



SuReFood Alliance Interdisciplinary Workshop #29

Time: April 22nd (Wednesday), 2026

08.00 – 09.00AM / **Amsterdam** time

09.00 – 10.00AM / **Lithuania** time

14.00 – 15.00PM / **Beijing** time

Location: Virtual Online [[Microsoft Teams](#)]

Time	Program
08.00 – 08.05 (NL) 14.00 – 14.05 (CN)	Introduction Chair: Fan Li (Associate Professor, College of Economics and Management, Huazhong Agricultural University, Wuhan, China; SuReFood Alliance, China)
08.05 – 08.40 (NL) 14.05 – 14.40 (CN)	Title: Circularity Efficiency in EU Agriculture: Evidence from a Nonradial Network DEA with Waste Linking Presenter: Jing Peng, Department of Resource Economics, Institute of Economics and Rural Development, Lithuanian Centre for Social Sciences. Abstract: Improving the circular use of energy, nutrients, and biomass has become increasingly important in European agriculture. However, existing research still provides limited cross-country evidence on how efficiently agricultural systems combine conventional production with biomass recirculation while containing environmental burdens. This study evaluates circularity efficiency in EU agriculture using a two-stage non-radial network directional distance function model. The model distinguishes production and circularity stages. A pooled variable-returns-to-scale frontier is established using 322 country-year observations from 2010 to 2023. The results show mean (non-oriented) efficiency scores of 0.904 for the production stage, 0.770 for the circularity stage, and 0.831 for the overall system, indicating that production-stage efficiency is generally higher, while circularity-stage efficiency is lower and more heterogeneous. The results suggest that cross-country differences in overall circularity efficiency are more closely associated with the circularity stage than with the production stage. Nonradial decomposition identifies renewable energy generation, crop-residue use, nutrient surplus, and manure application as the main sources of inefficiency. About the Presenter: Jing Peng is a PhD student in the Department of Resource Economics at the Institute of Economics and Rural Development, Lithuanian Centre for Social Sciences. He holds an MSc in agriculture from South China Agricultural University. His research interests include agricultural economics, rural development, circular economy, and data envelopment analysis. His recent work focuses on circular economy in agriculture.
08.40 – 08.55 (NL) 14.40 – 14.55 (CN)	Discussants: Associate Prof. dr. Tao Xiang (School of Accounting, Chongqing University of Technology, Chongqing, China)
08.55 – 09.00 (NL) 14.55 – 15.00 (CN)	Conclusion and closing remarks

For future presentation, please contact Fan Li (fan.li@wur.nl), Chen Qian (qianchen@caas.cn) and Mengru Wang (Mengru.wang@wur.nl). To access the virtual meeting, please click the link above or type in the following information on MS Teams: Teams Meeting ID: **349 209 551 833 09** Passcode: **tm7Co3Xk**

For more information and updates regarding the SuReFood Interdisciplinary Workshop, please scan the QR code below and follow our Wechat account. When you join our online workshop, please mute your microphone when the presenter is presenting; and if you wish to ask a question, please always use the button on the Teams to raise up your hand first. We wish to see you online very soon.

