education in Tanzania**: identification of elements of learning process and participation at community level. The objective is to explore contextual factors of knowledge and learning process in rural villages in Tanzania using mixed-methods approach (survey and open interviews). SEND THE APLICATTION TO: michelle.bonatti@zalf.de
- <u>Master thesis topic 2</u>: measurement of **spatial distribution of rainfall** along the study site. In this activity, the student will investigate if precipitation is equally distributed within the study region and if this affects crop development and performance. For this task, 50 rain gauges will be installed near fields cultivated with pearl millet. SEND THE APLICATTION TO: marcos.lana@slu.se
- <u>Master thesis topic 3</u>: in this work, the master student will **test the hypothesis that the use of tied ridges conserve water and has an effect of pearl millet yield**. Fifty on-farm fields will be available for sampling. SEND THE APLICATTION TO: **marcos.lana@slu.se**
- <u>Master thesis topic 4</u>: focus is on assessing the **effect on micro and macro soil erosion** of cultivation in flat fields or tied ridges. Field evaluations will be done after significant precipitation events. The assessment of precipitation amount will be done together with the responsible for the topic 2. SEND THE APLICATTION TO: marcos.lana@slu.se
- <u>Master thesis topic 5</u>: **comparison of the effect of micro fertilizer dosing on crops performance**. The hypothesis is that pearl millet fields managed using micro dosing (localized fertilizer

application) achieve higher yields compared to the broadcasting of fertilizer. Crop performance (crop development, total crop biomass and yield) and economic viability will be analysed. SEND THE APLICATTION TO: marcos.lana@slu.se

- <u>Master thesis topic 6</u>: **Design and testing of a "Lighthouse Farmer" concept**. The student will identify successful technology adopters and innovative households, and will explore opportunities for their active involvement in up-scaling technologies. The research will primarily use qualitative observations and interviews. SEND THE APLICATTION TO: jonathan.Steinke@zalf.de
- <u>Master thesis topic 7</u>: **Developing indicators of conflict cost for transdisciplinary research collaborations** and conduct of pre-study to test applicability (interviews; questionnaire survey). Economic background and knowledge of statistics of advantage. SEND THE APPLICATION TO: katharina.loehr@zalf.de
- <u>Master thesis topic 8</u>: **Transdisciplinary collaboration- conflict experience of stakeholders**. Conflict potential in transdisciplinary research settings is high; between project members but also between project members and stakeholders. The research shall analyse conflict experience of stakeholders participating in international research projects. The research will primarily use qualitative interviews but also questionnaire survey possible. Collaboration with master student (topic 1) can be discussed. Travel to Tanzania is optional. SEND THE APPLICATION TO: katharina.loehr@zalf.de
- <u>Master thesis topic 9</u>: **Optimal edible oil processing in Tanzania**. The objectives of the study are to estimate the economic benefits, assess efficiency of identified level of edible oil processing plants and discern competitiveness and marketability of their products. SEND THE APLICATTION TO: charles.mgeni@zalf.de
- <u>Master thesis topic 10</u>: The master student will analyze different **business models evolved from the introduction of firewood-based "Improved Cooking Stoves"** by Trans-SEC in 2015 regarding knowledge systems, design changes, use/acceptance, the sense of ownership, outscaling strategies and possible linkages to governmental programs. Qualitative tools such as Focus Group Discussions and Key Informant Interviews were used to establish a data basis. SEND THE APLICATTION TO: uckert@zalf.de and johannes.Hafner@zalf.de
- <u>Master thesis topic 11:</u> Exploring perspectives and challenges across 14 research institutions: lessons from a large-scale participatory North South action research (PAR) project. The selected MSc student will analyse how knowledge and money flow, power relations, and other factors can promote or hinder research collaboration. The MSc student will use the social mapping tool "Net-Map" to interview participating researchers and learn about and analyse the different types of relationships between 14 institutions in both Germany and Tanzania. SEND THE APLICATTION TO: graef@zalf.de



#### Selection criteria:

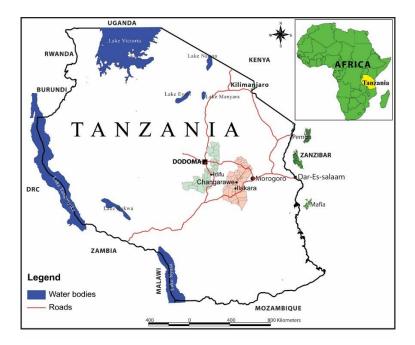
- Availability to participate in fieldwork in Tanzania;
- Fluency in oral English with good writing skills;
- MS Office skills;
- Basic knowledge related to the selected topic.

### **Details of the position:**

- One-time financial allotment for field research purposes (incl. flights, accommodation, and research assistant) will be discussed on individual basis;
- Guidance of the research and MA thesis work by Dr. Prof. Klaus Müller (ZALF/HU), Dr. Stefan Sieber (ZALF/HU), Dr. Marcos Lana (SLU), and Michelle Bonatti, Katharina Löhr, Charles Mgeni, Dr. Götz Uckert, Johannes Hafner, Dr. Frieder Graef and Jonathan Steinke (ZALF);
- Local structure, housing, support personnel and driver are provided by the project's organization.
- The student will be integrated into a Master thesis program hosted by ZALF-HU-SLU.
- An initial three-day training on intercultural conflict prevention and management at the Sokoine University of Agriculture (SUA) will be provided (10, 11 and 12 January 2018)
- Starting point is January 2018; a final thesis is expected to be submitted within six months.

## Applicants are required to submit the following documents via e-mail:

- Motivation letter (0,5 page);
- Short summary of bachelor thesis (0,5 page);
- Research proposal on the selected topic (1 page).
- Short Curriculum Vitae (including one academic referee);



#### **Coordination:**

The Leibniz-Centre for Agricultural Landscape Research (ZALF) and Humboldt University of Berlin (HU): Dr. Stefan Sieber Michelle Bonatti

**Swedish University of Agricultural Sciences (SLU):** Dr. Marcos Lana

**Local coordination Sokoine University (SUA):** Dr. Kamaldin Mutabase Dr. Hadijah Mbwana