UNITED REPUBLIC OF TANZANIA

MINISTRY OF EDUCATION, SCIENCE AND TECHNOLOGY

UNIVERSITY OF DAR ES SALAAM

COLLEGE OF AGRICULTURE AND FOOD TECHNOLOGY

SCHOLARSHIP OPPORTUNITY FOR PHD STUDIES IN FOOD SECURITY PROGRAMME

(*Readvertised*)

The Sustainable Agricultural Production and Value Addition for Enhancing Food Security in Tanzania (Food Security) a Sida-funded sub-programme, has one scholarship positions for PhD studies commencing in 1 November 2025 at UDSM.

Eligibility:

- The scholarships are strictly intended for UDSM staff only;
- Applicants must have a GPA of at least 3.8 for a Bachelor degree and a good Master degree with a GPA of 4 or above for dissertation or a pass for thesis;
- Master degree must be less than 5 years old;
- Qualified females are encouraged to apply.

Area of study are:

Value Addition to agroWastes: Production of cricket from agricultural waste

The increasing demand for animal protein to cater to the ever growing human population has prompted the quest for alternative protein sources from insects. Crickets are among insect species of major interest, its rearing is attracting attention as a novel way to produce food and feed because they are more eco-friendly due to their low emission of greenhouse gases, low water and feed intake, and the small land requirement for their production. However, rearing of crickets at large scale depends on the commercial chicken feed, which is expensive to the ordinary people and therefore cannot be sustained.

Rearing crickets using substrate waste presents a sustainable and innovative approach to food production. Substrate waste, such as agricultural byproducts (e.g., fruit and vegetable scraps, grain husks) and food waste, can be repurposed as feed for crickets. Utilising waste materials as feed can significantly lower the costs associated with cricket farming. Conversion of waste into high-quality protein will help to meet the growing global demand for alternative food sources. This method contributes to a circular economy, it minimises landfill waste and reduces greenhouse gas emissions associated with waste decomposition.

Objective: This study aims to optimise the rearing conditions and substrate composition for crickets to enhance growth rates, survival, and nutritional quality, while minimising environmental impact and production costs.

Supervision: Supervisors will be from the University of Dar es Salaam.

Additional eligibility: Applicant should have a background in Entomology, Food Science, Agriculture, Chemical and Process Engineering, Food Science, Biochemical Engineering or a related field. Experience with insect rearing is an added advantage.

Additional information: Application must be accompanied with transcripts, certificates, CV and a concept note of not more than two pages for the above PhD position. The application must reach the Project Principal Investigator by 20th October 2025. Submit your application in electronic form to: victor.vicent@udsm.ac.tz and copy to kibazohi@yahoo.com, kibazohi@udsm.ac.tz, and estnacky@gmail.com

Short listed applicants will be interviewed before end of October 2025. Selected applicants will commence studies on 1st November 2025.