

The Chancellor of Ghent University has the honour of inviting you to attend the public defense of the doctoral dissertation of

ing. Margo Degieter

Title of the doctoral dissertation:

A stakeholder analysis and sustainability assessment from a life cycle perspective of plant-based protein value chains in Europe

The public defence will take place on 9 December 2024 at 17:00 in Auditorium E2 at Campus Coupure, Coupure Links 653, 9000 Ghent.

There will be a contiguous reception to which you are heartily invited. Please confirm your attendance before 28 November with the following link:

https://ugent.qualtrics.com/jfe/form/SV_5yV3FZKEeS4O7ki

Dissertation supervisors

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Abstract of the doctoral research

Our current food system causes environmental issues, including biodiversity loss, deforestation, soil depletion, water pollution, and climate change. The high consumption of animal proteins in wealthy countries is unsustainable. With a projected global population of 9.7 billion by 2050, food and protein demand will rise. Shifting from animal to plant-based proteins can reduce environmental impacts, enhance food security, and improve public health. The market for plant-based proteins is growing rapidly, but Europe relies on imports, making its supply chains vulnerable. This PhD research explores the sustainability of protein-rich crops and plant-based foods in Europe, as well as stakeholder perceptions within the agri-food chain. The first part of the research uses life cycle assessment (LCA) and life cycle costing (LCC) to analyze sustainability. Protein-rich crops and their transformation into tempeh are studied, showing how results vary depending on methodological choices. The second part examines stakeholder perceptions, including the willingness of Belgian and Dutch farmers to grow protein-rich crops, influenced by environmental goals, risk aversion, and farm size. Other stakeholder views on plant protein chains depend on familiarity, confidence in sustainability, and stakeholder type. This PhD underscores the need for a multidimensional approach to sustainability and the key role of stakeholders in a successful shift to sustainable food systems in Europe.

Brief Curriculum Vitae

Margo Degieter is a doctoral researcher in the Agri-food Marketing and Chain Management research group, Department of Agricultural Economics at Ghent University, Belgium. She obtained masters' degrees in Biochemical Engineering Technology and complementary Studies in Economics at Ghent University. Her current research focuses on sustainability and stakeholder perceptions of plant-based food chains.

During her doctoral studies, Margo was involved in the Horizon2020 European project, Smart Protein and WeLASER. In addition, she was involved in the Erasmus+ project eTOMATO. She is (co-)author of scientific publications in peer-reviewed journals and she has presented her research at multiple international scientific conferences.