Prof. dr. ir. Charlotte Janssens

Center for Environmental Sciences (CMK), Hasselt University
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Marital Status: Married to Olivier Kamers
Citizenship: Belgian
Languages: Dutch (*native*), English (*fluent*), French (*working knowledge*)

RESEARCH INTERESTS

climate change adaptation & mitigation; food security; agriculture, forestry & land use; markets & trade; spatial economic analysis; dynamic economic modelling; integrated assessment modelling

ACADEMIC POSITIONS

2025 – current	Assistant Professor, Hasselt University, Belgium
2023 – current	Postdoctoral Fellow, Research Foundation – Flanders (FWO), Belgium.
2023	Postdoctoral researcher, Division of Bioeconomics, University of Leuven (KU Leuven), Belgium.
2023 – current	Guest Researcher, Biodiversity and Natural Resources (BNR) Program, International Institute for Applied Systems Analysis (IIASA), Austria.
2018 – 2022	Doctoral researcher, Division of Bioeconomics, KU Leuven, Belgium.
2018 – 2022	Guest Researcher Assistant, BNR Program, IIASA, Austria.

INTERNATIONAL MOBILITY

2023 – 2024	Visiting Researcher, Paris-Saclay Applied Economics (PSAE), INRAE, France. *Host: Dr. Christophe Gouel*
2023 – 2024	Visiting Researcher, Department of Geosciences, ENS, France. *Host: Dr. Carole Dalin*
01 – 03.2022	Visiting PhD Student, Department of Economics, Massachusetts Institute of Technology (MIT), USA. *Supervisor: Prof. Dr. Dave Donaldson*
2018 – 2022 (20 weeks)	Visiting Guest Researcher, Biodiversity and Natural Resources Program, IIASA, Austria. *Supervisor: Dr. Petr Havlik*
08 – 10.2016	Intern, Development Strategy and Governance Division, International Food Policy Research Institute (IFPRI), Ghana. *Supervisor: Dr. Isabel Lambrecht*

EDUCATION

PhD	Bioscience Engineering, KU Leuven, 2022 *Supervisors: Prof. Dr. Ir. Miet Maertens, Prof. Dr. Nicole Van Lipzig, Dr. Petr Havlik*
MSc	Agro- and Ecosystem Engineering (Major Economics*),* KU Leuven, 2017 *Summa cum laude with congratulations of the Board of Examiners*
BSc	Bioscience Engineering, KU Leuven, 2015 *Magna cum laude*

GRANTS AND AWARDS

04.2025	**BVLE/ABER PhD Award 2022-2025,** Belgian Association of Agricultural Economists (BAAE)
10.2023 – 09.2027	**Junior Postdoctoral Fellowship**, Research Foundation - Flanders (FWO) (*21.2% success rate*) Project: Modelling of agricultural markets and market impacts across spatial and temporal scales: Application to climate change scenario studies
10.2023 – 03.2024	**Grant** for long research stay abroad, Research Foundation - Flanders (FWO) Host Institute: UMR Paris-Saclay Applied Economics, Université Paris-Saclay, France
09.2023	**Grant** for participation in a conference abroad, Research Foundation - Flanders (FWO) Conference: 7th African Conference of Agricultural Economists, South Africa
01.2023 – 09.2023	**Post-Doctoral Mandate** Type 2, KU Leuven (*53% success rate*) Project: Linkages between Trade, Agriculture and Climate Change across Spatial and Temporal Scales
04.2022	Best Paper **Award,** Belgian Association of Agricultural Economists (BAAE) Paper: Trade, Storage and Climate Extremes: Evidence from Sub-Saharan Africa
01.2022 – 03.2022	**Grant** for long research stay abroad, Research Foundation - Flanders (FWO) (*62.50% success rate for 2020 call*) Host institute: Department of Economics, Massachusetts Institute of Technology (MIT), USA
01.2019 – 12.2022	**PhD Fellowship** Strategic Basic Research, Research Foundation - Flanders (FWO) (*28.90% success rate*) Project: The role of Agricultural Trade and Trade Policy in Climate Change Mitigation and Adaptation

TEACHING

2025 – 2026	Sustainable Tourism Management, UHasselt (MSc course, full) Introductory Economics, UHasselt (BSc course, full)
2024 – 2025	Climate and Resource Economics, KU Leuven (MSc course, full)
2022 – 2023	Environmental and Resource Economics II, KU Leuven (MSc course, full)
2020 – 2021	Environmental and Resource Economics II, KU Leuven (MSc course, three lectures) Bio-economics, KU Leuven (BSc course, exercise sessions) World Food and Ecosystems, University of Amsterdam (BSc course, guest lecture)

2019 – 2020 2018 – 2019	Environmental and Resource Economics II, KU Leuven (MSc course, exercise sessions)
2017	Teaching assistant BSc courses, Faculty of Bioscience Engineering, KU Leuven

PROFESSIONAL SERVICE

Academic journals	**Associate Deputy Editor** Climatic Change **Peer Review** Nature, Nature Climate Change, Nature Food, Nature Communications, Agribusiness: an International Journal, Agriculture & Food Security, Food Security, Global Change Biology, Global Environmental Change.
Advisor	**Daily supervisor for MSc Thesis students**
2021 – 2022	C. Coosemans, "Intra-national trade costs and food trade in Sub-Saharan Africa"
2018 – 2019	K. Veirman, "Adapting to a changing climate: potential role for intra-African agricultural trade?"
Institutional Service	
2023 – 2025	European Network of Early Career Agricultural Economists (AgEconMeet)
2022 – 2023; 2017 – 2018	ACE/LB steering committee, Faculty of Bioscience Engineering, KUL
2019 – 2021	Ecoteam, Department of Earth and Environmental Sciences, KU Leuven

PUBLICATIONS

2026 **Janssens C**. 2026. "Trade, storage, and climate extremes: Theory and evidence from Sub-Saharan Africa", *Journal of Development Economics* 182

2024 Keulemans W., Avermaete T., De Coninck B., De Tavernier J., Elsen A., Govers G., Honnay O., **Janssens C.,** Rolland F., Saeys W., Van Overwalle G. (2024). 'Duurzame landbouwproductie en de maatschappelijke uitdagingen'. Metaforum visietekst 22, 1-140. Leuven: Werkgroep Metaforum. link

Koen De Vos, **Charlotte Janssens**, Liesbet Jacobs et al. 2024. "African food system and biodiversity mainly affected by urbanization via dietary shifts" *Nature Sustainability* 7, 869–878.

2023 Koen De Vos, **Charlotte Janssens**, Liesbet Jacobs, Benjamin Campforts, Esther Boere, Marta Kozicka, Petr Havlik, Christian Folberth, Juraj Balkovič, Miet Maertens, and Gerard Govers. 2023. **"**Rice availability and stability in Africa under future socio-economic development and climatic change" *Nature Food* 4(June):518-527.

2022 **Charlotte Janssens.** 2022. "The Role of Agricultural Trade and Trade policy in Climate Change Mitigation and Adaptation". (PhD dissertation; December 2022)

Charlotte Janssens, Petr Havlík, Esther Boere, Amanda Palazzo, Aline Mosnier, David Leclère, Juraj Balkovič, and Miet Maertens. 2022. "A Sustainable Future for Africa through Continental Free Trade and Agricultural Development." *Nature Food* 3(August):608–618.

Santiago Guerrero, Ben Henderson, Hugo Valin, **Charlotte Janssens**, Petr Havlík, and Amanda Palazzo. 2022. The Impacts of Agricultural Trade and Support Policy Reform on

Climate Change Adaptation and Environmental Performance: A Model-Based Analysis. *OECD Food, Agriculture and Fisheries Papers* 180.

2021 Stefan Frank, Petr Havlík, Andrzej Tabeau, Peter Witzke, Esther Boere, Mariia Bogonos, Andre Deppermann, Michiel van Dijk, Lena Höglund-Isaksson, **Charlotte Janssens**, Monika Kesting, Hans van Meijl, Ignacio Pérez-Domínguez, and Hugo Valin. 2021. "How Much Multilateralism Do We Need? Effectiveness of Unilateral Agricultural Mitigation Efforts in the Global Context." *Environmental Research Letters* 16(10):104038.

Hao Zhao, Jinfeng Chang, Petr Havlík, Michiel van Dijk, Hugo Valin, **Charlotte Janssens**, Lin Ma, Zhaohai Bai, Mario Herrero, Pete Smith, and Michael Obersteiner. 2021. "China's Future Food Demand and Its Implications for Trade and Environment." *Nature Sustainability* 4(12):1042–51.

Charlotte Janssens, Petr Havlík, Tamás Krisztin, Justin Baker, Stefan Frank, Tomoko Hasegawa, David Leclère, Sara Ohrel, Shaun Ragnauth, Erwin Schmid, Hugo Valin, Nicole Van Lipzig, and Miet Maertens. 2021. "International Trade Is a Key Component of Climate Change Adaptation." *Nature Climate Change* 11(11):909–10.

2020 **Charlotte Janssens,** Petr Havlík, Tamás Krisztin, Justin Baker, Stefan Frank, Tomoko Hasegawa, David Leclère, Sara Ohrel, Shaun Ragnauth, Erwin Schmid, Hugo Valin, Nicole Van Lipzig, and Miet Maertens. 2020. "Global Hunger and Climate Change Adaptation through International Trade." *Nature Climate Change* 10:829–835.

2019 **Charlotte Janssens,** Goedele Van Den Broeck, Miet Maertens, and Isabel Lambrecht. 2019. "What If Mothers Are Entrepreneurs? Non-Farm Businesses and Child Schooling in Rural Ghana." *Journal of Rural Studies* 66(February):95–103.

WORK IN PROGRESS

"GHG emission efficiency of international agri-food trade flows"
with C. Dalin, C. Gouel, T. Gasser, and J. Verschuur

"Food's Carbon Plateau: 30 Years of Stable Emissions amid Surging Demand"
with C. Gouel, M. Bruckner, S. De-Cara Stéphane, and T. Gasser

"Sub-national markets and international trade: Key to understand climate change adaptation in Eastern and Southern Africa"
with M. Maertens and P. Havlík.

CONFERENCE PRESENTATIONS

2026 BSCA Conference 2026, Brussels, Belgium

2025 EAAE Conference 2025, Bonn, Germany

2024 Global Food Security Conference 2024, Leuven, Belgium (invited keynote)
The impact of agri-food trade in a changing climate: Mitigation, adaptation, and food security

2023 AAAE Conference 2023, Durban, South Africa

Sustainable future for Africa through continental free trade and agricultural development
EAAE Conference 2023, Rennes, France
Sub-National Markets and International Trade: Key to Understand Climate Change Adaptation in Eastern and Southern Africa
AAEA Conference 2023, Washington DC, USA
Track session: Adaptation to Climate Change Through International and Intra-national Trade
CSAE Conference 2023: Economic Development in Africa, Oxford, United Kingdom
Trade, Storage and Climate Extremes: Evidence from Sub-Saharan Africa

2022 AgEconMeet Conference, Göttingen, Germany
Towards an improved modelling of agricultural markets across spatial and temporal scales: Implications for climate change scenario studies

2021 GTAP Annual conference, Virtual.
Modelling intra- and international trade in crop markets in Africa
EAAE Triennial Congress (organized session), Virtual.
Trading Agricultural Goods across the African continent
ICAE Triennial Conference, Virtual.
The African Continental Free Trade Area: Trading Africa into Sustainability?

2020 AGU Fall Meeting (invited talk), Virtual.
Global Hunger and Climate Change Adaptation through International Trade

2019 IATRC Annual Meeting, Washington DC USA.
Trading Agricultural Goods Across the African Continent – GLOBIOM Scenario Analysis
IATRC Symposium, Seville, Spain.
Global Hunger and Climate Change Adaptation through International Trade

2018 ICAE Triennial Conference, Vancouver, Canada.
Mothers' Non-Farm Entrepreneurship and Child Secondary Education in Rural Ghana

OUTREACH

2024 Economics That Really Matters blogpost:
https://www.econthatmatters.com/2024/04/coping-with-climate-extremes-through-storage-and-trade-evidence-from-sub-saharan-africa/

2023 De Aardrijkskunde, Jaarboek 2023, Feiten en Mythes over Duurzame voeding
Tessa Avermaete, Erika De Keyser, Katrijn Coeckelberghs, Charlotte Janssens

2021 Anthropocene: https://www.anthropocenemagazine.org/2022/01/eat-globally/
Podcast 'Planeet Frank': https://podcastluisteren.nl/ep/Planeet-Frank-Over-de-zon-buitenaardse-intelligentie-en-melk
KU Leuven Blogt: https://kuleuvenblogt.be/2021/01/22/achter-de-schermen-bij-planeet-frank-hoe-duurzaam-zijn-plantaardige-melkvervangers/

2020 SDG Knowledge Hub: http://sdg.iisd.org/commentary/guest-articles/global-hunger-and-trade-under-globalwarming/
EOS: https://www.eoswetenschap.eu/voeding/vrije-handel-voorkomt-honger