

THE UNIVERSITY OF ZAMBIA

SCHOOL OF AGRICULTURAL SCIENCES
DEPARTMENT OF FOOD SCIENCE AND NUTRITION
DEPARTMENT OF AGRICULTURAL ECONOMICS

CALL FOR APPLICANTS

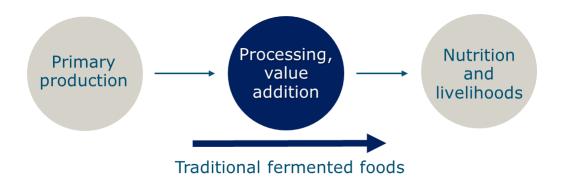
3 POSITIONS FOR PHD CANDIDATES

The School of Agricultural Sciences of the University of Zambia is seeking to recruit three PhD candidates within the framework of a research project on traditional fermented foods in Zambia. This project is a collaboration between UNZA, the Université d'Abomey Calavi in Benin, Chinhoyi University of Technology in Zimbabwe and Wageningen University in the Netherlands. The project is funded through Wageningen University.

The project

This project targets the promotion of food and nutrition security in Africa by ameliorating the quality and use of traditional fermented foods by improvement of traditional processing, diversification of diets and research on potential beneficial effects on gut microbiota. In addition, traditional fermented foods are an opportunity for the strengthening the local value chains and the fostering of women entrepreneurship at the level of small-scale producers. Fermented foods are characterized transformation of raw materials by microorganisms makes foods generally safe, highly nutritious and sensory attractive with an increased shelf-life, while creating entrepreneurship opportunities for local women. So far efforts to combat hunger and malnutrition have largely overlooked the potential of the improvement of local food processing and optimization of the concerned value chains. Hence, the upgrading of fermented foods can stimulate (women) entrepreneurship and is expected to have a direct effect on food and nutrition security by increased availability of fermented foods and through income generation to support livelihoods. There thus is a need for scientific research to formalize and upscale traditional processing of traditional fermented foods, to maximize nutritional impact and to develop value chains and strategies for entrepreneurship. The project targets traditional fermented foods in Zambia, Zimbabwe and Benin. This call for applicants concerns parts of the project connected to Zambian traditional fermented foods.

The full project description is available upon request.



PhD position #1. Upgrade traditional processing of Mabisi. Currently, traditional Mabisi is produced at household level. The overall aim of this PhD project is to research how to establish upgrading of artisanal household level production to small-to-medium enterprises at local farmer/producer cooperatives by designing the technological processes needed to upscale the production in current production areas. Here, we build on a previous PhD research project that characterized current traditional processing practice.

Fields of interest: food science and technology, biotechnology, food fermentation.

Supervisors and collaborators: Dr Bernard Moonga, Dr John Shindano (UNZA); Dr Anita Linnemann, Prof Eddy Smid, Dr Sijmen Schoustra (Wageningen University).

Contact: Bernard.Moonga@wur.nl; Anita.Linnemann@wur.nl; Eddy.Smid@wur.nl

PhD position #2. Microbial ecology and nutrition. Previous work on Mabisi and Munkoyo has highlighted these products can contribute to improvements of diets and to positive shifts in gut microbiota which could be of benefit to human health. The aim of this PhD project is to generalize these findings to a wider range of products in Zambia and Zimbabwe and their potential contributions to diets, and to perform more elaborate studies on the interaction of microbial communities from the fermented products and microbial communities in the gut microbiota.

Fields of interest: nutrition, microbial ecology/evolution, functional microbiology.

Supervisors and collaborators: Dr Pamela Marinda (UNZA), Dr Elise Talsma, Dr Sijmen
Schoustra, Prof Bas Zwaan (Wageningen University), Dr Justin Chileshe (TDRC).

Contact: Pamela Marinda ayiera@yahoo.co.uk, elise.talsma@wur.nl, sijmen.schoustra@wur.nl, justin.chileshe@wur.nl

PhD position #3. Fostering women entrepreneurship. This PhD project aims at scientific study on how to enhance conditions for locally initiated entrepreneurship in the traditional Mabisi value chain as source of income and opportunities for women and youths operating in local farmer cooperatives and households engaged in dairy farming. The study entails the development of value chains embedded in the domestic and local economic, legal and social-cultural environment. It may include tools like the New Institutional Economics analysis framework to understand how various factors in the action domain foster or indeed inhibit women & youth entrepreneurship, using the traditional Mabisi value chain in Zambia as case study. Fields of interest: entrepreneurship, business development, agricultural economics, value chain development, innovation management, institutional economics, organization theory, qualitative and/or quantitative research methodologies, New Institutional Economics analysis framework(s).

Supervisors and collaborators: Dr Rebecca Lubinda (UNZA), Dr Valentina C Materia, Prof Wilfred Dolfsma, Dr Sijmen Schoustra (Wageningen University).

Contact: rlubinda@unza.zm; valentina.materia@wur.nl

General information and application procedure for all three positions.

For all three positions, a Master degree in a relevant field is required. PhD projects have a duration of four years and are aimed at Zambian PhD candidates. PhD candidates will perform half their PhD work at UNZA and half their work in Wageningen and will graduate from Wageningen University. A stipend will cover stay and all expenses when in Wageningen and some expenses when in Zambia.

To apply, submit (a) a cover letter (max 2 pages) outlining your motivation and suitability for the project clearly indicating which project you are applying for and why, (b) your CV (max 4 pages) including names and contact details of two potential references and (c) scans of your academic bachelor and master transcripts. All these materials should be submitted by email to the contact email addresses listed for the PhD position you are applying for AND to Dr John Shindano (jshinda@yahoo.co.uk) and Dr Sijmen Schoustra (sijmen.schoustra@wur.nl). Deadline for applications is Friday 11 October 2019. Interviews are planned for the week of 28 October for which shortlisted candidates will be contacted. These interviews will be held in Lusaka. PhD projects are planned to start in January 2020.

For more information on the project, you may contact Sijmen Schoustra (overall project coordinator and Visiting Lecturer at UNZA; sijmen.schoustra@wur.nl) and Dr John Shindano (Assistant Dean Research and project coordinator at UNZA; jshinda@yahoo.co.uk). For enquiries on individual PhD projects, you may use the contact email addresses listed per PhD project.

 $\frac{https://www.wur.nl/en/project/Traditional-fermented-foods-to-promote-food-and-nutrition-security-in-Africa.htm}{}$



