Announcement

HORTINLEA (Horticultural Innovation and Learning for Improved Nutrition and Livelihood in East Africa) is an interdisciplinary research project addressing food security in East Africa, particularly in Kenya. 19 East African and German universities and research institutes work collaboratively to generate and distribute knowledge in order to increase horticultural production and consumption, especially of African Indigenous Vegetables (AIVs). The overall goal is to improve the livelihood and nutritional situation of the rural and urban poor.

The project is looking for Master students who are interested in conducting their Masters’ thesis with HORTINLEA and who have already demonstrated excellent performance in their field of research in East Africa or Germany. The Master’s Thesis Programme will give students the opportunity to get insights into a multi-stakeholder international research project. Moreover, students will work at the interface between interdisciplinary and transdisciplinary approaches and analyse how innovative knowledge exchange can promote food and nutrition security in East Africa. In this regard, students will be linked with the policy arena, private sector, NGOs, value chain and other relevant Kenyan and international actors. The project offers challenging case studies, financial support for the thesis writing phase, insights into project survey data, as well as experienced researchers and practitioners, who are ready to supervise and guide students through their thesis. Furthermore, the students will be encouraged to present the results of their Master’s thesis at international conferences and publish at least one peer-reviewed article.

The Centre for Rural Development /SLE and the Regional Office of the World Vegetable Centre in Eastern and Southern Africa /AVRDC-ESA as part of the HORTINLEA research project have identified 2 potential research topics for Master theses from different research areas related to knowledge management and knowledge exchange. Descriptions of the theses projects can be found here.

Selection criteria:
- Very good Bachelor degree in agricultural, communication or any related field
- Excellent performance in their current study
- Profound knowledge of qualitative and quantitative research methods
- Fluency in English with very good writing skills as well as knowledge of local languages in the partner countries (Kenya, Tanzania, Ethiopia).

Candidates should be registered at Kenyan, Tanzanian, Ethiopian or German universities and be about to start their Master’s thesis. Students are invited to apply by writing a one page synopsis on the suggested specific topic and are free to decide what their synopsis should look like, based on the information provided in the theses project description.

Applicants are required to submit the following documents via e-mail:
- Synopsis on the specific topic (1 page)
- Motivation letter (0,5 page)
- Curriculum Vitae (including academic referees)
- Short summary of bachelor thesis (max. 2 pages)

The deadline for applying for the SLE Master’s Thesis Programme is July 4th 2016 by following the application procedure outlined in the project description of each individual topic. You are welcome to apply for more than one thesis topic - in that case please send one joint application and make sure to prioritise the different topics. Applications received after the deadline will not be considered. Please send your application as one PDF file to: marlen.bachmann@agrar.hu-berlin.de. Selected candidates will be notified by July 15th 2016.
Improving food and nutrition security through AIVs at Kakuma refugee camp

The Centre for Rural Development /SLE and the Regional Office of the World Vegetable Centre in Eastern and Southern Africa /AVRDC-ESA as part of the HORTINLEA research project, funded by the German Federal Ministry of Education and Research (BMBF) and by the Federal Ministry for Economic Cooperation and Development (BMZ) through the GlobE overall initiative, seeks to improve the livelihood and nutritional situation of the rural and urban poor in East Africa by generating and exchanging knowledge on how to improve, increase and diversify horticultural production especially of African Indigenous Vegetables (AIVs). Two Master theses will contribute to the research activities promoting knowledge exchange and transfer of research results into policies and practice. Under the supervision of academics from East African universities, from the AVRDC-ESA and from the SLE - at the Humboldt-Universität zu Berlin applicants are expected to develop, define and implement their Master theses projects.

The ongoing research activities focus on assessing the potential of AIVs to address food and nutrition challenges among refugees at Kakuma camp and the host communities. Kakuma multinational camp founded in 1992 hosts over 180,000 refugees from South Sudan (50%) and Somalia (30%) (WFP, 2014). Refugee camps are characterised among others by a high level of malnutrition due to inhabitant’s dependency on food aid that may vary in quality and quantity (Brent et al., 2000).

AIVs have a great potential for helping to tackle the problem of malnutrition due to their high content in micronutrients. In comparison, AIV species such as Amaranth (Amaranthus spp),
There are some indications of the high market potential of AIVs. For instance, a 2012 study into the willingness to pay a premium for AIVs in Eldoret Town in Kenya showed that consumers “generally preferred AIVs” and were also ready to pay 79% more than they would have paid for exotic vegetables (Chelang’a et al., 2013). They also require few inputs because they are well adapted to the ecological conditions in Kenya and are mostly produced by smallholder farmers (Abukutsa, 2006).

One of the two Master’s theses is expected to analyse the role and potential of AIVs in food culture and food habits to improve food and nutritional security in the Kakuma refugee camp and in the host communities in Kakuma town. As a pilot study, it will provide evidence and knowledge for planning interventions to introduce/promote small-scale AIV farming in Kakuma in the north-western region. The thesis is expected to: (1) assess dietary pattern with focus on women and children, (2) analyse food habits and the history of the people’s diet in view of origin and food culture, especially in relation to the AIV consumption, (3) analyse mechanisms and channels of information exchange and identify lessons (good as well as failed examples) emerging from the work of relevant research and aid organisations, (4) provide recommendations on how to introduce and/or promote small-scale AIV farming in Kakuma refugee camp and to the host communities in Kakuma town in Kenya.

Beside the high potential of AIVs to tackle malnutrition, it has been claimed that the genetic diversity of AIVs has significant untapped potential in terms of climate change adaptation (Shackleton C. M. et al., 2009). AIVs fit well with the objectives of climate smart agriculture being easy adaptable to different climate conditions and productive under low input systems especially for drought periods (Barnabas K. et al., 2015). Thus, the second Master’s thesis is expected to analyse the agro-morphological characterisation and better utilisation of AIVs in correspondence with climate change in Kakuma refugee camp and in Kakuma town in the north-western region of Kenya. The study aims at enhancing AIVs value chain development for non-traditional cultivation areas and should examine the growth and productivity of AIVs at selected sites in north-western semi-arid region struggling with cyclical droughts. In doing so, the thesis should also focus on the production and marketing constraints and identify entry points for future interventions. It is required that the analysis will be combined with qualitative methods to access the traditional knowledge associated with the production of similar indigenous plants and especially leafy vegetables.

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**Candidates Qualifications**

Applicants should have a background in at least one of the following fields: economics/finance, agriculture/horticulture or related fields. Applicants must hold a Bachelor’s degree with excellent results. Very good written and oral English and excellent MS Office skills are essential for this position. Of advantage are as well relevant publications and very good writing skills, methods/experience for/in empirical social research, excellent organisation and communication skills. Applicants should be registered as Master students and be about to start their Master’s thesis.

The deadline for applying for this thesis topic is July 4th 2016. Please send your application to: marlen.bachmann@agrar.hu-berlin.de

**High Market Potential of AIVs in Kenya**

There are some indications of the high market potential of AIVs. For instance, a 2012 study into the willingness to pay a premium for AIVs in Eldoret Town in Kenya showed that consumers “generally preferred AIVs” and were also ready to pay 79% more than they would have paid for exotic vegetables (Chelang’a et al., 2013). They also require few inputs because they are well adapted to the ecological conditions in Kenya and are mostly produced by smallholder farmers (Abukutsa, 2006).

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Nightshade (*Solanum villosum*) and Spider Plant (*Cleome gynandra*) contain almost twice as much protein, 2-4 times more calcium, 1.5-2 times more vitamin A and more than 4 times as much vitamin C as spinach for instance. (Abukutsa, 2006).