



PhD Topic 2: Managing nutritional and entrepreneurial objectives

In the Great Lakes Region agricultural production serves the double aim to feed the family and to generate income. While for a single product, nutritional and entrepreneurial objectives are mutually exclusive, these objectives may coincide at farm level. In a transition to a more entrepreneurial farming, the way to ensure or create synergies between stepping up to entrepreneurial farming and achieving nutrition outcomes (diet quality and anthropometric measurements) is critical. The scientific literature shows that increasing productivity and income alone is not sufficient to improve nutritional outcomes such as diet quality and anthropometric measurements, in particular in transitional phases when farm households face limited market access to sell their own produce and buy additional food. In various cases, even negative trade-offs between more commercial farming and nutritional outcomes have been observed, which is coined ‘the curse of the cash crops’.

This PhD will investigate how stepping up towards entrepreneurial farming can benefit and avoid trade-offs for nutritional outcomes, of the farming households as well as of the rural and peri-urban consumers. An additional dimension of the research will explore how creating demand for nutritious products can potentially also benefit entrepreneurial aims. In collaboration with public and private development partners, various pathways and models will be assessed in the context of banana- and cassava-based agrifood systems in Central Africa, with an initial focus on Rwanda.

Starting research questions include:

- What are current trade-offs between nutrition outcomes and commercial farming in different farming systems as implemented by the farmers?
- What are risk factors for trade-offs between entrepreneurial farming and nutrition outcomes?
- How can transitioning to entrepreneurial farming benefit nutrition outcomes for different types of farm households?
- How can government, public and private development organizations use this information to improve their programs, targeting also nutrition objectives?

Institutional context and supervision

- The PhD student will be enrolled in the PhD program of Ghent University in Belgium on a sandwich PhD scholarship. The total duration of the PhD is 4 years, of which 18 to 24 months in total will be spent in Belgium.
- CIALCA provides so-called ‘sandwich’ PhD scholarship. The ‘sandwich’ modality implies that PhD candidates receive a stipend when in Belgium, and that their Rwandese academic or research institute provides salary when the PhD candidate is conducting



fieldwork in their respective country. The PhD scholarship covers all operational costs related to the implementation of the research.

- Professors Marijke D’Haese and Carl Lachat from Ghent University will serve as promoter and co-promoter.
- The project is part of the CIALCA consortium and network and will be co-supervised by researchers from CGIAR centres IITA and Bioversity International, as well as with national research and development partners.

Who is our ideal candidate?

Required for this position:

- Enthusiasm for research in general and for agriculture and nutrition in particular;
- A MSc Degree or equivalent in nutrition, agricultural economics, agricultural engineering, or related;
- Research and analytical skills that provide a starting point for completing the above-described PhD project;
- Proficiency in statistics;
- Having previously completed at least one individual research project (e.g. a MSc thesis);
- Proficiency in English and good understanding and communication in French;
- Good verbal and written communication and collaborative skills;
- Good skills on scientific paper writing;
- Be employed by national agricultural research institution or local universities in Rwanda;
- Have Rwandese nationality.

Desirable for this position:

- Experience with public or private sector development initiatives.

Application procedure:

- Applicants are to submit a concise letter of motivation, a detailed CV, the names of at least 3 relevant referees, and copies of BSc and MSc diplomas and transcripts indicating all courses and obtained degrees;
- Applications are to be submitted to agecon@ugent.be before 30 June 2018, midnight (Brussels time);
- Only short-listed candidates will be notified;
- Short-listed candidates are subject to an interview and written assessment.