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Going global to local: achieving agri-food sustainability from a spatially explicit input-output analysis perspective

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Citation

Sun, Z. (2021, June 1). *Going global to local: achieving agri-food sustainability from a spatially explicit input-output analysis perspective*. Retrieved from <https://hdl.handle.net/1887/3180744>

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Issue Date: 2021-06-01

Acknowledgements

It is challenging and wonderful to finalize the thesis. Foremost, I would like to express my deepest thankfulness and everlasting gratitude to my supervisors, Dr. Paul Behrens and Dr. Laura Scherer. They spent significant time and energy on every word of the thesis. They came up with suggestions whenever I met a tough problem, from algorithm design to technical issues of the software. They guided me in the road of academic research from all aspects. They inspired me how to choose an attractive topic for academic research and provided me new insights on how to explain results. They also taught me a lot about how to write an excellent academic paper how I should present my research. And beyond the academic research, they cared about my daily life. They encouraged me to take sufficient rest and I could share stressful issues and some worries with them.

I would also like to thank my promoter, Prof. Arnold Tukker for providing me a great opportunity to work in the CML. This thesis could not have been accomplished without his help and contributions. His feedbacks were always very clear and very helpful to improve the thesis.

I would thank the China Scholarship Council for the financial support that provided me with the opportunity to work at CML and live in Leiden. Special thanks to my Chinese friends for accompanying me to celebrate Chinese festivals. Your sweet parties helped me to overcome homesickness. I would thank the PhD-committee for organization of very useful workshops and other activities, such as “Managing Stress & Anxiety”, “Coaching in academic writing”, “Virtual drink”, and for circulating little presents on the occasion of the Chinese new year. I would thank my previous office mates and research partners in A3.03: Marinda van Pomeroy, Bregje Brinkmann, and Henrik Barmentlo. We enjoyed the mixed Dutch and Chinese culture, and learned some words from each other. I would also thank current roommates in B2.17: Elizabeth Migoni Alejandre, and Carlos Blanco Rocha. They are both very nice and humorous friends. I was very lucky to work with them. It a pleasure to thank other colleagues in CML for all their help in both work and daily life: Susanna van den Oever, Sammy Koning, Glenn Aguilar Hernandez, Franco Donati, Leon Hauser, Paul de Hoog, Arjan de Koning, and Sidney Niccolson.

Last but not the least, I would like to express my heartfelt thanks to my family for their unconditional support. I thank my parents to encourage me to explore my curiosity. I thank my brother and his wife take care of my parents, and also thank my little nephew who brings a lot of pleasure to the whole family.

List of publications

Papers in this thesis

1. **Sun, Z.**, Tukker, A. and Behrens, P., 2018. Going global to local: connecting top-down accounting and local impacts, a methodological review of spatially-explicit input–output approaches. *Environmental Science & Technology*, 53(3), pp.1048-1062.
2. **Sun, Z.**, Scherer, L., Tukker, A. and Behrens, P., 2020. Linking global crop and livestock consumption to local production hotspots. *Global Food Security*, 25, p.100323.
3. **Sun, Z.**, Behrens, P., Tukker, A., Bruckner, M., and Scherer, L. Land use in key biodiversity areas disproportionately threatens global biodiversity. (submitted to *Proceedings of the National Academy of Sciences*)
4. **Sun, Z.**, Scherer, L., Tukker, A., Spawn-Lee, S., Bruckner, M., Gibbs, H., and Behrens, P. A double carbon dividend from dietary change in high-income nations. (under review in *Nature Food*)

Additional publications

5. Huang, J., Ridoutt, B.G., **Sun, Z.**, Lan, K., Thorp, K.R., Wang, X., Yin, X., Huang, J., Chen, F. and Scherer, L., 2020. Balancing food production within the planetary water boundary. *Journal of Cleaner Production*, 253, p.119900.

Curriculum vitae

Zhongxiao Sun was born on 19th September 1991, in Zaozhuang City, Shandong Province, China. He took his high school education from Zaozhuang No.2 Senior High school from 2007 to 2010. He majored in Mathematics and Applied Mathematics at China University of Geosciences (Wuhan) from 2010 to 2014 and graduated with his BSc degree in June 2014.

Between 2014 and 2017, He obtained his MSc degree in the major of Environmental Science at the School of Environment, Beijing Normal University. After graduation, he joined the Institute of Environmental Sciences (CML) with the support of the China Scholarship Council (CSC). His PhD project, under the supervision of Dr. Paul Behrens, Dr. Laura Scherer, and Prof. Arnold Tukker, aimed at the application of spatially explicit input-output analysis. He employed the approach to trace local impacts propagating globally via domestic and international demand. This thesis is the outcome of his PhD research.