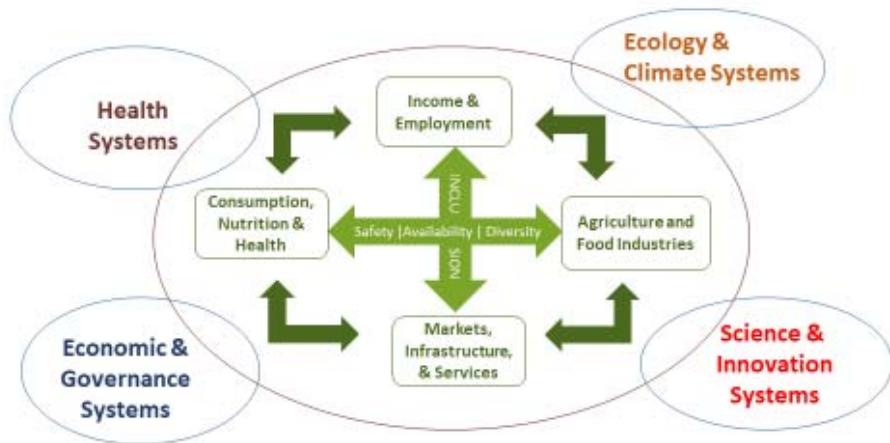


Food systems research

(broadly sorted by systems' components- only sources after 2016 considered)



1. Systems-wide research: Modelling Food Systems transformations- Synergies, Tradeoffs; Foresights – Policy Implications

Food Systems Summit (FSS) Briefs by Partners of Scientific Group

- Bron, G. M., Siebenga, J. J., & Fresco, L. O. (February 15, 2021) **In the age of pandemics, connecting food systems and health: a Global One Health approach.** *FSS Brief by Partners of Scientific Group.* https://sc-fss2021.org/wp-content/uploads/2021/03/FSS_Brief_Pandemics_Food_Systems_One_health.pdf
- Trigo, E., Chavarria, H., Smyth, S. J., Torroba, A., Wesseler, J., Zilberman, D., & Martinez, J. (February, 17, 2021) **The Bioeconomy and Food Systems Transformation** *FSS Brief by Partners of Scientific Group.* https://sc-fss2021.org/wp-content/uploads/2021/03/FSS_Brief_Bioeconomy_and_Food_Systems_Transformation.pdf

Reports/books

- Blay-Palmer, A., Conaré, D., Meter, K., Di Battista, A., & Johnston, C. (Hrsg.). (2020). **Sustainable food system assessment: Lessons from global practice.** Routledge, Taylor and Francis Group.
- Center for Development Research (ZEF) of the University of Bonn in cooperation with the Food and Agriculture Organization of the United Nations (FAO). (2020). **Investment costs and policy action opportunities for reaching a world without hunger (SDG2).** Joint Report. <http://www.fao.org/documents/card/en/c/cb1497en>
- Ceres 2030 (Cornell IP-CALS, International Food Policy Research Institute (IFPRI), International Institute of Sustainable Development (IISD)). (2020). **Sustainable solutions to end hunger (summary report).** https://ceres2030.org/wp-content/uploads/2021/03/ceres2030_en-summary-report.pdf
- ECDPM. (2020). **The Food Systems Approach in Practice: Our Guide for Sustainable Transformation.** Discussion Paper no 278. <https://ecdpm.org/wp-content/uploads/Food-Systems-Approach-In-Practice-Guide-For-Sustainable-Transformation-ECDPM-Discussion-Paper-278-2020.pdf>
- European Commission's Scientific Advice Mechanism (SAM). (2019). **A scoping review of major works relevant to scientific advice towards an EU sustainable food system.** http://ec.europa.eu/research/sam/pdf/meetings/hlg_sam_032019_scoping_report_sustainable-food.pdf.
- Food and Agriculture Organization of the United Nations (FAO). (2018). **Sustainable food systems: Concept and framework.** <http://www.fao.org/3/ca2079en/CA2079EN.pdf>
- Global Panel on Agriculture and Food Systems for Nutrition. (2020). **Future Food Systems: For people, our planet, and prosperity.** <https://www.glopan.org/foresight2/>
- HLPE. (2020). **Promoting youth engagement and employment in agriculture and food systems** (Committee on World Food Security High Level Panel of Experts on Food Security and Nutrition, Draft Report). http://assets.fsnforumhlpe.fao.org.s3-eu-west-1.amazonaws.com/public/HLPE_V0_Report_16_youth_engagement_employment.pdf
- Inter-Academy Partnership. (2018). **Opportunities for future research and innovation on food and nutrition security and agriculture: The Inter-Academy Partnership's global perspective.**

https://www.interacademies.org/sites/default/files/publication/iap_fnfa_global_web_complete_28nov.pdf

- International Food Policy Research Institute (IFPRI). (2020). **Global Food Policy Report: Building Inclusive Food Systems.** <https://doi.org/10.2499/9780896293670>
- OECD. (2021). **Making Better Policies for Food Systems.** <https://doi.org/10.1787/ddfba4de-en>
- The Chicago Council on Global Affairs. (2021). **Working Paper Centering Global Food security for Global Prosperity.** https://www.thechicagocouncil.org/sites/default/files/2021-02/report_centering-global-food-security-global-prosperity_2021-02-22.pdf
- The Global Bioeconomy Summit: Conference Report. (2020). **Expanding the Bioeconomy.** <https://gbs2020.net/conference-report/>
- von Braun, J., Beyene Chichaiblu, B., Torero Cullen, M., Laborde, D., & Smaller, C. (2020). **Ending Hunger by 2030 – policy actions and costs.** https://www.zef.de/fileadmin/downloads/SDG2_policybrief.pdf

Journal Publications

- Béné, C., Oosterveer, P., Lamotte, L., Brouwer, I. D., de Haan, S., Prager, S. D., Talsma, E. F., & Khoury, C. K. (2019). When food systems meet sustainability – Current narratives and implications for actions. *World Development*, 113, 116–130. <https://doi.org/10.1016/j.worlddev.2018.08.011>
- Fanzo, J., Covic, N., Dobermann, A., Henson, S., Herrero, M., Pingali, P., & Staal, S. (2020). **A research vision for food systems in the 2020s: Defying the status quo.** *Global Food Security*, 26, 100397. <https://doi.org/10.1016/j.gfs.2020.100397>
- Gustafson, D., Gutman, A., Leet, W., Drewnowski, A., Fanzo, J., & Ingram, J. (2016). **Seven Food System Metrics of Sustainable Nutrition Security.** *Sustainability*, 8(3), 196. <https://doi.org/10.3390/su8030196>
- Hasegawa, T., Fujimori, S., Havlík, P., Valin, H., Bodirsky, B. L., Doelman, J. C., Fellmann, T., Kyle, P., Koopman, J. F. L., Lotze-Campen, H., Mason-D'Croz, D., Ochi, Y., Pérez Domínguez, I., Stehfest, E., Sulser, T. B., Tabeau, A., Takahashi, K., Takakura, J., van Meijl, H., ... Witzke, P. (2018). **Risk of increased food insecurity under stringent global climate change mitigation policy.** *Nature Climate Change*, 8(8), 699–703. <https://doi.org/10.1038/s41558-018-0230-x>
- Herrero, M., Thornton, P. K., Mason-D'Croz, D., Palmer, J., Benton, T. G., Bodirsky, B. L., Bogard, J. R., Hall, A., Lee, B., Nyborg, K., Pradhan, P., Bonnett, G. D., Bryan, B. A., Campbell, B. M., Christensen, S., Clark, M., Cook, M. T., de Boer, I. J. M., Downs, C., ... West, P. C. (2020).

Innovation can accelerate the transition towards a sustainable food system. *Nature Food*, 1(5), 266–272. <https://doi.org/10.1038/s43016-020-0074-1>

- Herrero, M., Thornton, P. K., Mason-D'Croz, D., Palmer, J., Bodirsky, B. L., Pradhan, P., Barrett, C. B., Benton, T. G., Hall, A., Pikaar, I., Bogard, J. R., Bonnett, G. D., Bryan, B. A., Campbell, B. M., Christensen, S., Clark, M., Fanzo, J., Godde, C. M., Jarvis, A., ... Rockström, J. (2021). **Articulating the effect of food systems innovation on the Sustainable Development Goals.** *The Lancet Planetary Health*, 5(1), e50–e62. [https://doi.org/10.1016/S2542-5196\(20\)30277-1](https://doi.org/10.1016/S2542-5196(20)30277-1)
- Hertel, T. W., Ramankutty, N., & Baldos, U. L. C. (2014). **Global market integration increases likelihood that a future African Green Revolution could increase crop land use and CO₂ emissions.** *Proceedings of the National Academy of Sciences*, 111(38), 13799–13804. <https://doi.org/10.1073/pnas.1403543111>
- Janssens, C., Havlík, P., Krisztin, T., Baker, J., Frank, S., Hasegawa, T., Leclère, D., Ohrel, S., Ragnauth, S., Schmid, E., Valin, H., Van Lipzig, N., & Maertens, M. (2020). **Global hunger and climate change adaptation through international trade.** *Nature Climate Change*, 10(9), 829–835. <https://doi.org/10.1038/s41558-020-0847-4>
- King, A. (2017). **Technology: The future of agriculture.** *Nature*, 544(7651), S21–S23. <https://doi.org/10.1038/544S21a>
- Leach, M., Nisbett, N., Cabral, L., Harris, J., Hossain, N., & Thompson, J. (2020). **Food politics and development.** *World Development*, 134, 105024. <https://doi.org/10.1016/j.worlddev.2020.105024>
- Rockström, J., Edenhofer, O., Gaertner, J., & DeClerck, F. (2020). **Planet-proofing the global food system.** *Nature Food*, 1(1), 3–5. <https://doi.org/10.1038/s43016-019-0010-4>
- Samir, K., & Lutz, W. (2017). **The human core of the shared socioeconomic pathways: Population scenarios by age, sex and level of education for all countries to 2100.** *Global Environmental Change*, 42, 181–192. <https://doi.org/10.1016/j.gloenvcha.2014.06.004>
- Schmidt-Traub, G., Obersteiner, M., & Mosnier, A. (2019). **Fix the broken food system in three steps.** *Nature*, 569(7755), 181–183. <https://doi.org/10.1038/d41586-019-01420-2>
- Springmann, M., Clark, M., Mason-D'Croz, D., Wiebe, K., Bodirsky, B. L., Lassaletta, L., de Vries, W., Vermeulen, S. J., Herrero, M., Carlson, K. M., Jonell, M., Troell, M., DeClerck, F., Gordon, L. J., Zurayk, R., Scarborough, P., Rayner, M., Loken, B., Fanzo, J., ... Willett, W. (2018). **Options for keeping the food system within environmental limits.** *Nature*, 562(7728), 519–525. <https://doi.org/10.1038/s41586-018-0594-0>
- Tendall, D. M., Joerin, J., Kopainsky, B., Edwards, P., Shreck, A., Le, Q. B., Kruetli, P., Grant, M., & Six, J. (2015). **Food system resilience: Defining the concept.** *Global Food Security*, 6, 17–23. <https://doi.org/10.1016/j.gfs.2015.08.001>

2. Agriculture and Food Industries

Food Systems Summit (FSS) Briefs by Partners of Scientific Group

- Dobermann, A., Bruulsema, T., Cakmak, I., Gerard, B., Majumdar, K., McLaughlin, M., Reidsma, P., Vanlauwe, B., Wollenberg, L., Zhang, F., & Zhang, F. (February 10, 2021) **A New Paradigm for Plant Nutrition**, *FSS Brief by Partners of Scientific Group*. https://sc-fss2021.org/wp-content/uploads/2021/03/FSS_Brief_New_Paradigm_for_Plant_Nutrition.pdf

Reports/books

- Costello, C., Cao, S., & Gelcich, S. (2019). **The Future of Food from the Sea**. World Resources Institute. https://oceanpanel.org/sites/default/files/2019-11/19_HLP_BP1%20Paper.pdf
- FAO. (2018). **The future of food and agriculture – Alternative pathways to 2050**. <http://www.fao.org/3/CA1553EN/ca1553en.pdf>
- Food and Land Use (FOLU) Coalition September. (2019). **The Global Consultation Report of Growing Better: Ten Critical Transitions to Transform Food and Land Use**. <https://www.foodandlandusecoalition.org/global-report/>
- Fuglie, K., Gautam, M., Goyal, A., & Maloney, W. (2020). **Harvesting Prosperity – Technology and Productivity Growth in Agriculture**. World Bank. <https://openknowledge.worldbank.org/handle/10986/32350>
- IPCC. (2019). **Climate Change and Land: An IPCC special report on climate change, desertification, land degradation, sustainable land management, food security, and greenhouse gas fluxes in terrestrial ecosystems** (Summary for Policymakers). https://www.ipcc.ch/site/assets/uploads/sites/4/2020/02/SPM_Updated-Jan20.pdf
- IUFoST. (2021). **Global governance and the role of food science and technology for sustainable food systems**. International Union of Food Science and Technology. https://sc-fss2021.org/wp-content/uploads/2021/04/Global_Governance_Food_Science_Technology_IUFoST.pdf
- Lele, U., Agarwal, M., & Goswami, S. (2018). **Patterns of Structural Transformation and Agricultural Productivity Growth**. Gokhale Institute of Politics and Economics. <http://umalele.org/wp-content/uploads/2018/12/PST-Book.pdf>
- Nkonya, E., Mirzabaev, A., & von Braun, J. (2016). **Economics of land degradation and sustainable land management**. Springer. <http://link.springer.com/book/10.1007/978-3-319-19168-3>

- Qaim, M. (2016). **Genetically Modified Crops and Agricultural Development**. Palgrave Macmillan.
- Sperling, F., Havlík, P., Denis, M., Valin, H., Palazzo, A., Gaupp, F., & Visconti, P. (2020). **Transformations within reach: Pathways to a sustainable and resilient world. Resilient Food Systems**. International Institute for Applied Systems Analysis (IIASA) and the International Science Council (ISC). <http://pure.iiasa.ac.at/id/eprint/16822/1/Food%20%281%29.pdf>
- von Braun, J., Sánchez Sorondo, M., & Steiner, R. (2020). **Reduction of Food Loss and Waste**. Pontifical Academy of Sciences Scientiarvm Scripta Varia 147. http://www.pas.va/content/dam/accademia/pdf/pas_sv147.pdf

Journal Publications

- Abu Hatab, A., Cavinato, M. E. R., Lindemer, A., & Lagerkvist, C.-J. (2019). **Urban sprawl, food security and agricultural systems in developing countries: A systematic review of the literature**. *Cities*, 94, 129–142. <https://doi.org/10.1016/j.cities.2019.06.001>
- Alae-Carew, C., Nicoleau, S., Bird, F. A., Hawkins, P., Tuomisto, H. L., Haines, A., Dangour, A. D., & Scheelbeek, P. F. D. (2020). **The impact of environmental changes on the yield and nutritional quality of fruits, nuts and seeds: A systematic review**. *Environmental Research Letters*, 15(2), 023002. <https://doi.org/10.1088/1748-9326/ab5cc0>
- Bernard, B., & Lux, A. (2017). **How to feed the world sustainably: An overview of the discourse on agroecology and sustainable intensification**. *Regional Environmental Change*, 17(5), 1279–1290. <https://doi.org/10.1007/s10113-016-1027-y>
- Dubé, L., Webb, P., Arora, N. K., & Pingali, P. (2014). **Agriculture, health, and wealth convergence: Bridging traditional food systems and modern agribusiness solutions: Convergence thinking**. *Annals of the New York Academy of Sciences*, 1331(1), 1–14. <https://doi.org/10.1111/nyas.12602>
- Herrero, M., Henderson, B., Havlík, P., Thornton, P. K., Conant, R. T., Smith, P., Wirsénius, S., Hristov, A. N., Gerber, P., Gill, M., Butterbach-Bahl, K., Valin, H., Garnett, T., & Stehfest, E. (2016). **Greenhouse gas mitigation potentials in the livestock sector**. *Nature Climate Change*, 6(5), 452–461. <https://doi.org/10.1038/nclimate2925>
- Mason-D'Croz, D., Bogard, J. R., Sulser, T. B., Cenacchi, N., Dunston, S., Herrero, M., & Wiebe, K. (2019). **Gaps between fruit and vegetable production, demand, and recommended consumption at global and national levels: An integrated modelling study**. *The Lancet Planetary Health*, 3(7), e318–e329. [https://doi.org/10.1016/S2542-5196\(19\)30095-6](https://doi.org/10.1016/S2542-5196(19)30095-6)
- Muller, A., Schader, C., El-Hage Scialabba, N., Brüggemann, J., Isensee, A., Erb, K.-H., Smith, P., Klocke, P., Leiber, F., Stolze, M., & Niggli, U. (2017). **Strategies for feeding the world more sustainably with organic agriculture**. *Nature Communications*, 8(1), 1290.

<https://doi.org/10.1038/s41467-017-01410-w>

- Nuthalapati, C. S. R., Sutradhar, R., Reardon, T., & Qaim, M. (2020). **Supermarket procurement and farmgate prices in India.** *World Development*, 134, 105034. <https://doi.org/10.1016/j.worlddev.2020.105034>
- Qaim, M. (2020). **Role of New Plant Breeding Technologies for Food Security and Sustainable Agricultural Development.** *Applied Economic Perspectives and Policy*, 42(2), 129–150. <https://doi.org/10.1002/aapp.13044>
- Samoggia, A., Monticone, F., & Bertazzoli, A. (2021). **Innovative Digital Technologies for Purchasing and Consumption in Urban and Regional Agro-Food Systems: A Systematic Review.** *Foods*, 10(2), 208. <https://doi.org/10.3390/foods10020208>
- Seppelt, R., Arndt, C., Beckmann, M., Martin, E. A., & Hertel, T. W. (2020). **Deciphering the Biodiversity–Production Mutualism in the Global Food Security Debate.** *Trends in Ecology & Evolution*, 35(11), 1011–1020. <https://doi.org/10.1016/j.tree.2020.06.012>
- Smith, V., Wesseler, J. H. H., & Zilberman, D. (2021). **New Plant Breeding Technologies: An Assessment of the Political Economy of the Regulatory Environment and Implications for Sustainability.** *Sustainability*, 13(7), 3687. <https://doi.org/10.3390/su13073687>
- Takacs, B., & Borrión, A. (2020). **The Use of Life Cycle-Based Approaches in the Food Service Sector to Improve Sustainability: A Systematic Review.** *Sustainability*, 12(9), 3504. <https://doi.org/10.3390/su12093504>
- Wood, B., Williams, O., Nagarajan, V., & Sacks, G. (2021). **Market strategies used by processed food manufacturers to increase and consolidate their power: A systematic review and document analysis.** *Globalization and Health*, 17(1), 17. <https://doi.org/10.1186/s12992-021-00667-7>

3. Markets, Infrastructure and Services

Reports/books

- Kalkuhl, M., J. von Braun, M. Torero. 2016. **Food Price Volatility and Its Implications for Food Security and Policy.** Springer Netherlands. <http://link.springer.com/book/10.1007%2F978-3-319-28201-5>

Journal Publications

- Brown, M. E., Carr, E. R., Grace, K. L., Wiebe, K., Funk, C. C., Attavanich, W., Backlund, P., & Buja, L. (2017). **Do markets and trade help or hurt the global food system adapt to climate change?** *Food Policy*, 68, 154–159. <https://doi.org/10.1016/j.foodpol.2017.02.004>

- Chiffolleau, Y., & Dourian, T. (2020). **Sustainable Food Supply Chains: Is Shortening the Answer? A Literature Review for a Research and Innovation Agenda.** *Sustainability*, 12(23), 9831. <https://doi.org/10.3390/su12239831>
- Dimitri, C., & Gardner, K. (2019). **Farmer use of intermediated market channels: A review.** *Renewable Agriculture and Food Systems*, 34(03), 181–197. <https://doi.org/10.1017/S1742170518000182>
- Liverpool-Tasie, L. S. O., Wineman, A., Young, S., Tambo, J., Vargas, C., Reardon, T., Adjognon, G. S., Porciello, J., Gathoni, N., Bizikova, L., Galiè, A., & Celestin, A. (2020). **A scoping review of market links between value chain actors and small-scale producers in developing regions.** *Nature Sustainability*, 3(10), 799–808. <https://doi.org/10.1038/s41893-020-00621-2>

4. Consumption, Nutrition and Health

Food Systems Summit (FSS) Briefs by Partners of Scientific Group

- Von Braun, J. Sorondo, M.S., & Steiner, R. (2021) **Reduction of Food Loss and Waste – The Challenges and Conclusions for Actions Findings and Recommendations for Actions of an international Conference by the Pontifical Academy of Sciences with the Rockefeller Foundation FSS Brief by Partners of Scientific Group.** https://sc-fss2021.org/wp-content/uploads/2021/03/FSS_Brief_Food_Loss_and_Waste_Reduction.pdf
- Von Braun, J., Chichaibelu, B.B., Cullen, M.T., Laborde, D., & Smaller, C. (March 4, 2021; reprint from Oct.13, 2020) **Ending Hunger by 2030 – policy actions and costs FSS Brief by Partners of Scientific Group.** https://sc-fss2021.org/wp-content/uploads/2021/03/FSS_Brief_End_Hunger_SDG2_Actions_Costs.pdf

Reports/books

- **2020 Global Nutrition Report: Action on equity to end malnutrition.** (2020). Development Initiatives. <https://globalnutritionreport.org/reports/2020-global-nutrition-report/>
- **A world without hunger is possible.** (2020). https://www.zef.de/fileadmin/downloads/SDG2_policybrief.pdf
- **Food Safety and Healthy Diet – Recommendations by international researchers and policy makers.** (2018). <http://www.pas.va/content/accademia/en/publications/scriptavaria/food.html>
- GCNF. (2019). **School Meal Programs Around the World.** https://survey.gcnf.org/wp-content/uploads/2021/03/GCNF_School-Meal-Programs-Around-the-World_Report_2021_Final.pdf

- Giner, C., & Brooks, J. (2019). **Policies for encouraging healthier food choices**. OECD. <https://www.oecd-ilibrary.org/docserver/11a42b51-en.pdf?expires=1616942167&id=id&accname=guest&checksum=4A02E182A1F0DA30F132F80F6C27B9B7>
- Global Panel on Agriculture and Food Systems for Nutrition. (2016). **Food systems and diets: Facing the challenges of the 21st century**. <http://ebrary.ifpri.org/utils/getfile/collection/p15738coll5/id/5516/filename/5517.pdf>
- HLPE. (2017). **Nutrition and Food Systems. A report by the High-Level Panel of Experts on Food Security and Nutrition of the Committee in World Food Security**. <http://www.fao.org/3/i7846e/i7846e.pdf>
- HLPE. (2020). **Food security and nutrition: Building a global narrative towards 2030. A report by the High-Level Panel of Experts on Food Security and Nutrition of the Committee on World Food Security**. <http://www.fao.org/3/ca9731en/ca9731en.pdf>
- International Food Policy Research Institute. (2016). **Global Nutrition Report 2016: From Promise to Impact: Ending Malnutrition by 2030**. <http://dx.doi.org/10.2499/9780896295841>
- OECD. (2019). **The Heavy Burden of Obesity: The Economics of Prevention**. OECD Publishing. <https://doi.org/10.1787/67450d67-en>.
- Pennisi, E. (2021, April 7). **Food supplements that alter gut bacteria could ‘cure’ malnutrition**. Science. <https://www.sciencemag.org/news/2021/04/food-supplements-alter-gut-bacteria-could-cure-malnutrition>
- WHO. (2020). **Dietary recommendations: Nutritional requirements; Establishing human nutrient requirements for worldwide application**. <https://apps.who.int/nutrition/topics/nutrecomm/en/index.html>

Journal Publications

- Afshin, A., Sur, P. J., Fay, K. A., Cornaby, L., Ferrara, G., Salama, J. S., Mullany, E. C., Abate, K. H., Abbafati, C., Abebe, Z., Afarideh, M., Aggarwal, A., Agrawal, S., Akinyemiju, T., Alahdab, F., Bacha, U., Bachman, V. F., Badali, H., Badawi, A., ... Murray, C. J. L. (2019). **Health effects of dietary risks in 195 countries, 1990–2017: A systematic analysis for the Global Burden of Disease Study 2017**. *The Lancet*, 393(10184), 1958–1972. [https://doi.org/10.1016/S0140-6736\(19\)30041-8](https://doi.org/10.1016/S0140-6736(19)30041-8)
- Bloem, S., & de Pee, S. (2017). **Developing approaches to achieve adequate nutrition among urban populations requires an understanding of urban development**. *Global Food Security*, 12, 80–88. <https://doi.org/10.1016/j.gfs.2016.09.001>
- Fore, H. H., Dongyu, Q., Beasley, D. M., & Ghebreyesus, T. A. (2020). **Child malnutrition and**

COVID-19: The time to act is now. *The Lancet*, 396(10250), 517–518.

[https://doi.org/10.1016/S0140-6736\(20\)31648-2](https://doi.org/10.1016/S0140-6736(20)31648-2)

- Gillespie, S., & van den Bold, M. (2017). **Agriculture, Food Systems, and Nutrition: Meeting the Challenge.** *Global Challenges*, 1(3), 1600002. <https://doi.org/10.1002/gch2.201600002>
- Gillespie, S., van den Bold, M., & Hodge, J. (2019). **Nutrition and the governance of agri-food systems in South Asia: A systematic review.** *Food Policy*, 82, 13–27. <https://doi.org/10.1016/j.foodpol.2018.10.013>
- Hawkes, C., Ruel, M. T., Salm, L., Sinclair, B., & Branca, F. (2020). **Double-duty actions: Seizing programme and policy opportunities to address malnutrition in all its forms.** *The Lancet*, 395(10218), 142–155. [https://doi.org/10.1016/S0140-6736\(19\)32506-1](https://doi.org/10.1016/S0140-6736(19)32506-1)
- Headey, D. D., & Alderman, H. H. (2019). **The Relative Caloric Prices of Healthy and Unhealthy Foods Differ Systematically across Income Levels and Continents.** *The Journal of Nutrition*, 149(11), 2020–2033. <https://doi.org/10.1093/jn/nxz158>
- Jaacks, L. M. (2019). **Taxes on saturated fat, salt, and sugar improve the healthiness of grocery purchases, but changes are frustratingly small.** *The Lancet Public Health*, 4(8), e363–e364. [https://doi.org/10.1016/S2468-2667\(19\)30110-0](https://doi.org/10.1016/S2468-2667(19)30110-0)
- Jones, A. D., Hoey, L., Blesh, J., Miller, L., Green, A., & Shapiro, L. F. (2016). **A Systematic Review of the Measurement of Sustainable Diets.** *Advances in Nutrition: An International Review Journal*, 7(4), 641–664. <https://doi.org/10.3945/an.115.011015>
- Laborde, D., Martin, W., Swinnen, J., & Vos, R. (2020). **COVID-19 risks to global food security.** *Science*, 369(6503), 500–502. <https://doi.org/10.1126/science.abc4765>
- Liberato, S. C., Bailie, R., & Brimblecombe, J. (2014). **Nutrition interventions at point-of-sale to encourage healthier food purchasing: A systematic review.** *BMC Public Health*, 14(1), 919. <https://doi.org/10.1186/1471-2458-14-919>
- Micha, R., Karageorgou, D., Bakogianni, I., Trichia, E., Whitsel, L. P., Story, M., Peñalvo, J. L., & Mozaffarian, D. (2018). **Effectiveness of school food environment policies on children's dietary behaviors: A systematic review and meta-analysis.** *PLOS ONE*, 13(3), e0194555. <https://doi.org/10.1371/journal.pone.0194555>
- Miller, V., Yusuf, S., Chow, C. K., Dehghan, M., Corsi, D. J., Lock, K., Popkin, B., Rangarajan, S., Khatib, R., Lear, S. A., Mony, P., Kaur, M., Mohan, V., Vijayakumar, K., Gupta, R., Kruger, A., Tsolekile, L., Mohammadifard, N., Rahman, O., ... Mente, A. (2016). **Availability, affordability, and consumption of fruits and vegetables in 18 countries across income levels: Findings from the Prospective Urban Rural Epidemiology (PURE) study.** *The Lancet. Global Health*, 4(10), e695-703. [https://doi.org/10.1016/S2214-109X\(16\)30186-3](https://doi.org/10.1016/S2214-109X(16)30186-3)
- Nordhagen, S. (2020). **Food supply chains and child and adolescent diets: A review.** *Global Food Security*, 27, 100443. <https://doi.org/10.1016/j.gfs.2020.100443>

- Popkin, B. M., Corvalan, C., & Grummer-Strawn, L. M. (2020). **Dynamics of the double burden of malnutrition and the changing nutrition reality.** *The Lancet*, 395(10217), 65–74. [https://doi.org/10.1016/S0140-6736\(19\)32497-3](https://doi.org/10.1016/S0140-6736(19)32497-3)
- Springmann, M., Mason-D'Croz, D., Robinson, S., Garnett, T., Godfray, H. C. J., Gollin, D., Rayner, M., Ballon, P., & Scarborough, P. (2016). **Global and regional health effects of future food production under climate change: A modelling study.** *The Lancet*, 387(10031), 1937–1946. [https://doi.org/10.1016/S0140-6736\(15\)01156-3](https://doi.org/10.1016/S0140-6736(15)01156-3)
- Tobi, R. C. A., Harris, F., Rana, R., Brown, K. A., Quaife, M., & Green, R. (2019). **Sustainable Diet Dimensions. Comparing Consumer Preference for Nutrition, Environmental and Social Responsibility Food Labelling: A Systematic Review.** *Sustainability*, 11(23), 6575. <https://doi.org/10.3390/su11236575>
- Trijsburg, L., Talsma, E. F., de Vries, J. H. M., Kennedy, G., Kuijsten, A., & Brouwer, I. D. (2019). **Diet quality indices for research in low- and middle-income countries: A systematic review.** *Nutrition Reviews*, 77(8), 515–540. <https://doi.org/10.1093/nutrit/nuz017>
- Willett, W., Rockström, J., Loken, B., Springmann, M., Lang, T., Vermeulen, S., Garnett, T., Tilman, D., DeClerck, F., Wood, A., Jonell, M., Clark, M., Gordon, L. J., Fanzo, J., Hawkes, C., Zurayk, R., Rivera, J. A., De Vries, W., Majele Sibanda, L., ... Murray, C. J. L. (2019). **Food in the Anthropocene: The EAT–Lancet Commission on healthy diets from sustainable food systems.** *The Lancet*, 393(10170), 447–492. [https://doi.org/10.1016/S0140-6736\(18\)31788-4](https://doi.org/10.1016/S0140-6736(18)31788-4)

5. Income and Employment

Reports/Books

- Luc Christiaensen, Zachariah Rutledge, J. Edward Taylor (2020). **The Future of Work in Agriculture Some Reflections.** World Bank Policy Research Working Paper 9193
- Taylor, J. Edward, and Charlton, Diane. 2018. **The Farm Labor Problem: A Global Perspective.** Amsterdam: Elsevier Academic Press.

Journal Publications

- Bukhman, G; Mocumbi, AO; Atun, R; et al. for the Lancet NCDI Poverty Commission Study Group. (2020). **The Lancet NCDI Poverty Commission: bridging a gap in universal health coverage for the poorest billion.** *The Lancet*; September 14, 2020 [https://doi.org/10.1016/S0140-6736\(20\)31907-3](https://doi.org/10.1016/S0140-6736(20)31907-3)

- da Silva, I. C. M., França, G. V., Barros, A. J., Amouzou, A., Krasevec, J., & Victora, C. G. (2018). Socioeconomic inequalities persist despite declining stunting prevalence in low- and middle-income countries. *The Journal of Nutrition*, 148(2), 254–258. <https://doi.org/10.1093/jn/nxx050>
- Philip K Thornton, Patricia Kristjanson Wiebke Förch, Carlos Barahona Laura Cramer Sonali Pradhan. 2019). Is agricultural adaptation to global change in lower-income countries on track to meet the future food production challenge? Global Environmental Change Volume 52, September 2018, Pages 37-48 <https://doi.org/10.1016/j.gloenvcha.2018.06.003>

Action tracks related papers



1. Ensuring Access to Safe and Nutritious Food for All

- Hendriks, S., Soussana, J., Cole, M., Kambugu, A., & Zilberman, D. (2020). **Ensuring Access to Safe and Nutritious Food for all Through Transformation of Food Systems - a paper on Action Track 1.** https://sc-fss2021.org/wp-content/uploads/2020/12/1-ACTION_TRACK_1-Scientific_Group_draft_paper_2-12-2020.pdf

Reports/Books

- FAO. (2018). **Transforming food and agriculture to achieve the SDGs: 20 interconnected actions to guide decision-makers.** <http://www.fao.org/3/i9900EN/i9900en.pdf>
- Jaffee, S., Henson, S., Unnevehr, L., Grace, D., & Cassou, E. (2019). **The safe food imperative: Accelerating progress in low- and middle-income countries.** International Bank for Reconstruction and Development and The World Bank. <https://openknowledge.worldbank.org/handle/10986/30568>
- Searchinger, T., Waite, R., Hanson, C., & Ranganathan, J. (2018). **Creating a Sustainable Food Future: A Menu of Solutions to Feed Nearly 10 Billion People by 2050: A synthesis report.** Washington DC. https://files.wri.org/s3fs-public/creating-sustainable-food-future_2.pdf

Journal Publications

- Baker, P., Brown, A. D., Wingrove, K., Allender, S., Walls, H., Cullerton, K., Lee, A., Demaio, A., & Lawrence, M. (2019). **Generating political commitment for ending malnutrition in all its forms: A system dynamics approach for strengthening nutrition actor networks.** *Obesity Reviews*, 20(S2), 30–44. <https://doi.org/10.1111/obr.12871>
- Basso, B., & Antle, J. (2020). **Digital agriculture to design sustainable agricultural systems.** *Nature Sustainability*, 3(4), 254–256. <https://doi.org/10.1038/s41893-020-0510-0>
- Fraval, S., Hammond, J., Bogard, J. R., Ng'endo, M., van Etten, J., Herrero, M., Oosting, S. J., de Boer, I. J. M., Lannerstad, M., Teufel, N., Lamanna, C., Rosenstock, T. S., Pagella, T., Vanlauwe, B., Dotsop-Nguezet, P. M., Baines, D., Carpena, P., Njingulula, P., Okafor, C., ... van Wijk, M. T. (2019). **Food Access Deficiencies in Sub-saharan Africa: Prevalence and Implications for Agricultural Interventions.** *Frontiers in Sustainable Food Systems*, 3, 104. <https://doi.org/10.3389/fsufs.2019.00104>
- Gido, E. O., Ayuya, O. I., Owuor, G., & Bokelmann, W. (2017). **Consumption intensity of leafy African indigenous vegetables: Towards enhancing nutritional security in rural and urban dwellers in Kenya.** *Agricultural and Food Economics*, 5(1), 14. <https://doi.org/10.1186/s40100-017-0082-0>
- Headey, D., Heidkamp, R., Osendarp, S., Ruel, M., Scott, N., Black, R., Shekar, M., Bouis, H., Flory, A., Haddad, L., & Walker, N. (2020). **Impacts of COVID-19 on childhood malnutrition and nutrition-related mortality.** *The Lancet*, 396(10250), 519–521. [https://doi.org/10.1016/S0140-6736\(20\)31647-0](https://doi.org/10.1016/S0140-6736(20)31647-0)
- Herrero, M., Thornton, P. K., Power, B., Bogard, J. R., Remans, R., Fritz, S., Gerber, J. S., Nelson, G., See, L., Waha, K., Watson, R. A., West, P. C., Samberg, L. H., van de Steeg, J., Stephenson, E., van Wijk, M., & Havlík, P. (2017). **Farming and the geography of nutrient production for human use: A transdisciplinary analysis.** *The Lancet Planetary Health*, 1(1), e33–e42. [https://doi.org/10.1016/S2542-5196\(17\)30007-4](https://doi.org/10.1016/S2542-5196(17)30007-4)
- Kamilaris, A., Fonts, A., & Prenafeta-Boldú, F. X. (2019). **The rise of blockchain technology in agriculture and food supply chains.** *Trends in Food Science & Technology*, 91, 640–652.

<https://doi.org/10.1016/j.tifs.2019.07.034>

- Laborde, D., Martin, W., Swinnen, J., & Vos, R. (2020). **COVID-19 risks to global food security.** *Science*, 369(6503), 500–502. <https://doi.org/10.1126/science.abc4765>
- Li, X., & Siddique, K. H. M. (2020). Future Smart Food: Harnessing the potential of neglected and underutilized species for Zero Hunger. *Maternal & Child Nutrition*, 16(S3). <https://doi.org/10.1111/mcn.13008>
- Pérez-Escamilla, R., Gubert, M. B., Rogers, B., & Hromi-Fiedler, A. (2017). **Food security measurement and governance: Assessment of the usefulness of diverse food insecurity indicators for policy makers.** *Global Food Security*, 14, 96–104. <https://doi.org/10.1016/j.gfs.2017.06.003>
- Ruel, M. T., Quisumbing, A. R., & Balagamwala, M. (2018). **Nutrition-sensitive agriculture: What have we learned so far?** *Global Food Security*, 17, 128–153. <https://doi.org/10.1016/j.gfs.2018.01.002>
- van Vliet, J., Eitelberg, D. A., & Verburg, P. H. (2017). **A global analysis of land take in cropland areas and production displacement from urbanization.** *Global Environmental Change*, 43, 107–115. <https://doi.org/10.1016/j.gloenvcha.2017.02.001>
- Vilar-Compte, M., Burrola-Méndez, S., Lozano-Marrufo, A., Ferré-Eguiluz, I., Flores, D., Gaitán-Rossi, P., Teruel, G., & Pérez-Escamilla, R. (2021). **Urban poverty and nutrition challenges associated with accessibility to a healthy diet: A global systematic literature review.** *International Journal for Equity in Health*, 20(1), 40. <https://doi.org/10.1186/s12939-020-01330-0>
- Wolfert, S., Ge, L., Verdouw, C., & Bogaardt, M.-J. (2017). **Big Data in Smart Farming – A review.** *Agricultural Systems*, 153, 69–80. <https://doi.org/10.1016/j.agsy.2017.01.023>
- Zilberman, D., Lu, L., & Reardon, T. (2019). **Innovation-induced food supply chain design.** *Food Policy*, 83, 289–297. <https://doi.org/10.1016/j.foodpol.2017.03.010>
- Zuccala, E., & Horton, R. (2020). **Reframing the NCD agenda: A matter of justice and equity.** *The Lancet*, 396(10256), 939–940. [https://doi.org/10.1016/S0140-6736\(20\)31910-3](https://doi.org/10.1016/S0140-6736(20)31910-3)

2. Shifting to Sustainable Consumption Patterns

- Herrero, M., Hugas, M., Lele, U., Wira, A., & Torero, M. (2020). **Shift to Healthy and Sustainable Consumption Patterns - a paper on Action Track 2.** https://sc-fss2021.org/wp-content/uploads/2020/12/2-Action_Track_2_Scientific_Group_15-12-20.pdf
- Neufeld, L. M., Hendriks, S., & Hugas, M. (2020). **Healthy diet: A definition for the United Nations Food Systems Summit 2021.** <https://sc-fss2021.org/wp->

content/uploads/2020/12/Healthy_diet_Draft-Scientific_Group_25-11-2020.pdf

Reports/Books

- FAO, IFAD, UNICEF, WFP, & WHO. (2020). **The State of Food Security and Nutrition in the World 2020. Transforming food systems for affordable healthy diets.**
<https://doi.org/10.1109/JSTARS.2014.2300145>
- FAO & WHO. (2019). **Sustainable healthy diets.** <https://doi.org/10.4060/ca6640en>

Journal Publications

- Aleksandrowicz, L., Green, R., Joy, E. J. M., Smith, P., & Haines, A. (2016). **The impacts of dietary change on greenhouse gas emissions, land use, water use, and health: A systematic review.** *PLOS ONE*, 11(11), e0165797. <https://doi.org/10.1371/journal.pone.0165797>
- Baker, P., Machado, P., Santos, T., Sievert, K., Backholer, K., Hadjikakou, M., Russell, C., Huse, O., Bell, C., Scrinis, G., Worsley, A., Friel, S., & Lawrence, M. (2020). **Ultra-processed foods and the nutrition transition: Global, regional and national trends, food systems transformations and political economy drivers.** *Obesity Reviews*, 21(12).
<https://doi.org/10.1111/obr.13126>
- Béné, C., Fanzo, J., Haddad, L., Hawkes, C., Caron, P., Vermeulen, S., Herrero, M., & Oosterveer, P. (2020). **Five priorities to operationalize the EAT–Lancet Commission report.** *Nature Food*, 1(8), 457–459. <https://doi.org/10.1038/s43016-020-0136-4>
- Broers, V. J. V., De Breucker, C., Van den Broucke, S., & Luminet, O. (2017). **A systematic review and meta-analysis of the effectiveness of nudging to increase fruit and vegetable choice.** *European Journal of Public Health*, 27(5), 912–920.
<https://doi.org/10.1093/eurpub/ckx085>
- Downs, S., & Demmler, K. M. (2020). **Food environment interventions targeting children and adolescents: A scoping review.** *Global Food Security*, 27, 100403.
<https://doi.org/10.1016/j.gfs.2020.100403>
- Fanzo, J. (2019). **Healthy and sustainable diets and food systems: The key to achieving sustainable development goal 2?** *Food Ethics*, 4(2), 159–174.
<https://doi.org/10.1007/s41055-019-00052-6>
- Gearan, E. C., & Fox, M. K. (2020). **Updated nutrition standards have significantly improved the nutritional quality of school lunches and breakfasts.** *Journal of the Academy of Nutrition and Dietetics*, 120(3), 363–370. <https://doi.org/10.1016/j.jand.2019.10.022>
- Gibb, H. J., Barchowsky, A., Bellinger, D., Bolger, P. M., Carrington, C., Havelaar, A. H., Oberoi,

S., Zang, Y., O'Leary, K., & Devleesschauwer, B. (2019). **Estimates of the 2015 global and regional disease burden from four foodborne metals – arsenic, cadmium, lead and methylmercury.** *Environmental Research*, 174, 188–194.
<https://doi.org/10.1016/j.envres.2018.12.062>

- Grummon, A. H., & Hall, M. G. (2020). **Sugary drink warnings: A meta-analysis of experimental studies.** *PLOS Medicine*, 17(5), e1003120.
<https://doi.org/10.1371/journal.pmed.1003120>
- Hawkes, C., Fox, E., Downs, S. M., Fanzo, J., & Neve, K. (2020). **Child-centered food systems: Reorienting food systems towards healthy diets for children.** *Global Food Security*, 27, 100414. <https://doi.org/10.1016/j.gfs.2020.100414>
- Herforth, A., Arimond, M., Álvarez-Sánchez, C., Coates, J., Christianson, K., & Muehlhoff, E. (2019). **A global review of food-based dietary guidelines.** *Advances in Nutrition*, 10(4), 590–605. <https://doi.org/10.1093/advances/nmy130>
- Hirvonen, K., Bai, Y., Headey, D., & Masters, W. A. (2020). **Affordability of the EAT–Lancet reference diet: A global analysis.** *The Lancet Global Health*, 8(1), e59–e66.
[https://doi.org/10.1016/S2214-109X\(19\)30447-4](https://doi.org/10.1016/S2214-109X(19)30447-4)
- Imamura, F., Micha, R., Khatibzadeh, S., Fahimi, S., Shi, P., Powles, J., & Mozaffarian, D. (2015). **Dietary quality among men and women in 187 countries in 1990 and 2010: A systematic assessment.** *The Lancet Global Health*, 3(3), e132–e142.
[https://doi.org/10.1016/S2214-109X\(14\)70381-X](https://doi.org/10.1016/S2214-109X(14)70381-X)
- Jägermeyr, J., Pastor, A., Biemans, H., & Gerten, D. (2017). **Reconciling irrigated food production with environmental flows for Sustainable Development Goals implementation.** *Nature Communications*, 8(1), 15900. <https://doi.org/10.1038/ncomms15900>
- Knapp, S., & van der Heijden, M. G. A. (2018). **A global meta-analysis of yield stability in organic and conservation agriculture.** *Nature Communications*, 9(1), 3632.
<https://doi.org/10.1038/s41467-018-05956-1>
- Mason-D'Croz, D., Bogard, J. R., Sulser, T. B., Cenacchi, N., Dunston, S., Herrero, M., & Wiebe, K. (2019). **Gaps between fruit and vegetable production, demand, and recommended consumption at global and national levels: An integrated modelling study.** *The Lancet Planetary Health*, 3(7), e318–e329. [https://doi.org/10.1016/S2542-5196\(19\)30095-6](https://doi.org/10.1016/S2542-5196(19)30095-6)
- McDermott, J., & Wyatt, A. J. (2017). **The role of pulses in sustainable and healthy food systems: Pulses in food systems.** *Annals of the New York Academy of Sciences*, 1392(1), 30–42. <https://doi.org/10.1111/nyas.13319>
- Morris, S. S., Barquera, S., Sutrisna, A., Izwardy, D., & Kupka, R. (2020). **Perspective: Interventions to improve the diets of children and adolescents.** *Global Food Security*, 27, 100379. <https://doi.org/10.1016/j.gfs.2020.100379>

- Perignon, M., Vieux, F., Soler, L.-G., Masset, G., & Darmon, N. (2017). **Improving diet sustainability through evolution of food choices: Review of epidemiological studies on the environmental impact of diets.** *Nutrition Reviews*, 75(1), 2–17.
<https://doi.org/10.1093/nutrit/nuw043>
- Schreinemachers, P., Baliki, G., Shrestha, R. M., Bhattacharai, D. R., Gautam, I. P., Ghimire, P. L., Subedi, B. P., & Brück, T. (2020). **Nudging children toward healthier food choices: An experiment combining school and home gardens.** *Global Food Security*, 26, 100454.
<https://doi.org/10.1016/j.gfs.2020.100454>
- Springmann, M., Spajic, L., Clark, M. A., Poore, J., Herforth, A., Webb, P., Rayner, M., & Scarborough, P. (2020). **The healthiness and sustainability of national and global food based dietary guidelines: Modelling study.** *BMJ*, m2322. <https://doi.org/10.1136/bmj.m2322>
- Taillie, L. S., Reyes, M., Colchero, M. A., Popkin, B., & Corvalán, C. (2020). **An evaluation of Chile's Law of Food Labeling and Advertising on sugar-sweetened beverage purchases from 2015 to 2017: A before-and-after study.** *PLOS Medicine*, 17(2), e1003015.
<https://doi.org/10.1371/journal.pmed.1003015>
- Wolfenden, L., Barnes, C., Lane, C., McCrabb, S., Brown, H. M., Gerritsen, S., Barquera, S., Véjar, L. S., Munguía, A., & Yoong, S. L. (2021). **Consolidating evidence on the effectiveness of interventions promoting fruit and vegetable consumption: An umbrella review.** *International Journal of Behavioral Nutrition and Physical Activity*, 18(1), 11.
<https://doi.org/10.1186/s12966-020-01046-y>
- Zarnowiecki, D., Mauch, C. E., Middleton, G., Matwiejczyk, L., Watson, W. L., Dibbs, J., Dessaix, A., & Golley, R. K. (2020). **A systematic evaluation of digital nutrition promotion websites and apps for supporting parents to influence children's nutrition.** *International Journal of Behavioral Nutrition and Physical Activity*, 17(1), 17.
<https://doi.org/10.1186/s12966-020-0915-1>

3. Boosting Nature Positive Production at Sufficient Scale

- Hodson, E., Niggli, U., Kitajima, K., Lal, R., & Sadoff, C. (2020). **Boost Nature Positive Production - A paper on Action Track 3.** https://sc-fss2021.org/wp-content/uploads/2020/12/3-Action_Track_3_Scientific_Group_draft_Dec-12-2020.pdf

Reports/Books

- Padulosi, S., Roy, P., & Rosado-May, F. J. (2019). **Supporting Nutrition-Sensitive Agriculture through Neglected and Underutilized Species.**

https://cgospace.cgiar.org/bitstream/handle/10568/102462/Supporting_Padulosi_2019_ENG.pdf

- Lal, R. (2017). **Improving soil health and human protein nutrition by pulses-based cropping systems.** In Advances in Agronomy (Bd. 145, S. 167–204). Elsevier.
<https://doi.org/10.1016/bs.agron.2017.05.003>

Journal Publications

- Belton, B., Reardon, T., & Zilberman, D. (2020). **Sustainable commoditization of seafood.** *Nature Sustainability*, 3(9), 677–684. <https://doi.org/10.1038/s41893-020-0540-7>
- Frank, S., Beach, R., Havlík, P., Valin, H., Herrero, M., Mosnier, A., Hasegawa, T., Creason, J., Ragnauth, S., & Obersteiner, M. (2018). **Structural change as a key component for agricultural non-CO₂ mitigation efforts.** *Nature Communications*, 9(1), 1060. <https://doi.org/10.1038/s41467-018-03489-1>
- Frank, S., Havlík, P., Soussana, J.-F., Levesque, A., Valin, H., Wollenberg, E., Kleinwechter, U., Fricko, O., Gusti, M., Herrero, M., Smith, P., Hasegawa, T., Kraxner, F., & Obersteiner, M. (2017). **Reducing greenhouse gas emissions in agriculture without compromising food security?** *Environmental Research Letters*, 12(10), 105004. <https://doi.org/10.1088/1748-9326/aa8c83>
- Frison, E., & Clément, C. (2020). **The potential of diversified agroecological systems to deliver healthy outcomes: Making the link between agriculture, food systems & health.** *Food Policy*, 96, 101851. <https://doi.org/10.1016/j.foodpol.2020.101851>
- Gaupp, F., Hall, J., Hochrainer-Stigler, S., & Dadson, S. (2020). **Changing risks of simultaneous global breadbasket failure.** *Nature Climate Change*, 10(1), 54–57. <https://doi.org/10.1038/s41558-019-0600-z>
- Hallström, E., Carlsson-Kanyama, A., & Börjesson, P. (2015). **Environmental impact of dietary change: A systematic review.** *Journal of Cleaner Production*, 91, 1–11. <https://doi.org/10.1016/j.jclepro.2014.12.008>
- Harris, F., Moss, C., Joy, E. J. M., Quinn, R., Scheelbeek, P. F. D., Dangour, A. D., & Green, R. (2019). **The Water Footprint of Diets: A Global Systematic Review and Meta-analysis.** *Advances in Nutrition*, nmz091. <https://doi.org/10.1093/advances/nmz091>
- Herrero, M., Thornton, P. K., Power, B., Bogard, J. R., Remans, R., Fritz, S., Gerber, J. S., Nelson, G., See, L., Waha, K., Watson, R. A., West, P. C., Samberg, L. H., van de Steeg, J., Stephenson, E., van Wijk, M., & Havlík, P. (2017). **Farming and the geography of nutrient production for human use: A transdisciplinary analysis.** *The Lancet Planetary Health*, 1(1), e33–e42. [https://doi.org/10.1016/S2542-5196\(17\)30007-4](https://doi.org/10.1016/S2542-5196(17)30007-4)
- Jensen, E. S., Carlsson, G., & Hauggaard-Nielsen, H. (2020). **Intercropping of grain legumes and cereals improves the use of soil N resources and reduces the requirement for synthetic fertilizer N: A global-scale analysis.** *Agronomy for Sustainable Development*, 40(1), 5.

<https://doi.org/10.1007/s13593-020-0607-x>

- Kruijssen, F., Tedesco, I., Ward, A., Pincus, L., Love, D., & Thorne-Lyman, A. L. (2020). Loss and waste in fish value chains: **A review of the evidence from low and middle-income countries.** *Global Food Security*, 26, 100434. <https://doi.org/10.1016/j.gfs.2020.100434>
- Lal, R. (2020). **Home gardening and urban agriculture for advancing food and nutritional security in response to the COVID-19 pandemic.** *Food Security*, 12(4), 871–876. <https://doi.org/10.1007/s12571-020-01058-3>
- Leclère, D., Obersteiner, M., Barrett, M., Butchart, S. H. M., Chaudhary, A., De Palma, A., DeClerck, F. A. J., Di Marco, M., Doelman, J. C., Dürrauer, M., Freeman, R., Harfoot, M., Hasegawa, T., Hellweg, S., Hilbers, J. P., Hill, S. L. L., Humpenöder, F., Jennings, N., Krisztin, T., ... Young, L. (2020). **Bending the curve of terrestrial biodiversity needs an integrated strategy.** *Nature*. <https://doi.org/10.1038/s41586-020-2705-y>
- Mottet, A., de Haan, C., Falcucci, A., Tempio, G., Opio, C., & Gerber, P. (2017). **Livestock: On our plates or eating at our table? A new analysis of the feed/food debate.** *Global Food Security*, 14, 1–8. <https://doi.org/10.1016/j.gfs.2017.01.001>
- Muller, A., Schader, C., El-Hage Scialabba, N., Brüggemann, J., Isensee, A., Erb, K.-H., Smith, P., Klocke, P., Leiber, F., Stolze, M., & Niggli, U. (2017). **Strategies for feeding the world more sustainably with organic agriculture.** *Nature Communications*, 8(1), 1290. <https://doi.org/10.1038/s41467-017-01410-w>
- Orr, A., Tsusaka, T., Kee-Tui, S. H., & Msere, H. (2016). **What Do We Mean by ‘Women’s Crops’? Commercialisation, Gender and the Power to Name: Women’s Crops.** *Journal of International Development*, 28(6), 919–937. <https://doi.org/10.1002/jid.3224>
- Piñeiro, V., Arias, J., Dürr, J., Elverdin, P., Ibáñez, A. M., Kinengyere, A., Opazo, C. M., Owoo, N., Page, J. R., Prager, S. D., & Torero, M. (2020). **A scoping review on incentives for adoption of sustainable agricultural practices and their outcomes.** *Nature Sustainability*, 3(10), 809–820. <https://doi.org/10.1038/s41893-020-00617-y>
- Pretty, J., Benton, T. G., Bharucha, Z. P., Dicks, L. V., Flora, C. B., Godfray, H. C. J., Goulson, D., Hartley, S., Lampkin, N., Morris, C., Pierzynski, G., Prasad, P. V. V., Reganold, J., Rockström, J., Smith, P., Thorne, P., & Wratten, S. (2018). **Global assessment of agricultural system redesign for sustainable intensification.** *Nature Sustainability*, 1(8), 441–446. <https://doi.org/10.1038/s41893-018-0114-0>
- Smith, P., Calvin, K., Nkem, J., Campbell, D., Cherubini, F., Grassi, G., Korotkov, V., Le Hoang, A., Lwasa, S., McElwee, P., Nkonya, E., Saigusa, N., Soussana, J., Taboada, M. A., Manning, F. C., Nampanzira, D., Arias-Navarro, C., Vizzarri, M., House, J., ... Arneth, A. (2020). **Which practices co-deliver food security, climate change mitigation and adaptation, and combat land degradation and desertification?** *Global Change Biology*, 26(3), 1532–1575. <https://doi.org/10.1111/gcb.14878>

- van der Ploeg, J. D., Barjolle, D., Bruil, J., Brunori, G., Costa Madureira, L. M., Dessein, J., Drag, Z., Fink-Kessler, A., Gasselin, P., Gonzalez de Molina, M., Gorlach, K., Jürgens, K., Kinsella, J., Kirwan, J., Knickel, K., Lucas, V., Marsden, T., Maye, D., Migliorini, P., ... Wezel, A. (2019). **The economic potential of agroecology: Empirical evidence from Europe.** *Journal of Rural Studies*, 71, 46–61. <https://doi.org/10.1016/j.jrurstud.2019.09.003>
- van Vliet, S., Kronberg, S. L., & Provenza, F. D. (2020). **Plant-Based Meats, Human Health, and Climate Change.** *Frontiers in Sustainable Food Systems*, 4, 128. <https://doi.org/10.3389/fsufs.2020.00128>

4. Advancing Equitable Livelihoods and Value Distribution

- Neufeld, L., Huang, J., Badiane, O., Caron, P., & Forsse, L. S. (2020). **Advance Equitable Livelihoods - a paper on Action Track 4.** <https://sc-fss2021.org/wp-content/uploads/2020/12/4-ACTION TRACK 4 Scientific Group draft 30-11-2020.pdf>

Reports/Books

- Acharya, G., Cassou, E., Jaffee, S., & Ludher, E. K. (2021). **RICH Food, Smart City: How Building Reliable, Inclusive, Competitive, and Healthy Food Systems is Smart Policy for Urban Asia.** World Bank. <https://openknowledge.worldbank.org/handle/10986/35137>
- FAO. (2018). **Dynamic development, shifting demographics, changing diets.** <http://www.fao.org/3/I8499EN/i8499en.pdf>
- IFAD. (2019). **Policy Brief. Partnering with indigenous peoples for the SDGs. Advancing solutions by working together.** https://www.ifad.org/documents/38714170/41390728/policybrief_indigenous_sdg.pdf/e294b690-b26c-994c-550c-076d15190100
- World Bank. (2018). **Poverty and Shared Prosperity 2018: Piecing Together the Poverty Puzzle.** <https://openknowledge.worldbank.org/bitstream/handle/10986/30418/9781464813306.pdf>
- Xie, J., & Brownell, K. (2020). **Nutritious food procurement in cities in low and middle-income countries.** [Working Paper #7]. <https://doi.org/10.36072/wp.7>

Journal Publications

- Akter, S., Krupnik, T. J., Rossi, F., & Khanam, F. (2016). **The influence of gender and product design on farmers' preferences for weather-indexed crop insurance.** *Global Environmental Change*, 38, 217–229. <https://doi.org/10.1016/j.gloenvcha.2016.03.010>
- Akter, S., Rutsaert, P., Luis, J., Htwe, N. M., San, S. S., Raharjo, B., & Pustika, A. (2017).

Women's empowerment and gender equity in agriculture: A different perspective from Southeast Asia. *Food Policy*, 69, 270–279. <https://doi.org/10.1016/j.foodpol.2017.05.003>

- Baker, P., Hawkes, C., Wingrove, K., Demaio, A. R., Parkhurst, J., Thow, A. M., & Walls, H. (2018). **What drives political commitment for nutrition? A review and framework synthesis to inform the United Nations Decade of Action on Nutrition.** *BMJ Global Health*, 3(1), e000485. <https://doi.org/10.1136/bmjgh-2017-000485>
- Barrett, C. B. (2020). **Actions now can curb food systems fallout from COVID-19.** *Nature Food*, 1(6), 319–320. <https://doi.org/10.1038/s43016-020-0085-y>
- Browne, J., Lock, M., Walker, T., Egan, M., & Backholer, K. (2020). **Effects of food policy actions on Indigenous Peoples' nutrition-related outcomes: A systematic review.** *BMJ Global Health*, 5(8), e002442. <https://doi.org/10.1136/bmjgh-2020-002442>
- Lambin, E. F., Gibbs, H. K., Heilmayr, R., Carlson, K. M., Fleck, L. C., Garrett, R. D., le Polain de Waroux, Y., McDermott, C. L., McLaughlin, D., Newton, P., Nolte, C., Pacheco, P., Rausch, L. L., Streck, C., Thorlakson, T., & Walker, N. F. (2018). **The role of supply-chain initiatives in reducing deforestation.** *Nature Climate Change*, 8(2), 109–116. <https://doi.org/10.1038/s41558-017-0061-1>
- Manlosa, A. O., Schultner, J., Dorresteijn, I., & Fischer, J. (2019). **Leverage points for improving gender equality and human well-being in a smallholder farming context.** *Sustainability Science*, 14(2), 529–541. <https://doi.org/10.1007/s11625-018-0636-4>
- McCartan, J., van Burgel, E., McArthur, I., Testa, S., Thurn, E., Funston, S., Kho, A., McMahon, E., & Brimblecombe, J. (2020). **Traditional Food Energy Intake Among Indigenous Populations in Select High-Income Settler Colonized Countries: A Systematic Literature Review.** *Current Developments in Nutrition*, nzaa163. <https://doi.org/10.1093/cdn/nzaa163>
- Nordhagen, S. (2020). **Food supply chains and child and adolescent diets: A review.** *Global Food Security*, 27, 100443. <https://doi.org/10.1016/j.gfs.2020.100443>
- Rossi, A., Bui, S., & Marsden, T. (2019). **Redefining power relations in agrifood systems.** *Journal of Rural Studies*, 68, 147–158. <https://doi.org/10.1016/j.jrurstud.2019.01.002>
- Sukhdev, P. (2018). **Smarter metrics will help fix our food system.** *Nature*. <https://www.nature.com/articles/d41586-018-05328-1>
- Wouterse, F., & Badiane, O. (2019). **The role of health, experience, and educational attainment in agricultural production: Evidence from smallholders in Burkina Faso.** *Agricultural Economics*, 50(4), 421–434. <https://doi.org/10.1111/agec.12500>

5. Building Resilience to Vulnerabilities, Shocks, Stresses

- Hertel, T. W. ., Elouafi, I., Ewert, F., & Tanticharoen, M. (2020). **Building Resilience to**

Vulnerabilities, Shocks and Stresses - a paper on Action Track 5. https://sc-fss2021.org/wp-content/uploads/2020/12/5-ACTION_TRACK_5_Scientific_Group_Dec-15-2020.pdf

Reports/Books

- FAO. (2018). **Report on the Work of the FAO Indigenous Peoples Team.** http://www.fao.org/fileadmin/user_upload/faoweb/2018-New/Our_Pillars/2018_Annual_Report_FAO_Indigenous_Peoples_Team.pdf
- FSIN Food Security Information Network. (2020). **2020 Global Report on Food Crises: Joint analysis for better decisions.** <https://docs.wfp.org/api/documents/WFP-0000114546/download/>
- Lowder, S. K., Sánchez, M. V., & Bertini, R. (2019). **Farms, family farms, farmland distribution and farm labour what do we know today?** <http://www.fao.org/3/ca7036en/ca7036en.pdf>
- OECD. (2020). **Strengthening agricultural resilience in the face of multiple risks.** <https://doi.org/10.1787/2250453e-en>

Journal Publications

- Béné, C. (2020). **Resilience of local food systems and links to food security – A review of some important concepts in the context of COVID-19 and other shocks.** *Food Security*, 12(4), 805–822. <https://doi.org/10.1007/s12571-020-01076-1>
- Blay-Palmer, A., Santini, G., Dubbeling, M., Renting, H., Taguchi, M., & Giordano, T. (2018). **Validating the city region food system approach: Enacting inclusive, transformational city region food systems.** *Sustainability*, 10(5), 1680. <https://doi.org/10.3390/su10051680>
- Di Marco, M., Baker, M. L., Daszak, P., De Barro, P., Eskew, E. A., Godde, C. M., Harwood, T. D., Herrero, M., Hoskins, A. J., Johnson, E., Karesh, W. B., Machalaba, C., Garcia, J. N., Paini, D., Pirzl, R., Smith, M. S., Zambrana-Torrelío, C., & Ferrier, S. (2020). **Opinion: Sustainable development must account for pandemic risk.** *Proceedings of the National Academy of Sciences*, 117(8), 3888–3892. <https://doi.org/10.1073/pnas.2001655117>
- Emeana, E. M., Trenchard, L., & Dehnen-Schmutz, K. (2020). **The revolution of mobile phone-enabled services for agricultural development (M-agri services) in africa: The challenges for sustainability.** *Sustainability*, 12(2), 485. <https://doi.org/10.3390/su12020485>
- Hansen, J., Hellin, J., Rosenstock, T., Fisher, E., Cairns, J., Stirling, C., Lamanna, C., van Etten, J., Rose, A., & Campbell, B. (2019). **Climate risk management and rural poverty reduction.** *Agricultural Systems*, 172, 28–46. <https://doi.org/10.1016/j.agsy.2018.01.019>
- Hidrobo, M., Hoddinott, J., Kumar, N., & Olivier, M. (2018). **Social protection, food security, and asset formation.** *World Development*, 101, 88–

103. <https://doi.org/10.1016/j.worlddev.2017.08.014>

- Javed, S. A., Haider, A., & Nawaz, M. (2020). **How agricultural practices managing market risk get attributed to climate change? Quasi-experiment evidence.** *Journal of Rural Studies*, 73, 46–55. <https://doi.org/10.1016/j.jrurstud.2019.11.020>
- Klassen, S., & Murphy, S. (2020). **Equity as both a means and an end: Lessons for resilient food systems from COVID-19.** *World Development*, 136, 105104. <https://doi.org/10.1016/j.worlddev.2020.105104>
- Komarek, A. M., De Pinto, A., & Smith, V. H. (2020). **A review of types of risks in agriculture: What we know and what we need to know.** *Agricultural Systems*, 178, 102738. <https://doi.org/10.1016/j.agsy.2019.102738>
- Mahajan, K., & Tomar, S. (2021). **COVID-19 and Supply Chain Disruption: Evidence from Food Markets in India.** *American Journal of Agricultural Economics*, 103(1), 35–52. <https://doi.org/10.1111/ajae.12158>
- Meyer, M. A. (2020). **The role of resilience in food system studies in low- and middle-income countries.** *Global Food Security*, 24, 100356. <https://doi.org/10.1016/j.gfs.2020.100356>
- Mohanty, S. P., Hughes, D. P., & Salathé, M. (2016). **Using deep learning for image-based plant disease detection.** *Frontiers in Plant Science*, 7, 1419. <https://doi.org/10.3389/fpls.2016.01419>
- Mushtaq, S., Kath, J., Stone, R., Henry, R., Läderach, P., Reardon-Smith, K., Cobon, D., Marcussen, T., Cliffe, N., Kristiansen, P., & Pischke, F. (2020). **Creating positive synergies between risk management and transfer to accelerate food system climate resilience.** *Climatic Change*, 161(3), 465–478. <https://doi.org/10.1007/s10584-020-02679-5>
- Oliver, T. H., Boyd, E., Balcombe, K., Benton, T. G., Bullock, J. M., Donovan, D., Feola, G., Heard, M., Mace, G. M., Mortimer, S. R., Nunes, R. J., Pywell, R. F., & Zaum, D. (2018). **Overcoming undesirable resilience in the global food system.** *Global Sustainability*, 1, e9. <https://doi.org/10.1017/sus.2018.9>
- Rahman, H. M. T., & Hickey, G. M. (2019). **What does autonomous adaptation to climate change have to teach public policy and planning about avoiding the risks of maladaptation in bangladesh?** *Frontiers in Environmental Science*, 7, 2. <https://doi.org/10.3389/fenvs.2019.00002>
- Schreinemachers, P., Grovermann, C., Praneetvatakul, S., Heng, P., Nguyen, T. T. L., Buntong, B., Le, N. T., & Pinn, T. (2020). **How much is too much? Quantifying pesticide overuse in vegetable production in Southeast Asia.** *Journal of Cleaner Production*, 244, 118738. <https://doi.org/10.1016/j.jclepro.2019.118738>
- Vieira, L. C., Serrao-Neumann, S., Howes, M., & Mackey, B. (2018). **Unpacking components of sustainable and resilient urban food systems.** *Journal of Cleaner Production*, 200, 318–330. <https://doi.org/10.1016/j.jclepro.2018.07.283>

