

Announcement for a PhD scholarship on

“Contribution of processed fruits and vegetables to sustainable nutrition in Sub-Saharan Africa”

at the Department of Crop Sciences, Division Quality of Plant Products, University of Göttingen, Germany

Background

The FruVaSe project will start in September 2018 to work on “Fruits and vegetables for all seasons: Improved resource-efficient processing techniques and new market solutions for surplus fruits and vegetables for rural development in Sub-Saharan Africa”. The three-year project will be led by University of Göttingen (UGOE) in collaboration with Erfurt University of Applied Sciences (EUAS) in Germany, Nelson-Mandela African Institution for Science and Technology (NM-AIST) in Tanzania, Makerere University (MUG) in Uganda, University of Nairobi (UoN) and University of Eldoret (UoE) in Kenya. FruVaSe will (i) select the nutritionally most promising varieties of the target fruits and vegetables (FVs), focussing on cashew apple, guava, jackfruit, and the green leafy vegetables cowpea leaves, cassava leaves and African nightshade, (ii) develop new and evaluate traditional technologies for processing and prolonged shelf-life without degrading the nutritive value, taste and presentational characteristics, and (iii) possibly commercialize products. An integrated systems’ approach (water-energy-food-waste (WEFW) nexus) shall be followed, aiming at (iv) the model development of an energy autonomous, resource-efficient processing procedure embedded in a business model empowering rural women. In a life-cycle approach all parts of the plants will be used, for human nutrition, animal feed and/or biogas production, the sludge being used as fertilizer, thereby reducing greenhouse gas (GHG) emissions. Additionally, (v) a water re-use concept will be established as well as an analysis and innovative purification of drinking water for juice production.

For the work package on “*Food patterns and knowledge, attitude and practice of consumption of selected processed fruits and vegetables*” we are looking for one PhD student who is highly motivated to work on the above mentioned topic in a multi-disciplinary and international team.

Responsibilities/research tasks

In consultation with the supervisors at University of Göttingen and Nelson-Mandela African Institution for Science and Technology in Tanzania, the PhD student will

- Determine the nutrition and health status, food and nutrient intake, dietary patterns and dietary diversity of different household members during different seasons.
- Assess the nutritional knowledge and attitudes towards consuming fruits and vegetables in general and consuming the selected processed fruits and vegetables in particular.
- Identify an optimal and high quality diet for women and other family members through modelling at lowest costs and for different seasons integrating the processed fruit and vegetable products.

Educational qualifications, skills and experience

- MSc with distinction/ honours in agricultural sciences, nutritional sciences or related fields
- Very good command of English is required
- Work experience in Sub-Saharan Africa is preferred
- Experience in the field of nutritional assessment is preferred
- Team player; willingness to assume responsibility and work on own initiative
- High interest in other disciplines and willingness to work in a multi-disciplinary team
- Proficiency in relevant statistics is essential
- Willingness to travel and spend several months alternately in East Africa and Germany

What we offer

- Scholarship according to the German Academic Exchange Service (DAAD) regulations in Germany or in the relevant country
- International and interdisciplinary project to work in together with several other PhD and MSc students from different disciplines in all participating countries

Duration and preferred dates: 1st September 2018 – 31st August 2021

Contact: Prof. Dr. Elke Pawelzik, University of Göttingen, Department of Crop Sciences, Division Quality of Plant Products, Carl-Sprengel-Weg 1, 37075 Göttingen, Germany

Please submit your application (CV, a one-page motivation statement and a synopsis of your proposed research [maximum four pages]) online to: epawelz@gwdg.de. Deadline for applications is **July 23, 2018**.