

Wei Li

Address: De Boelelaan 1105, 1081 HV Amsterdam, the Netherlands

Email: w.li2@vu.nl

Website: Teaching - Wei Li/Homepage

Phone: +31 6 30484769

RESEARCH FIELDS

Water-Energy-Food Nexus, Integrated Governance, Inequality, Development Economics, Sustainability

EDUCATION

09/2021-present

PhD in Development Economics

School of Business and Economics, Vrije Universiteit Amsterdam, the Netherlands

Supervisors:

Philip Ward

Institute for Environmental Studies,

Vrije Universiteit Amsterdam:

Deltares

philip.ward@vu.nl

Lia van Wesenbeeck

School of Business and Economics,

Amsterdam Centre for World Food Studies.

Amsterdam Centre for World
Vrije Universiteit Amsterdam

c.f.a.van.wesenbeeck@vu.nl

09/2021-present

Research Associate

Amsterdam Centre for World Food Studies, the Netherlands

09/2018-07/2021

MSc in Management

Outstanding graduate, School of Agricultural Economics and Rural Development, Renmin University of China, China (GPA: 3.89/4, rank 1/53)

Supervisor: Xiaohui Tian

09/2014-07/2018

BSc in Management

Outstanding graduate, College of Economics and Management, Northwest Agricultural & Forestry University, China (GPA: 3.78/4, rank 1/67)

07/2016-08/2016

Study Abroad Program on Agricultural operations and natural resource management in the US Midwest

Michigan State University, United States of America

PUBLICATIONS

Wei Li*, Philip J. Ward and Lia van Wesenbeeck (2025). A critical review of quantifying water-energy-food nexus interactions. *Renewable and Sustainable Energy Reviews*, 211, <https://doi.org/10.1016/j.rser.2024.115280> (Impact Factor: 16.3, CiteScore: 31.2)

Xiaohui Tian (MSc supervisor), **Wei Li**, and Rong Li* (2021). [The environmental effects of agricultural mechanization: Evidence from agricultural machinery purchase subsidy policy](#). *Chinese Rural Economy* (中国农村经济), 2021(9), 95-109. (The No. 1 journal in Agricultural Economics in China, featuring full text in Chinese with an English abstract)

WORKING PAPERS

Wei Li*, Philip J. Ward and Lia van Wesenbeeck, Towards an ideal water-energy-food nexus model: moving beyond silos to integrated resource governance.

Abstract: The water-energy-food (WEF) nexus applies systems thinking to transcend siloed sectoral perspectives and foster integrated resource governance. This study identifies six key objectives that an ideal model for the WEF nexus should achieve: ensuring resource security; promoting resource circularity; enabling transferability across spatial and temporal scales and geographic scopes; facilitating comprehensive identification and quantification of resource interactions; integrating economic, environmental, and societal considerations; and ensuring theoretical rigor and empirical solvability. No WEF nexus model has simultaneously achieved all six objectives. To address this gap, we develop the first transparent and comprehensive WEF nexus model that achieves all six objectives. The model's applicability is illustrated through an example of the Beijing-Tianjin-Hebei region in China, and its broader empirical and policy relevance is demonstrated through a set of potential scenarios. This model is novel and environmentally

relevant by integrating comprehensive water quality assessment (including pollutants and temperature), tracing resource circularity across full life cycles, and embedding efficiency, sustainability, and equity in a unified optimization. These advances provide a systems foundation for understanding coupled human-natural systems and for developing sustainable, scalable, and equitable resource strategies.

Rongping Ruan, **Wei Li**, Kenneth Vaughan, Jinyang Wei, Ruonan Wang*, Dynamic evolution of entrepreneurship among impoverished households.

CONFERENCE PRESENTATIONS

Wei Li (presenter), Philip J. Ward and Lia van Wesenbeeck, “Towards an ideal theoretical model for the water-energy-food nexus”

06/2025 Presented at the World Conference on Natural Resource Modeling, Kathmandu, Nepal.

04/2025 Presented at the Tinbergen Institute PhD seminar, Amsterdam, the Netherlands.

PROJECT EXPERIENCE

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|------------------------|--|
| 01/2023-09/2023 | <p>Project: Comprehensive Treatment and Control Strategy of Groundwater Overexploitation</p> <p>Founder: Peking university, Renmin university of China, and Ministry of Science and Technology of the People’s Republic of China</p> <ul style="list-style-type: none"> • Coordinated with local village cadres as one of team leaders • Participated in the household survey of seven villages in Hebei Province, China |
| 01/2019-02/2021 | <p>Project: Short-term Forecast and Analysis of Agricultural Product Market Prices</p> <p>Founder: Ministry of Agriculture and Rural Affairs of the People’s Republic of China</p> <ul style="list-style-type: none"> • Used the time series model to forecast the major agricultural products’ price in China • Developed the Self-adaptable Short-term Agricultural Prices Prediction System • Wrote four semi-annual reports; The report of the first half of 2020 was approved by the Deputy Secretary-General of the National Development and Reform Commission of China |

TEACHING & SUPERVISING EXPERIENCE

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| 02/2025-05/2025 & 02/2024-05/2024 | <p><i>Advanced Macroeconomics</i> (Undergraduate Course), Amsterdam University College, teaching assistant for Professor Lia van Wesenbeeck</p> |
| 04/2023-07/2023 | <p><i>Bachelor Thesis Supervision</i>, student: Janina Krupski, thesis title: <i>China’s Pilot Free Trade Zones: The Solution to Avoiding the Middle-Income Trap?</i></p> |
| 02/2023-03/2023 | <p><i>Macroeconomics I</i> (Undergraduate Course), Vrije Universiteit Amsterdam, teaching assistant for Professor B.A. Brugemann</p> |
| 09/2022-10/2022 | <p><i>Economics Challenges</i> (Undergraduate Course), Vrije Universiteit Amsterdam, teaching assistant for Professor Roland Iwan Luttens</p> |

SKILLS

Computer Skills: ArcGIS, Python, STATA, GAMS

Languages: Chinese (Native), English (Proficient), Dutch (A2)

AWARDS & GRANTS

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| 07/2022-07/2025 | Erasmus+ Mobility Grant-KA171, European Commission (€8,760) |
| 09/2021-08/2025 | Government-sponsored Oversea Education, China Scholarship Council |
| 09/2020 | Excellent Paper in the 4th Agriculture, Rural Areas and Farmers Forum, editorial departments of <i>China Rural Economy</i> & <i>China Rural Observation</i> |
| 06/2018 | Honor Thesis in Management, Northwest Agriculture & Forestry University (awarded to top 100 theses from the whole university) |
| 11/2017 | National Outstanding Forestry Graduates of China (awarded to top 40 graduates nationwide) |
| 11/2017 & 11/2016 | National Scholarship (Top Honor), Ministry of Education of China (awarded to the top 3%, received twice) |