WEI ZHANG

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EDUCATION

Ph.D. Agricultural, Food, and Resource Economics, Michigan State University, East Lansing, Michigan, 2007.
Major field: Environmental and Resource Economics
Minor fields: Econometrics; Agricultural Markets and Price Analysis
Dissertation: Optimal Pest Management in the Presence of Natural Pest Control Services
(Honorable Mention, 2008 American Agricultural Economics Association Outstanding Doctoral Dissertation Award; Departmental Best Dissertation Award for 2007, Michigan State University.)

M.S. Community Development and Applied Economics, University of Vermont, Burlington, Vermont, 2002.

B.A. International Economics, Renmin University of China, Beijing, P.R. China, 1997.

PROFESSIONAL EXPERIENCE

Senior Research Fellow, Research Lead on Ecosystem Health and Biodiversity, Natural Resources and Resilience Unit, the International Food Policy Research Institute (IFPRI). Washington D.C., 2023. December 2023 - present.

Senior Research Fellow, Environment, Production and Technology Division, the International Food Policy Research Institute (IFPRI). Washington D.C., April 2019 – December 2023.
Research Fellow, November 2011-April 2019
Associate Research Fellow, November 2008-October 2011

Specially appointed senior researcher, The Institute of Agricultural Economics and Development, Jiangsu Academy of Agricultural Sciences (JAAS), China. September 2020 – September 2021.

Visiting professor, Chinese Academy of Agricultural Sciences (CAAS). Beijing, China. 2018.

Consultant Environmental Economist, Environment Department, the World Bank. Washington D.C., November 2006-October 2008.

Research Assistant, Department of Agricultural, Food, and Resource Economics, Michigan State University, Fall 2001-Fall 2006.

Intern, China National Forestry Economics and Development Research Center, State Forestry Administration of China, Beijing, P.R. China, Summer 2004.

Research and Teaching Assistant, Department of Community Development & Applied Economics, University of Vermont, Spring 2000-Summer 2001.

PEER-REVIEWED JOURNAL ARTICLES AND BOOK CHAPTERS

1. Estrada-Carmona, N., R. Carmenta, J. Reed, E. Betemariam, T. Falk, A.K. Hart, S. Jones, F. Kleinschroth, M. McCartney, R. Meinzen-Dick, J. Milder, M. Quintero, R. Remans, D. Valbuena, L. Willemen, **W. Zhang**. (2024) Reconciling conservation and development

requires enhanced integration and broader aims: A cross-continental assessment of landscape approaches. *One Earth* 7:1–16. https://doi.org/10.1016/j.oneear.2024.08.014

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3. ElDidi, H., **Zhang, W.**, Blackmore, I., Gelaw, F., De Petris, C., Teka, N., Yimam, S., Mekonnen, D., Ringler, C., & Meinzen-Dick, R. (2024). Getting Ahead of the Game: Experiential Learning for Groundwater Governance in Ethiopia. *International Journal of the Commons*, 18(1), pp. 66–81. DOI: https://doi.org/10.5334/ijc.1316
4. Waeber, P.O., A. Fellay, C.A. Garcia, R. Carmenta, N.E. Carmona, T. Falk, J. Ghazoul, J. Reed, L. Willemen, **W. Zhang**, F. Kleinschroth. (2023) Structuring the complexity of integrated landscape approaches into selectable, scalable, and measurable attributes. *Environmental, Science and Policy* 147: 67-77. https://doi.org/10.1016/j.envsci.2023.06.003
5. Falk, T., **W. Zhang**, R. Meinzen-Dick, L. Bartels, R. Sanil, P. Priyadarshini. (2023) Games for Social Learning: Triggering Collective Changes in Commons Management. *Ecology and Society* 28(1): 30. https://doi.org/10.5751/ES-13862-280130
6. **Zhang, W.**, H. ElDidi, Y. Masuda, R.S. Meinzen-Dick, K. Swallow, C. Ringler, N. DeMello, A. Aldous. (2023) Community-based conservation of freshwater resources: learning from a critical review of the literature and case studies. *Society and Natural Resources*. https://doi.org/10.1080/08941920.2023.2191228
7. Schaub, S., J. Ghazoul, R. Huber, **W. Zhang**, A. Sander, C. Rees, S. Banerjee, and R. Finger. 2023. The role of behavioral factors and opportunity costs in farmers' participation in voluntary agri-environmental schemes: A systematic review. *Journal of Agricultural Economics* 74(3): 617-660. https://doi.org/10.1111/1477-9552.12538
8. Gu, R., **W. Zhang**, K. Chen, F. Nie. 2023. Can information and communication technologies contribute to poverty reduction? Evidence from poor counties in China. *Information Technology for Development* 29(1): 128-150. https://doi.org/10.1080/02681102.2022.2123772
9. Bell, A.R., O.S. Rakotonarivo, A. Bhargava, A.B. Duthie, **W. Zhang**, B. Sargent, S. Lewis, and A. Kipchumba. Financial incentives often fail to reconcile agricultural productivity and pro-conservation behavior. (2023). *Communications Earth & Environment*. 4, 27 (2023). https://doi.org/10.1038/s43247-023-00689-6
10. Sandhu, H., **W. Zhang**, R. Meinzen-Dick, H. ElDidi, S. Perveen, J. Sharma, J. Kaur, P. Priyadarshini. (2023) Valuing ecosystem services provided by land commons in India. *Environmental Research Letters*: 18 013001. https://doi.org/10.1088/1748-9326/acadf4
11. **Zhang, W.**, Meinzen-Dick, R. S., Valappanandi, S., Balakrishna, R., Reddy, H., Janssen, M. A., Thomas, L., Priyadarshini, P., Kandicuppa, S.,Chaturvedi, R., & Ghate, R. (2022). How Do Game Design, Gender, and Players' Backgrounds Affect Behavior in Framed Field Experiments? Evidence from Community Forestry in India. *International Journal of the Commons* 16(1): 341–359. DOI: https://doi.org/10.5334/ijc.1179
12. Contributing author to Chapter 6 Transforming food systems. Mosnier, A., M. Springmann, S. Fan. In: United Nations Environment Programme (2022). Emissions Gap Report 2022: The Closing Window — Climate crisis calls for rapid transformation of societies. Nairobi. https://www.unep.org/emissions-gap-report-2022

13. Li, M., Z. Guo, **W. Zhang**. 2022. A novel seasonal-spatial integrated model for improving the economic-environmental performance of crop production. *MethodsX* 9 (2022) 101906 https://doi.org/10.1016/j.mex.2022.101906
14. Wyckhuys, K.A.G., **W. Zhang**, Y. Colmenarez, E. Simelton, B.O. Sander, Y. Lu. 2022. Tri-trophic defenses as a central pivot of low-emission, pest-suppressive farming systems. *Current Opinion in Environmental Sustainability* 58(October 2022): 101208. https://doi.org/10.1016/j.cosust.2022.101208.
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16. Wyckhuys, K.A.G., M.J. Furlong, **W. Zhang**, G.C. Yubak Dhoj. 2022. Carbon benefits of enlisting nature for crop protection. *Nature Food*. https://doi.org/10.1038/s43016-022-00510-1. (IFPRI blog: https://www.ifpri.org/blog/scaling-integrated-pest-management-protect-crops-and-reduce-carbon-footprints)
17. Meinzen-Dick, R.S., P. Pradhan, and **W. Zhang**. 2022. Migration and Gender Dynamics of Irrigation Governance in Nepal. International Journal of the Commons, 16(1): 137–154. https://doi.org/10.5334/ijc.1165
18. Lu, Y., K.A.G. Wyckhuys, L. Yang, B. Liu, J. Zeng, Y. Jiang, N. Desneux, **W. Zhang**, and K. Wu. 2022. Bt cotton area contraction drives regional pest resurgence, crop loss and pesticide use. *Plant Biotechnology Journal 20: 390–398.* https://doi.org/10.1111/pbi.13721
19. Li, M., **W. Zhang**, Z. Guo, P. Bhandary. 2022. Deforestation and Smallholder Income: Evidence from Remittances to Nepal. *Land Economics* 98(2): 376-398. https://www.doi.org/10.3368/le.98.2.090220-0139R
20. Meinzen-Dick, R., **W. Zhang**, H. ElDidi, P. Priyadarshini. 2022. Chapter 7. Landscape Governance: Engaging Stakeholders to Confront Climate Change. 2022 Global Food Policy Report: Climate Change & Food Systems Washington, D.C.: International Food Policy Research Institute (IFPRI). https://ebrary.ifpri.org/digital/collection/p15738coll2/id/135895
21. Wan, N.F., M. Dainese, F. Zhu, L.B. Xiao, **W. Zhang**, …, B. Li. 2021. Decline of three farmland pest species in rapidly urbanizing landscapes. *iScience* 24, 103002. DOI: https://doi.org/10.1016/j.isci.2021.103002.
22. Li, M., Z. Guo, **W. Zhang**. 2021. Balancing Food Security and Environmental Sustainability by Optimizing Seasonal-Spatial Crop Production in Bangladesh. *Environmental Research Letters* 16 (2021) 074046. https://doi.org/10.1088/1748-9326/ac0be4
23. Meinzen-Dick, R., C. Ringler, **W. Zhang**, and C. Arndt. 2021. Natural Resources and Environment: Governance for Nature-Positive Food Systems. In 2021 Global Food Policy Report. Chapter 4. Pp. 44-53. Washington, D.C.: International Food Policy Research Institute (IFPRI). https://gfpr.ifpri.info/
24. **Zhang, W.**, M. Elias, R. Meinzen-Dick, K. Swallow, D. Walker, C.C. Hernandez, E. Nkonya. Soil health and gender: why and how to identify the linkages. 2021. *International Journal of Agricultural Sustainability* 19(3-4): 269-287. DOI: 10.1080/14735903.2021.1906575
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Influence of land tenure interventions on human well-being and environmental outcomes. *Nature Sustainability* 4: 242–251. https://doi.org/10.1038/s41893-020-00648-5

26. Masuda, Y.J., J.R.B. Fisher, **W. Zhang**, T. Boucher, C. Castilla, and G. Blundo. 2020. A respondent-driven method for mapping small agricultural plots using tablets and high resolution imagery. *Journal of International Development* 32(5): 727-748. https://doi.org/10.1002/jid.3475
27. McGonigle, D.F., G.R. Nodari, R. Phillips, E. Aynekulu, N. Estrada Carmona, S. Jones, I. Koziell, E. Luedeling, R. Remans, K. Shepherd, D. Wiberg, C. Whitney, **W. Zhang**. 2020. A knowledge brokering framework for integrated landscape management. *Frontiers in Sustainable Food Systems* 4:13. doi: 10.3389/fsufs.2020.00013
28. Matthews, N., **W. Zhang**, A. Bell, and L. Treemore-Spears. 2020. Ecosystems and Ecosystem Services, Chapter 9 in Introduction to the Food-Energy-Water Nexus, Peter Saundry and Benjamin Ruddell, editors, Springer, New York.
29. Dainese, M., E.A. Martin, […**W. Zhang**...], I. Steffan-Dewenter. 2019. A global synthesis reveals biodiversity-mediated benefits for crop production. *Science Advances* 5(10): eaax0121. DOI: 10.1126/sciadv.aax0121.
30. Tallis, H., […**W. Zhang**...], S. Zobrist. 2019. Aligning Evidence Generation and Use Across Health, Development, and Environment. *Current Opinion in Environmental Sustainability* 39:81–93. https://www.sciencedirect.com/science/article/pii/S1877343518301374?via%3Dihub
31. Sandhu, H., A. Muller, P. Sukhdev, K. Merrigan, A. Tenkouano, P. Kumar, S. Hussain, **W. Zhang**, W. Pengue, B Gemmill-Herren, M.W. Hamm, M.C.T. von der Pahlen, C. Obst, K. Sharma, H. Gundimeda, A. Markandya, P. May, G. Platais, J. Weigelt, I.L. Alva. 2019. The future of agriculture and food: evaluating the holistic costs and benefits. *The Anthropocene Review* 6(3):270-278. doi:10.1177/2053019619872808
32. Chaplin-Kramer, R., M. O'Rourke, N. Schellhorn, **W. Zhang**, B. Robinson, C. Gratton, J. Rosenheim, T. Tscharntke, and D.S. Karp. 2019. Measuring what matters: actionable information for conservation biocontrol in multifunctional landscape. *Frontiers in Sustainable Food Systems* 3:60. doi: 10.3389/fsufs.2019.00060
33. **Zhang, W.**, E. Dulloo, G. Kennedy, A. Bailey, H. Sandhu, and E. Nkonya. (2019). Biodiversity and Ecosystem Services. Chapter 8 in C. Campanhola and S. Pandey, editors, *Sustainable Food and Agriculture: An Integrated Approach*. Pages 137-152. https://www.sciencedirect.com/science/article/pii/B978012812134400008X The Food and Agriculture organization of the United Nations (FAO). Co Published by Elsevier Inc. DOI: https://doi.org/10.1016/B978-0-12-812134-4.00008-X.
34. **Zhang, W.**, Y.H. Lu, W. van der Werf, J.K. Huang, F. Wu, K. Zhou, X.Z. Deng, Y.Y. Jiang, K.M. Wu, M.W. Rosegrant. (2018) Multidecadal, county-level analysis of the effects of land use, Bt cotton, and weather on cotton pests in China. *Proceedings of the National Academy of Sciences of the United States of America* (*PNAS*) 115(33): E7700–E7709. https://doi.org/10.1073/pnas.1721436115
35. Karp, D.S., ……, **Zhang, W.**, et al. (2018). Crop pests and predators exhibit inconsistent responses to surrounding landscape composition. *Proceedings of the National Academy of Sciences of the United States of America* (*PNAS*) 115(33): E7863–E7870. **[Cover story]** https://doi.org/10.1073/pnas.1800042115

36. Wyckhuys, K.A.G., **Zhang, W.**, Prager, S.D., Kramer, D.B., Delaquis, E., van der Werf, W. (2018) Biological control of an invasive agricultural pest eases pressures on global commodity markets. *Environmental Research Letters* 13(9): 094005. **[Editors' Featured Article]** https://doi.org/10.1088/1748-9326/aad8f0
37. **Zhang, W.**, Gowdy, J., Bassi, A.M., Santamaria, M., DeClerck, F., Adegboyega, A., Andersson, G.K.S., Augustyn, A.M., Bawden, R., Bell, A., Darknhofer, I., Dearing, J., Dyke, J., Failler, P., Galetto, L., Hernández, C.C., Johnson, P., Jones, S.K., Kleppel, G., Komarek, A.M., Latawiec, A., Mateus, R., McVittie, A., Ortega, E., Phelps, D., Ringler, C., Sangha, K.K., Schaafsma, M., Scherr, S., Hossain, M.S., Thorn, J.P.R., Tyack, N., Vaessen, T., Viglizzo, E., Walker, D., Willemen, L. and Wood, S.L.R. (2018). Systems thinking: an approach for understanding 'eco-agri-food systems'. In TEEB for Agriculture & Food: Scientific and Economic Foundations. Geneva: UN Environment. **[The TEEBAgriFood initiative won the Vision Award of 2018 Future Policy Award (FPA) for the report.]**
38. **Zhang, W.**, E. Kato, F. Bianchi, P. Bhandary, G. Gort, and W. van der Werf. 2018. Farmers' perceptions of crop pest severity in Nigeria are associated with landscape, agronomic and socio-economic factors. *Agriculture, Ecosystems and Environment* 259: 159–167.
39. Huang, J., K. Zhou, **W. Zhang**, X. Deng, W. van der Werf, Y. Lu, K. Wu, and M.W. Rosegrant. 2018. Uncovering the economic value of natural enemies and the true cost of chemical insecticides to cotton farmers in China. *Environmental Research Letters* 13 (2018) 064027. https://doi.org/10.1088/1748-9326/aabfb0
40. Wood, S., S. Jones, J.A. Johnson, K. Brauman, R. Chaplin-Kramer, A. Fremier, E. Girvetz, L.J. Gordon, C. Kappel, L. Mandle, M. Mulligan, P. O'Farrell, W.K. Smith, L. Willemen, **W. Zhang**, F. DeClerck. 2018. Distilling the role of ecosystem services in the Sustainable Development Goals. *Ecosystem Services* 29 (A): 70–82.
41. DeClerck, F.A.J., S. Jones, S. Attwood, D. Bossio, E. Girvetz, B. Chaplin-Kramer, E. Enfors, A. Fremier, L. J. Gordon, F. Kizito, I. Lopez Noriega, N. Matthews, M. McCartney, M. Meacham, A. Noble, M. Quintero, R. Remans, R. Soppe, L. Willemen, S. Wood, and **W. Zhang**. 2016. Agricultural ecosystems and their services: the vanguard of sustainability? *Current Opinion in Environmental Sustainability* 23: 92–99. http://dx.doi.org/10.1016/j.cosust.2016.11.016
42. **Zhang, W**., E. Kato, P. Bhandary, E. Nkonya, H.I. Ibrahim, M. Agbonlahor, H.Y. Ibrahim, and C. Cox. Awareness and Perceptions of Ecosystem Services in Relation to Land Use Types: Evidence from Rural Communities in Nigeria. 2016. *Ecosystem Services* 22(A): 150-160. DOI: 10.1016/j.ecoser.2016.10.011
43. Bell, A. and **W. Zhang**. 2016. Payments discourage coordination in ecosystem services provision: Evidence from Behavioral experiments in Southeast Asia. *Environmental Research Letters* 11 (2016) 114024. DOI 10.1088/1748-9326/11/11/114024
44. Tscharntke, T., D. Karp, R. Chaplin-Kramer, P. Batáry, F. deClerck, C. Gratton, A. Ives, M. Jonsson, E. Martin, A. Martínez-Salinas, T.D. Meehan, M. O'Rourke, K. Poveda, J.A. Rosenheim, A. Rusch, N. Schellhorn, S. Wratten, **W. Zhang**. 2016. When natural habitat fails to enhance biological pest control – five hypotheses. *Biological Conservation* 204 (Part B): 449–458.
45. Bell, A.R., **W. Zhang**, and K. Nou. 2016. Pesticide use and cooperative management of natural enemy habitat in a framed field experiment. *Agricultural Systems* 143: 1–13.

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47. Koo, J., N, M. Ephraim, C. Azzarri, C. Cox, T. Johnson, A.M. Komarek, H.Y. Kwon, A. De Pinto, C. Roberts, and **W. Zhang**. 2016. Land and soil management: Promoting healthy soils for healthier agricultural systems. In 2016 Global Food Policy Report. Chapter 5. Pp. 40-47. Washington, D.C.: International Food Policy Research Institute (IFPRI). http://ebrary.ifpri.org/cdm/ref/collection/p15738coll2/id/130213
48. Swinton, S. M., C. B. Jolejole-Foreman, F. Lupi, S. Ma, **W. Zhang** and H. Chen (2015). Economic Value of Ecosystem Services from Agriculture. Chapter 3 in S. K. Hamilton, J. E. Doll, and G. P. Robertson, editors. The Ecology of Agricultural Landscapes: Long-Term Research on the Path to Sustainability. Oxford University Press, New York, New York, USA.
49. Zhou, K., J. Huang, X. Deng, W. van der Werf, **W. Zhang**, Y. Lu, K. Wu, and F. Wu. (2014) "Effects of land use and insecticides on natural enemies of aphids in cotton: first evidence from smallholder agriculture in the North China Plain." *Agriculture, Ecosystems and Environment* 183: 176– 184.
50. Yang, J., **W. Zhang**, and S. Tokgoz. (2013) "The Macro Economic Impact of Chinese Currency Appreciation on China and the United States: a Global CGE Analysis." *Journal of Policy Modeling* 35(6): 1029 – 1042.
51. **Zhang, W**., E. Yu, S. Rozelle, J. Yang, and S. Msangi. 2013. "The Impact of Biofuel Growth on Agriculture: Why is the Range of Estimates so Wide?" *Food Policy* 38: 227 – 239.
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53. **Zhang, W.**, and S.M. Swinton. 2012. "Optimal Control of Soybean Aphid in the Presence of Natural Enemies and the Implied Value of Their Ecosystem Services." *Journal of Environmental Management* 96 (1): 7-16.
54. **Zhang, W**., and S. Pagiola. 2011. "Assessing the potential for synergy in the implementation of Payment for Environmental Services (PES) programs: an empirical analysis in Costa Rica." *Environmental Conservation* 38(4): 406-416.
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56. **Zhang, W**., W. van der Werf, and S.M. Swinton. 2010. "Spatially Optimal Habitat Management for Enhancing Natural Control of an Invasive Agricultural Pest: Soybean Aphid." *Resource and Energy Economics* 32 (2010) 551–565.
57. Pagiola, S., **W. Zhang**, and A. Colom. 2010. "Can payments for watershed services help save biodiversity? A spatial analysis of highland Guatemala." *Journal of Natural Resources Policy Research* 2(1): 7-24.
58. Wang, Q., and **W. Zhang**. 2010. "An economic analysis of potato demand in China." *American Journal of Potato Research* 87:245–252.
59. **Zhang, W**., and S.M. Swinton. 2009. "Incorporating Natural Enemies in an Economic Threshold for Dynamically Optimal Pest Management." *Ecological Modeling* 220: 1315–1324.

60. **Zhang, W**., T.H. Ricketts, C. Kremen, K. Carney, and S.M. Swinton. 2007. "Ecosystem Services and Dis-services to Agriculture." *Ecological Economics* 64(2): 253-260. [Ranked top three articles published in Ecological Economics by WoS citations in each of the years from 2004 to 2014 (Costanza et al. 2016, Ecological Economics 123: 68–76)]
61. Liu, C., S. Wang, **W. Zhang**, and D. Liang. 2007. "Compensation for Forest Ecological Services in China." *Forestry Studies in China* 9(1): 68-79.
62. Liu, C., and **W. Zhang**. 2006. "Impacts of Conversion of Farmland to Forestland Program on Household Income: Evidence from a Sand Control Program in the Vicinity of Beijing and Tianjin." *China Economic Quarterly* (Chinese) 6(1): 273-290.
63. Wang, Q., and **W. Zhang**. 2004. "China's Potato Industry and Potential Impacts on the Global Market." *American Journal of Potato Research* 81 (2):101-109.

RESEARCH MANUSCRIPTS IN THE PIPELINE

1. Bell, A., O.S. Rakotonarivo, **W. Zhang**, C. De Petris, A. Kipchumba, R.S. Meinzen-Dick. Understanding Borana pastoralist adaptation to drought via games and experiments. Revised and Resubmitted. *Ecology and Society*.
2. Wu, V., A.R. Bell, and **W. Zhang**. Farm size heterogeneity reduces effectiveness of payments for ecosystem services: An Agent-Based Model study. Under review at *Environmental Research Letters*,
3. Nkonya, E., E. Kato, C. Kaizzi, and **W. Zhang**. Gender, soil fertility management & poverty dynamics in Uganda. Under review at *Food Policy*.
4. Blackmore, Ivy, Hagar ElDidi, Emmanuel Obuobie, Margaret Akuriba, **Wei Zhang**, Claudia Ringler, and Ruth S. Meinzen-Dick. Learning Effects of an Experiential Groundwater Resource Game in North-Eastern Ghana. Under review at *Journal of Development Economics*.
5. Guo, Z., H. Sharma, M. Jadav, U. Hettiarachchi, C. Guha, **W. Zhang**, P. Priyadarshini, R. S. Meinzen-Dick. Measuring Above-Ground Carbon Stock Using Spatial Analysis and the InVEST Model: Application in the Thoria Watershed, India. Under review at the journal of *Environmental Research Communications.*
6. Wyckhuys, K., … **W. Zhang**. Invasive pests reduce carbon sequestration of monoculture tree plantations. Under review at *Diversity and Distributions*.
7. Castilla, C., Y.J. Masuda, **W. Zhang**. Intra-Household Allocation, Beliefs, and Communication between Spouses in Kenya. *Journal of Economic Behavior and Organization*.
8. Hou, L., **W. Zhang**, Y. Zou, J. Tang, J. Huang, F. Bianchi, W. van der Werf. Dynamics of pest and natural enemy populations in subtropical rice landscapes: the role of insecticide use and semi-natural habitats. Under review at *Environmental Research Letters*.

OTHER PUBLICATIONS AND REPORTS

1. Blackmore, Ivy and ElDidi, Hagar and Obuobie, Emmanuel and Akuriba, Margaret and Zhang, Wei and Ringler, Claudia and Meinzen-Dick, Ruth S., Learning Effects of an Experiential Groundwater Resource Game in North-Eastern Ghana. Available at SSRN: https://ssrn.com/abstract=4796586 or http://dx.doi.org/10.2139/ssrn.4796586
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carbon stock modeling in the Thoria Watershed, India. CGIAR Blog. https://www.cgiar.org/news-events/news/can-sustainable-management-of-land-commons-offer-a-nature-positive-solution-initial-insights-from-land-use-based-above-ground-carbon-stock-modeling-in-the-thoria-watershed-india/

3. Hettiarachchi, Upeksha, Wei Zhang, and Kristin Davis. 2024. Ecosystem services may provide large economic values in forests in Kenya and Vietnam. CGIAR Blog. Ecosystem services may provide large economic values in forests in Kenya and Vietnam - CGIAR
4. Kinuthia, Dickson, Sedi Boukaka, Kristin Davis, Wei Zhang, Upeksha Hettiarachch. 2024. Kenyan farmers in Kisumu and Vihiga are embracing nature-positive agri-food systems. CGIAR Blog. Kenyan farmers in Kisumu and Vihiga are embracing nature-positive agri-food systems - CGIAR
5. Hettiarachchi, Upeksha; Zhang, Wei; Zhe, Guo; and Walter, Kibet. 2023. Toward Sustainable Land Use Planning: Land Use Mapping for Nandi County, Kenya. CGIAR Blog. https://www.cgiar.org/news-events/news/toward-sustainable-land-use-planning-land-use-mapping-for-nandi-county-kenya/
6. Sapkota, T. B., Corbeels, M., Verchot, L., Zhang, W., Castro, A. & Martius, C. (2023). Greenhouse gas mitigation potential of food systems and approach to quantify them (Seminar Report). CGIAR. https://hdl.handle.net/10883/22909
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79. Sobczynska, E., **W. Zhang** and S. Msangi. 2011. "The potential for ethanol as a sustainable household cooking energy option in Africa". Selected paper, the 15th *International Consortium on Applied Bioeconomy Research* (ICABR) Annual Conference on "Sustainability and the Bioeconomy", Frascati (Rome), Italy, June 26-29, 2011.
80. Siwa Msangi, S., P. Dorosh, and **W. Zhang**, 2008. "Biofuels and Human Welfare: Balancing Energy Needs for Fuel and Food." Conference proceedings of the workshop on Biofuels at Addis Ababa University, October 20th –21st 2008, Addis Ababa, Ethiopia.
81. **Zhang, W.** 2008. "Optimal Pest Management in the Presence of Natural Pest Control Services" *American Journal of Agricultural Economics* 90(5). Abstract of doctoral dissertation being honored at the 2008 American Agricultural Economics Association Meeting.
82. Pagiola, S., Zhang, W., and Colom, A., 2007. "Assessing the Potential for Payments for Watershed Services to Reduce Poverty in Highland Guatemala." Washington DC: World Bank.
83. Pagiola, S., A. Colom, and W. Zhang. 2007. "Mapping Environmental Services in Highland Guatemala." Washington DC: World Bank.
84. Swinton, S.M., and W. Zhang. 2005. "Rethinking Ecosystem Services from an Intermediate Product Perspective." Selected paper, the annual meeting of *American Agricultural Economics Association*, Providence, Rhode Island, July 24-27, 2005.
85. Zhang, W., and C. Liu. 2005. "The Impact of Environmental Policy on Household Income and Activity Choice: Evidence from Sandstorm Source Control Program in North China." In *Proceedings of the Chinese Economists Society 2005--Sustainable Economic Growth in China: Investing in Human Capital and Environment.*
86. Horan, R.D., R. Claassen, and W. Zhang. 2004. "Instrument Choice and Targeting." Staff paper 04-15, Department of Agricultural Economics, Michigan State University.
87. Horan, R.D., R. Claassen, J. Agapoff, and W. Zhang. 2004. "Instrument Choice and Budget-Constrained Targeting." Staff paper 04-14, Department of Agricultural Economics, Michigan State University.
88. Swinton, S.M., C.M. Lanser, and W. Zhang. 2005. "Economic Analysis of Sustainable Agriculture and Food Systems." Web site developed for the Sustainable Agriculture and Food Systems program at Michigan State University, http://www.safs.msu.edu/econ/about.htm.
89. Zhang, W., R. Parsons, and D. Meals. 2001. "Financial Impacts vs. Environmental Impacts of Alternative Phosphorus Management Practices on Vermont Dairy Farms." *Agricultural and Resource Economics Review* 30(2): 223. Selected abstract of the Northeastern Agricultural and Resource Economics Association Meeting, Bar Harbor, Maine, June 2001.
90. Zhang, W., Q. Wang, and C. Fang. 2001. "China's Urban Consumer Demand for Dairy Products and Implications for Trade." *Agricultural and Resource Economics Review* 30(2): 217. Selected abstract of the Northeastern Agricultural and Resource Economics Association Meeting, Bar Harbor, Maine, June 2001.

SELECTED PRESENTATIONS

1. Wei Zhang, 2024. Soil health and gender: how big is the gap? soil health and gender. Paper presentation, session on "Gender Inequalities and Soil Health". Congress of the International Union of Soil Sciences, May 19-21, 2024, Florence, Italy.
2. Wei Zhang, 2024. Co-organizer, "Transdisciplinary Approaches in Agri-Food Systems Transformation Research", Pre-Conference Workshop Submission #5115, 32nd International Conference of Agricultural Economics (ICAE), August 2-7, 2024 New Delhi, India
3. Wei Zhang, 2023. Panelist, Building socio-ecological resilience through ecosystem-based solutions to address the climate crisis and safeguard biodiversity.COP28 Food Pavilion Event, Dubai, UAE, December 11, 2023.
4. Wei Zhang, 2023. Panelist, Empowering agents of transformation: Paths towards inclusive governance for sustainable food systems. COP28 Side Event PandaHub Pavilion, Dubai, UAE, December 10, 2023.
5. Wei Zhang, 2023. Panelist, Water-Energy-Food-Environment Nexus: Transformative Pathways in a Climate Resilient Pakistan. COP28 Pakistan Pavilion, Dubai, UAE, December 10, 2023.
6. Wei Zhang, panelist on "From Policy to Practice – Bringing Rio Conventions to life through women's leadership in climate and biodiversity agendas", co-hosted by WWF International, CARE-WWF Alliance and Agroecology Coalition, September 19, 2023. Nature Positive Hub, the Climate Week NYC event, New York City
7. Wei Zhang, "Low-emission food systems: CGIAR-China research partnership". Session on Climate change and agricultural land use system management in China, China Pavilion, UNFCCC CoP 27, November 6, 2022. Virtual.
8. ElDidi, H. W. Zhang, F. Gelaw, N. Teka, D. Mekonnen, S. Yimam, C. De Petris, C. Ringler, R. Meinzen-Dick. 2021. Experiential learning: Groundwater games and collective action in Ethiopia. Selected paper presentation at Sustainability and Development Conference 2022, January 24-28, 2022. Virtual.
9. Panelist. OneCGIAR Initiative "NEXUS Gains" Talk 7: Carbon Emissions from Inland Water. December 8, 2022. Virtual.
10. Chair and Panelist. Webinar, Enhancing Biodiversity and Resilience in Intensive Farming Systems: Results from an ETH Zürich-IFPRI Collaborative study. Organized by IFPRI, ETH Zürich, and Bayer. December 6, 2022. Virtual.
11. Guo, Z., H. Sharma, M. Jadav and W. Zhang. 2022. Mapping Above Ground Carbon Storage and Sequestration in Thoria Watershed, India: A Spatially Explicit Ecosystem Service Assessment Using InVEST Model. Presentation at the 10th International Conference on Agro-geoinformatics (Agro-Geoinformatics).
12. Panelist. From Research to Resilience - CGIAR WLE webinar series #6: Innovations in soil health monitoring for nature and people. October 28, 2021.
13. Wei Zhang, "Sustainable management of commons to boost synergies: A case study on India", presentation at From Research to Resilience-CGIAR WLE webinar series #6: Boosting synergies and managing trade-offs in food systems. October 21, 2021.
14. Wei Zhang, Engaging stakeholders: Landscape management for confronting climate change. IFPRI Virtual 20 "Ideas for confronting climate change today". October 14, 2021.
15. Meinzen-Dick, R., P. Pradhan, W. Zhang. 2021. Migration and Gender Dynamics in Irrigation Governance in Nepal. In session "Moving beyond the "feminization" of

agriculture" at the "Cultivating Equality: Advancing Gender Research in Agriculture and Food Systems" (Virtual) conference, October 12-15, 2021.

16. ElDidi, H., R. Khurana, W. Zhang, H. Sandhu, C. Guha, P. Priyadarshini, H. Nagendra, Z. Guo, R. Meinzen-Dick. 2021. Common lands in India: Spatial distribution and overlay with socioeconomic and environmental indicators. Selected paper presentation at Landscape 2021: Diversification for Sustainable and Resilient Agriculture. September 20-22, 2021.
17. Meinzen-Dick, R., W. Zhang, P. Pradhan. 2021. Migration and Gender Dynamics in Irrigation Governance in Nepal: Results of Phone Survey with Water Users Association Leaders. In Invited Panel "Beyond the Feminization of Agriculture" at the International Conference of Agricultural Economists (ICAE) 2021 (Virtual) conference, August 17-31, 2021, the triennial conference of the International Association of Agricultural Economists (IAAE).
18. Falk, T., W. Zhang, R. Meinzen-Dick, and L. Bartels. 2021. Games for triggering collective changes in natural resource management: four cases from India. Poster presentation at *Tropentag 2021: Towards shifting paradigms in agriculture for a healthy and sustainable future (virtual conference)*, September 15-17, 2021.
19. ElDidi, H. W. Zhang, F. Gelaw, N. Teka, D. Mekonnen, S. Yimam, C. De Petris, C. Ringler, R. Meinzen-Dick. 2021. Experiential Learning: Groundwater Games and Collective Action in Ethiopia. Selected paper presentation at *Tropentag 2021: Towards shifting paradigms in agriculture for a healthy and sustainable future (virtual conference)*, September 15-17, 2021.
20. Li, M., Z. Guo, W. Zhang. 2021. Balancing Food Security and Environmental Sustainability by Optimizing Seasonal-Spatial Crop Production in Bangladesh. In symposium "Quantifying the linkage between human and natural ecosystems for improved land use decision-making" at the International Conference of Agricultural Economists (ICAE) 2021 (Virtual) conference, August 17-31, 2021, the triennial conference of the International Association of Agricultural Economists (IAAE).
21. Zhang, W., ElDidi, H. F. Gelaw, N. Teka, D. Mekonnen, S. Yimam, C. De Petris, C. Ringler, R. Meinzen-Dick. 2021. Getting Ahead of the Game: Raising Awareness of Groundwater Depletion in Ethiopia. In symposium "Games for Triggering Collective Change in Natural Resource Management" at the International Conference of Agricultural Economists (ICAE) 2021 (Virtual) conference, August 17-31, 2021, the triennial conference of the International Association of Agricultural Economists (IAAE).
22. Meinzen-Dick, R., W. Zhang, P. Pradhan. 2021. Migration and gender dynamics in irrigation governance in Nepal. CGIAR research program on Policies, Institutions and Markets (PIM) webinar "Feminization of agriculture: Building evidence to debunk myths on current challenges and opportunities". June 10, 2021.
23. Meinzen-Dick, R., W. Zhang, P. Pradhan, and E. Kato. 2020. Irrigation system responses to male migration: Quantitative results of a phone survey. CGIAR research program on Policies, Institutions and Markets (PIM) webinar, Migration and gender dynamics in irrigation governance in Nepal. November 25, 2020.
24. Li, M., Z. Guo and W. Zhang. 2020. Balancing Food Security and Environmental Sustainability through Seasonal Crop Allocation in Bangladesh. Selected paper for poster presentation at the 2020 Agricultural and Applied Economics Association (AAEA) annual meeting (virtual), August 10-11, 2020.

25. Li, M., W. Zhang. 2020. Does 'Landless' Stimulate Bangladesh Rural Migration under Weather Risk? Selected paper for presentation at the 2020 Agricultural and Applied Economics Association (AAEA) annual meeting (virtual), August 10-11, 2020.
26. Zhang, W., Z. Guo, X. Cheng, and V. Kowal. 2020. Valuation of nature's contribution to maintaining soil fertility in the Upper Tana Basin, Kenya: An integrated socio-ecological modeling approach. Poster selected for presentation, the 2020 Natural Capital Symposium, Stanford University, CA, USA. March 16-18, 2020 [Conference being postponed due to the covid-19 pandemic].
27. Gu, R., W. Zhang, K. Chen, F. Nie. Is ICT overpromised for poverty reduction objective? Evidence from poor counties in rural China. Selected paper presentation, China Agricultural Economic Review (CAER) annual international conference, October 17-19, 2019, Hangzhou, China.
28. Zhang, W. 2019. New ideas on sustainable pest management. IFPRI policy seminar "Adapting to New Climate Realities: Doing More, Better, and New". Washington DC, September 19, 2019.
29. Guo, Z. W. Zhang, M. Li, J. Tang, Z. Yu, L. Di. 2019. Impacts of land cover changes to nutrient delivery in Bangladesh: A spatially explicit ecosystem service assessment using InVEST model. The 8th International Conference on Agro-Geoinformatics, July 16-19, 2019, Istanbul, Turkey.
30. Zhang, W., R. Meinzen-Dick, P. Priyadarshini, L. Thomas, R. Ghate, M. Janssen, V. Sanoop, R. Balakrishna, H. Reddy, R. Chaturvedi. 2019. What does a framed field experiment on community forestry leave behind in India: a qualitative and quantitative exploration. Selected paper presentation, the International Association for the Study of the Commons (IASC) Conference. Lima, Peru, July 1-5, 2019. Selected paper presentation, the Sixth Workshop on the Ostrom Workshop (WOW6), Bloomington, Indiana, June 19-22, 2019.
31. Falk, T., W. Zhang, R. Meinzen-Dick, L. Bartels. 2019. Lessons learnt from using behavioral games for institutional capacity development in South Asia. Selected paper presentation, the International Association for the Study of the Commons (IASC) Conference. Lima, Peru, July 1-5, 2019.
32. Zhang, W. 2019. VCA framework – a Freshwater crosswalk review. Voice, Choice and Action Gathering, the Nature Conservancy, Bend, Oregon, May 13-16, 2019.
33. Zhang, W., R. Meinzen-Dick, R. Chaturvedi, P. Priyadarshini, M. Janssen, L. Thomas, R. Ghate, R. Balakrishna, H. Reddy, S. Kandicuppa, V. Sanoop. 2018. What do games really reveal? Interpreting observed behavior in a framed field experiment in India with a grain of salt. Selected paper presentation at the Sustainability and Development Conference, University of Michigan, Ann Arbor, Michigan, Nov 9-11, 2018.
34. Zhang, W., Y. Liu, A. Bell. 2018. Disentangling determinants of insecticide use to manage production, food security, and health risks: Evidence from household survey and risk assessment experiments in Cambodia and Vietnam. Poster presentation at the 2018 Annual Meeting of the Planetary Health Alliance, May 29–31, 2018, Edinburgh, UK.
35. Zhang, W. 2018. Holistic and integrated approaches to achieving SDG 15. Invited panelist, Sustainable Development Goal 15: Progress and Prospects - An expert group meeting in preparation for HLPF 2018: Transformation towards sustainable and resilient societies. United Nations, New York, May 14-15, 2018.

36. Zhang, W. 2018. Disentangling determinants of insecticide use to manage production, food security, and health risks: Evidence from Cambodia and Vietnam. Concurrent session on Pesticide use determinants and human health. the 9th International IPM Symposium, March 19-22, 2018, Baltimore, Maryland, USA.
37. Zhang, W. 2017. Managing insects-based ecosystem services: lessons and recommendations. Invited panel presentation. Invited panelist, FAO-North America Roundtable Discussion: Scaling Up Pollinator Action for Food, Environmental and Health Resilience. November 3, 2017, Washington DC.
38. Zhang, W. 2017. Natural Resource Management Games for Research and Impact: Evidence from framed field experiments in India and Southeast Asia. Agricultural Policy Support Unit (APSU), Ministry of Agriculture, Dhaka, Bangladesh, November 7, 2017; Research seminar at the Indian Council of Agricultural Research (ICAR)-campus, New Delhi, India, November 15, 2017.
39. Zhang, W. 2017. Cooperative management of natural enemy habitat for ecosystem services provision: Evidence from behavioral experiments in Southeast Asia. Invited presentation, The 2nd South Lake Innovation Forum for International Young Talents, Huazhong Agricultural University, Wuhan, China, May 17-19, 2017 (Based on Bell and Zhang, 2016, *ERL*).
40. Zhang, W., Y. Liu, A. Bell. 2016. "Farmers' pesticide use behavior toward own consumption- versus sale-oriented production: Joint effects of risk preferences and perceptions of health risks." Selected paper presentation at the 2016 Agricultural and Applied Economics Association (AAEA) annual meeting, July 31-August 2, 2016, Boston, USA.
41. Bell, A. and W. Zhang. 2016. "Payments crowd out coordination in ecosystem services provision: Evidence from behavioral experiments in Southeast Asia." Selected paper presentation at the Association for Environmental Studies and Sciences (AESS) annual conference, Washington DC. June 8-11, 2016.
42. Liu, Y., W. Zhang, P. Bhandary. 2016. "Impact of irrigation on crop choices and diversification in Nepal" Paper presented at the National Center for Science and the Environment (NCSE) national conference on "The Food-Water-Energy Nexus", January 19-21, 2016, Washington DC.
43. Bell, A., N. Matthews, and W. Zhang. 2016. "Opportunities for improved promotion of ecosystem services in agriculture under the WEF Nexus." Paper presented at the National Center for Science and the Environment (NCSE) national conference on "The Food-Water-Energy Nexus", January 19-21, 2016, Washington DC.
44. Guo, Z., R. Shrestha, W. Zhang, P. Bhandary, E. Yu, L. Di, 2015. "Land cover classification and change detection analysis using LandSat series and geospatial datasets in Nepal from 1980 to 2010" Selected paper, Agro-Geoinformatics 2015: Information for Sustainable Agriculture, the 4th International Conference on Agro-Geoinformatics. Istanbul, Turkey, July 20-24, 2015.
45. Zhang, W., E. Kato, P. Bhandary, E. Nkonya, H.I. Ibrahim, M.U. Agbonlahor, and H.Y. Ibrahim. 2015. "Communities' perceptions and knowledge of ecosystem services: Evidence from rural communities in Nigeria." Selected poster, the International Association of Agricultural Economists (IAAE) Triennial Conference: 29th ICAE, August 8-14, 2015, Milan, Italy.

46. Liu, Y., W. Zhang, P. Bhandary. 2015. "Measuring the impact of irrigation on crop diversity and productivity in Nepal: Evidence from a panel household data." Invited presentation at the 6th International Seminar on "Small Scale Irrigation Systems: Challenges to Sustainable Livelihood" organized by the Farmer Managed Irrigation Systems Promotion Trust (FMIST), February 15-16, 2015, Kathmandu, Nepal.
47. Li, M., W. Zhang, Z. Guo, Y. Liu, and P. Bhandary. 2015. Deforestation and Smallholder Income: Evidence from Remittances to Nepal. Abstract accepted by the 4th Annual Association of Environmental and Resource Economists (AERE) Summer Conference. June 3-5, 2015, San Diego, California.
48. Zhang, W., E. Kato, P. Bhandary, E. Nkonya, H.I. Ibrahim, M.U. Agbonlahor, and H.Y. Ibrahim. 2014. "Communities' perceptions and knowledge of ecosystem services: Evidence from rural communities in Nigeria." Selected paper, CGIAR workshop on "Institutions for Ecosystems Services", October 27-29, 2014, Washington DC, USA.
49. Ringler, C. and W. Zhang. 2014. "Challenges and opportunities of undertaking social surveys in the context of interdisciplinary projects on ecosystem services." ESPA Social Surveys Event, London, UK, October 23-24, 2014.
50. Zhang, W. 2014. "Land Use Diversity, Insecticides, and the Value of Natural Enemies in Cotton: First Evidence from Smallholder Agriculture in the North China Plain." AFRE Department Brown Bag Seminar, Michigan State University, East Lansing, Michigan, USA, May 30, 2014.
51. Zhang, W. 2014. "Ecosystem valuation case study – Pest control as an ecosystem service." Invited lecture at the Training workshop on "Economic Tools for Integrating Biodiversity and Ecosystem Services into Agricultural Sector Investments" Biodiversity and Ecosystem Services Program, Inter-American Development Bank, Washington D.C. May 20-21, 2014.
52. Koo, J., W. Zhang, C. Cox, 2014. "Developing Sustainable Agricultural Productivity Indicators." Sustainable Agricultural Productivity Target Meeting, Washington DC, USA, January 24, 2014.
53. Bell, A. and W. Zhang, 2014. "Promoting Insect-based Ecosystem Services in Smallholder Landscapes: Pilot results from Framed Field Experiment – Cambodia", IFPRI Brown bag seminar, Washington DC, USA, March 24, 2014.
54. Zhang, W., P. Bhandary, E. Kato, E. Nkonya, H. I. Ibrahim, M. U. Agbonlahor, and H. U. Ibrahim. 2013. "Farmers' perceptions and knowledge of ecosystem services: Initial findings from Nigeria." Workshop on "BioSight/SustainableFutures" project, Washington DC, December 3-5, 2013.
55. Nkonya, E., W. Zhang, E. Kato and P. Bhandary. 2013. "Local Institutions for Collective Management of Ecosystem services." Workshop on "BioSight/SustainableFutures" project, Washington DC, December 3-5, 2013.
56. Zhang, W. 2013. "Integrating Institutions into Bio-Economic Modeling for Development." Discussant for the paper entitled "Integrating Institutions into Bio-Economic Modeling for Development: A Background Paper for the IFPRI BioSight Project on Sustainable Agricultural Intensification at the Nexus of Food, Water, Land, Energy and the Environment", by Kimberly A. Swallow and Brent M. Swallow. Workshop on "BioSight/SustainableFutures" project, Washington DC, December 3-5, 2013.
57. Zhang, W., Jikun Huang, Ke Zhou, Xiangzheng Deng, Wopke van der Werf, Yanhui Lu, Kongming Wu, Feng Wu, and Mark Rosegrant. 2013. "Land use, pest regulation ecosystem

services, and economic value of natural enemies: Evidence from China." Invited presentation at the International Symposium on Agro-biodiversity for Sustainability Development, June 3-4, Beijing, China. The Symposium was co-organized by Biodiversity International and Chinese Academy of Agricultural Sciences.

58. Zhang, W., Y. Lu, F. Wu, J. Huang, K. Zhou, W. van der Werf, X. Deng, K. Wu, M.W. Rosegrant. 2012. "The Effects of Land Use Diversity on Pest Pressure and Insecticide Use in Cotton: A County Level Analysis for China." Selected paper presented at the China Section AAEA Annual Meeting, August 12-14, Seattle, Washington, USA. The same paper was also presented at the ESPA project workshop held at Center for Chinese Agricultural Policy, Chinese Academy of Sciences, July 19, 2012, Beijing, China; The Nigeria Strategy Support Program (NSSP) Policy Seminar, September 13, 2012, Abuja, Nigeria; FAO, April 12, 2012, Rome, Italy; Biodiversity International, April 13, 2012, Rome, Italy; and the Crop Systems Analysis seminar, Wageningen University, October 8, 2012, the Netherlands.
59. Zhang, W. and M. Rosegrant. 2012. "Landscape Diversity and Ecosystem Services in Agricultural Ecosystems: Preliminary Results from China." Poster presented at the ESPA Annual Science Conference, November 19-20, 2012, London, UK.
60. Yang, J., W. Zhang, and S. Tokgoz. 2012. "The Macro Economic Impact of Chinese Currency Appreciation on China and the United States: a Global CGE Analysis." Paper submitted for consideration of presentation at the 28th *International Conference of Agricultural Economists* (ICAE) of the IAAE, Foz do Iguaçu, Brazil, August 18- 24, 2012
61. Zhang, W., S.M. Swinton, A. Egbendewe-Mondzozo, W. van der Werf, F. Bianchi, and J. Huang. 2012. "Optimizing landscape-level habitat set-aside for natural enemies of agricultural pests." Presentation at the 7th International IPM Symposium, Memphis, Tennessee, March 27-29, 2012.
62. Zhang, W., and S.M. Swinton. 2012. "Adjusting the Economic Threshold to Account for Natural Enemies: the case of Soybean Aphids." Presentation at the 7th International IPM Symposium, Memphis, Tennessee, March 27-29, 2012.
63. Tokgoz, S., W. Zhang, S. Msangi, and P. Bhandary. 2011. "Agriculture and Energy: Implications for Food Security, Water, and Land Use." American Geophysical Union (AGU) fall meeting, San Francisco, CA, December 5-9, 2011.
64. Zhang, W. 2011. "Ecosystem services in agriculture". Presentation at the capacity building workshop for the Ecosystem Services and Poverty Alleviation (ESPA) Framework Programme project "Landscape Diversity and Ecosystem Services in Agricultural Ecosystems: Implications for Sustainable Growth and Rural Poverty in China." Institute of Plant Protection, Beijing, China, July 6-7, 2011.
65. Zhang, W. S.M. Swinton, A. Egbendewe-Mondzozo, W. van der Werf, and F. Bianchi. 2011. "Habitat Management to Enhance Natural Pest Control Ecosystem Services at the Landscape Scale: A Spatial Land Use Optimization Approach". Selected paper presented at the *Association of Environmental and Resource Economists* (AERE) Summer Conference, Seattle, WA, June 9-10, 2011.
66. Zhang, W. S.M. Swinton, A. Egbendewe-Mondzozo, W. van der Werf, and F. Bianchi. 2011. "Spatially optimal habitat land use management for natural pest control ecosystem services in agricultural landscapes". Selected paper presented at the *Northeastern Agricultural and Resource Economics Association* (NAREA) annual meeting, Pittsburgh, PA, July 24-26, 2011.

67. Sobczynska, E., W. Zhang and S. Msangi. 2011. "The potential for ethanol as a sustainable household cooking energy option in Africa". Paper presented at the 15th *International Consortium on Applied Bioeconomy Research* (ICABR) Annual Conference on "Sustainability and the Bioeconomy", Frascati (Rome), Italy, June 26-29, 2011.
68. Hill, R., S. Msangi, and W. Zhang. 2010. "Understanding small-holder constraints to jatropha investment". Selected poster, the annual meeting of *American Agricultural Economics Association*, Denver, Colorado. July 25-27, 2010.
69. Zhang, W., and S. Pagiola. 2009. "Assessing the potential for synergy in the implementation of Payment for Environmental Services (PES) programs: an empirical analysis of Costa Rica." Contributed poster, the 27th conference of *International Association of Agricultural Economists,* Beijing, China. August 16-22, 2009.
70. Zhang, W., E. Yu, S. Rozelle, J. Yang, and S. Msangi. 2009. "The Impact of Biofuel Growth on Agriculture: Why is the Range of Estimates so Wide?" Organized Symposium paper, the 27th conference of *International Association of Agricultural Economists*, Beijing, China. August 16-22, 2009. Also presented at the brown-bag seminar at IFPRI, Washington DC, February 2009.
71. Tallis, H., S. Pagiola, W. Zhang, S. Shaikh, E. Nelson, C. Stanton, and P. Shyamsundar, 2009. "Mapping distributional effects of ecosystem services on human well-being." Selected paper, the annual meeting of the *Society for Conservation Biology,* Beijing, China, July 11-16, 2009.
72. Msangi, S. W. Zhang, and S. Thornhill. 2009. "Biofuels in Sub-Saharan Africa Policies, Issues and Concerns". The Biofuel Situation & Policies in Developing Countries, 7-8 May 2009, Bancroft Hotel, UC Berkeley.
73. Pagiola, S., W. Zhang, and A. Colom. 2008. "Assessing the Potential for Payments for Watershed Services to Reduce Poverty in Guatemala." Selected poster, the annual meeting of *American Agricultural Economics Association*, Orlando, Florida. July 27-29, 2008.
74. van der Werf, W., D.A. Landis, M.M. Gardiner, A.C. Costamagna, J.M. Baveco, P.W. Goedhart, F.J.J.A. Bianchi, N.C. Schellhorn, W. Zhang, and S.M. Swinton. 2008. "Modelling and design of pest suppressive landscapes." *The 5th International Crop Science Congress*, Korea, April 13-18, 2008.
75. Swinton, S.M., W. Zhang, and F. Song. 2007. "Managing an Invasive Agricultural Pest Using Information about Natural Enemies." *Invasive Species Workshop,* Michigan State University, East Lansing, Michigan, October 2007.
76. Pagiola, S. W. Zhang, and A. Colom. 2007. "Can the poor participate in PES? Empirical evidence from Latin America." *Poverty and Environment Partnership (PEP) 11th Meeting*, Copenhagen, Denmark, June 18-20, 2007
77. Pagiola, S. W. Zhang, and A. Colom. 2007. "Current ideas for mapping distributional effects and other social outcomes of resource management." *Collaboration Opportunities for Ecosystem Service Science in Environmental Management: The World Bank and the Natural Capital Project.* Washington, D.C., September 26, 2007.
78. Zhang, W., W. van der Werf, and S.M. Swinton. 2007. "Spatially Optimal Habitat Management For Natural Pest Control Services." Selected poster, the annual meeting of *American Agricultural Economics Association*, Portland, Oregon. July 29-August 1, 2007.

79. Colom, A., S. Pagiola, and W. Zhang. 2007. "Where Are the Services? Spatial Mapping of Water Services in Guatemala." *Global Workshop of Payment for Environmental Services*, Lombok, Indonesia, January 22-27, 2007.
80. Zhang, W., and S.M. Swinton. 2006. "A Natural Enemies-Adjusted Economic Threshold for Pest Control." Selected paper, the *8th Annual BIOECON Conference on the Economic Analysis of Ecology and Biodiversity*, Kings College Cambridge, United Kingdom, August 29-30, 2006.
81. Zhang, W., and S.M. Swinton. 2006. "The Effect of Natural Enemies on Profit-Maximizing Pest Control." Poster, the *Long-Term Ecological Research All-Scientists Meeting*, Estes Park, Colorado, September 20-23, 2006. Also presented at *Graduate Student Research Symposium*, Department of Agricultural, Food, and Resource Economics, Michigan State University, East Lansing, Michigan, January 27, 2007.
82. Zhang, W., and S.M. Swinton. 2006. "Pest Control in the Presence of Pest Suppression by Natural Enemies." Selected paper, the annual meeting of *American Agricultural Economics Association*, Long Beach, California, July 23-26, 2006.
83. Zhang, W., and S.M. Swinton. 2006. "How Pest Suppression by Natural Enemies Contributes to Optimal Pest Management." *Ecological Research in Agricultural Landscapes: The 2006 Kellogg Biological Station Long-Term Ecological Research Symposium and Poster Forum*, Michigan State University, East Lansing, Michigan, May 9, 2006.
84. Zhang, W., and S.M. Swinton. 2006. "Valuing Ecosystem Service from an Intermediate Product Perspective." Selected poster, *American Association for the Advancement of Science*, annual meeting, St. Louis, Missouri, February 16-20, 2006. Also presented at *Ecological Research in Agricultural Landscapes: The 2006 Kellogg Biological Station Long-Term Ecological Research Symposium and Poster Forum*, Michigan State University, East Lansing, Michigan, May 9, 2006
85. Swinton, S.M., and W. Zhang. 2005. "Rethinking Ecosystem Services from an Intermediate Product Perspective." Selected paper, the annual meeting of *American Agricultural Economics Association*, Providence, Rhode Island, July 24-27, 2005.
86. Zhang, W., and C. Liu. 2005. "The Impact of Environmental Policy on Household Income and Activity Choice: Evidence from Sandstorm Source Control Program in North China." Selected paper, the annual meeting of *American Agricultural Economics Association*, Providence, Rhode Island, July 24-27, 2005. Also presented at *Chinese Economists Society International Conference on Sustainable Economic Growth in China*, Chongqing, P.R. China, June 24-26, 2005, and the *Second Annual Conference of the Consortium for Western China Development Studies: Rural and Sustainable Development in Western China*, Yinchuan, Ningxia, P.R. China, June 21-22, 2005 (invited panel paper).
87. Wang, Q., and W. Zhang. 2005. "U.S.-China Agricultural Trade: Potentials and Challenges." Selected poster, the *Symposium on Ecological Complexity and Ecosystem Services: Opportunities for China-USA Collaboration*, University of Vermont, Burlington, Vermont, October 21-22, 2005.
88. Horan, R.D., R. Claassen, J. Agapoff, and W. Zhang. 2004. "Instrument Choice and Budget-Constrained Targeting." Selected paper, the annual meeting of *American Agricultural Economics Association*, Denver, Colorado, August 1-4, 2004.
89. Horan, R.D., R. Claassen, and W. Zhang. 2003. "The Economics of Green Payments for Reducing Agricultural Nonpoint Source Pollution in the Corn Belt." Selected paper, the

annual meeting of *American Agricultural Economics Association*, Montreal, Canada, July 27-30, 2003. Also presented at the annual meeting of *American Water Resources Association International Congress "Watershed Management for Water Supply Systems"*, New York City, New York, June 29-July 3, 2003.

90. Zhang, W., and Q. Wang. 2003. "Changes in China's Urban Food Consumption and Implications for Trade." Selected paper, the annual meeting of *American Agricultural Economics Association*, Montreal, Canada, July 27-30, 2003.
91. Zhang, W., and R. Parsons. 2001. "Financial Impacts of Alternative Phosphorus Management Practices: The Case of Vermont Dairy Farms." Selected paper, the annual meeting of *American Agricultural Economics Association*, Chicago, Illinois, August 5-8, 2001.
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MEDIA

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Panelist, Bending the curve of biodiversity loss: How can agriculture become part of the solution? A (virtual) panel discussion focused on enhancing biodiversity and resilience in agriculture for environmental well-being, co-hosted by the World Food System Center, the Ecosystem Management Group, the Sustainable Agroecosystems Group, and the Agricultural Economics and Policy Group of ETH Zurich. June 29, 2021. https://worldfoodsystem.ethz.ch/news/wfsc-news/2021/06/bending-the-curve-of-biodiversity-loss-a-panel-discussion.html

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Research featured in China Science Daily ("中国科学报"), "Biodiversity crucial for sustainable agricultural development" (Chinese title: "多样化"助推农业可持续发展), by 韩扬眉, November 11, 2019, http://news.sciencenet.cn/htmlnews/2019/11/432535.shtm

Press release on the Dainese et al. (2019, Science Advances) article featured on multiple outlets in multiple languages (including one released by IFPRI in Chinese). Blog posted on the WLE website was picked up in AGree newsletter. October 2019.

Research featured in China Science Daily ("中国科学报"), "Natural enemy insects contribute to green economy" (Chinese title: 天敌昆虫为绿色生产增值), (Fang Wang, August 22, 2018) http://news.sciencenet.cn/sbhtmlnews/2018/8/338381.shtm?id=338381

Research featured in Nature *Research Highlights*, "How a wasp the size of a pinhead may have moved global markets", August 20, 2018 https://www.nature.com/articles/d41586-018-06005-z

Research featured in UC-Davis News - Food & Agriculture. "Natural Habitat Can Help Farmers Control Pests, But Not Always a Win-Win" (Kat Kerlin, July 30, 2018). https://www.ucdavis.edu/news/natural-habitat-can-help-farmers-control-pests-not-always-win-win

Research reported in article "The double threat to China's cotton industry: warmer weather and the hungry mirid bug" in the South China Morning Post (Alice Shen, July 21, 2018). The article reached 4M readers. https://www.scmp.com/news/china/society/article/2156243/double-threat-chinas-cotton-industry-warmer-weather-and-hungry#comments

Research reported in news article "Study estimates true value of ladybird as biocontrol" in the Science Development Network (SciDev.Net) (Sandy Ong, Singapore, June 22, 2018) https://www.scidev.net/asia-pacific/farming/news/study-estimates-true-value-of-ladybird-as-biocontrol.html

Interview article "Determining the True Costs of Our Food Through Systems Thinking" https://foodtank.com/news/2018/04/wei-zhang-teeb-agrifood-systems-thinking-empowers-us/. Food Tank. April 2018. Republished under the title "Systems thinking empowers us" on WLE's Thrive blog, June 4, 2018. https://wle.cgiar.org/thrive/2018/04/06/systems-thinking-empowers-us

Research featured in WLE News Story "WLE researchers contribute to landmark ecosystem report", July 6, 2018. https://wle.cgiar.org/wle-researchers-contribute-landmark-ecosystem-report.

Research featured in CGIAR Research Program on Water, Land and Ecosystems (WLE). 2018. Solutions for Thriving Ecosystems: 2017-2018 Research Highlights. Colombo, Sri Lanka: CGIAR Research Program on Water, Land and Ecosystems (WLE). 2p. (https://wle.cgiar.org/solutions-thriving-ecosystems-2017-2018-research-highlights).

Research reported in article "NonCropShare game assesses usefulness of co-operation 'sweeteners'" in the *Environmental Research Web* (Kate Ravilious, December 6, 2016). Retrieved from http://environmentalresearchweb.org/cws/article/news/67220

SERVICE TO THE PROFESSION

Referee for journals: Journal of Environmental Economics and Management (***Outstanding reviewer status achieved***), Environmental Research Letters, Environmental Research Communications, Ecological Economics, Ecosystem Services, Resource and Energy Economics, Economic Modelling, Ecological Modelling, Agricultural Economics, Environmental and Resource Economics, Environmental Conservation, Applied Economic Perspectives & Policy, Environment, Development and Sustainability, Canadian Journal of Agricultural Economics, International Journal of Pest Management, China Economic Review, European Review of Agricultural Economics, Environmental Management, Journal of Environmental Economics and Policy, Ecological Engineering, Land Use Policy, Local Environment, Food Policy, Nature Ecology & Evolution, Frontiers in Environmental Science, Frontiers in Sustainable Food Systems

Member of Scientific Advisory Committee, International Research Symposium on Agricultural Greenhouse Gas Mitigation: From Research to Implementation (AgriGHG-2024), hosted by the German Federal Ministry of Food and Agriculture (BMEL), co-organized by the Global Research Alliance on Agricultural Greenhouse Gases, CGIAR and the German Federal Research Institute Thuenen, 2024.

Judge for the Food System Vision Prize, The Rockefeller Foundation**,** (https://www.foodsystemvisionprize.org/), 2020.

Committee member: Agricultural and Applied Economics Association (AAEA) Nominating Committee, 2017-2020; IFPRI Publications Review Committee (PRC), 2018 – present; IFPRI Publications Ranking Committee, 2024 – present; Advisory Committee, Rural Development and Food Security Forum, Asian Development Bank, 2019; Standing Search Committee, Development Strategy and Governance Division, IFPRI, 2010; Standing Search Committee, Environment Production Technology Division, IFPRI, 2013

Working Group Member: 1) the National Socio-Environmental Synthesis Center (SESYNC) Working Group on Evidence and Decision-Support Tools for Controlling Agricultural Pests with Conservation Interventions. 2014-2016. 2) Science for Nature and People Partnership (SNAPP) Working Group on "Making ecosystems count in the Sustainable Development Goals", 2014-2015.

Reviewer for competitive grant programs: Natural Environment Research Council (NERC) of the UK, Alberta Water Research Institute of Canada, USDA-National Institute of Food and Agriculture's (NIFA) Exploratory Research program of the Agriculture and Food Research Initiative, the Royal Society's Future Leaders - African Independent Research (FLAIR) Fellowships.

Expert reviewer for the First Order Draft (FOD) of the Intergovernmental Platform on Biodiversity and Ecosystem Services (IPBES) Assessment report on the Thematic assessment of pollinators, pollination and food production (Deliverable 3a) and Policy support tools and methodologies for scenario analysis and modelling of biodiversity and ecosystem services (Deliverable 3c). January-March 2015.

Reviewer for selected papers and posters for the International Association of Agricultural Economists (IAAE)

Workshop or session organizer or co-organizer:

- "Quantifying the Linkage between Human and Natural Ecosystems for Improved Land Use Decision-Making", Symposium proposal submitted to the International Conference of Agricultural Economists (ICAE) 2021 (Virtual) conference, August 17-31, 2021, the triennial conference of the International Association of Agricultural Economists (IAAE)
- "Pesticide use determinants and human health", the 9th International IPM Symposium, March 19-22, 2018, Baltimore, Maryland, USA.
- "Trade-offs and Synergies in Provision of Environmental Services from Working Ecosystems" and "The role of Payments for Environmental Services (PES) in global efforts to reduce emissions from deforestation and forest degradation (REDD)", the 4th World Congress of Environmental and Resource Economists (WCERE)**,** Montreal, Canada, June 28-July 2, 2010.
- "Ecosystem Services and Valuation." Graduate Student Symposium at the Long-Term Ecological Research All-Scientists Meeting, Estes Park, Colorado, September 20-23, 2006.

AWARDS

1. ThriveNet researcher event participation grant, the CGIAR's Water, Land and Ecosystems (WLE) research program. 2018.
2. Recipient of the "Enhanced Negotiations Skills for Women" training through the AWARD Leadership Series, Mombasa, Kenya, September 23-26, 2013.
3. Visiting Scientist Grant, 2012. C.T. de Wit Graduate School for Production Ecology and Resource Conservation, Wageningen University, the Netherlands.
4. Honorable Mention Recipient, Outstanding Doctoral Dissertation Award, American Agricultural Economics Association, 2008.
5. Best Ph.D. Dissertation Award. Department of Agricultural, Food, and Resource Economics, Michigan State University, 2007.
6. "AAAS/*Science* Program for Excellence in Science" Award. 2006. American Association for the Advancement of Science (AAAS).
7. Graduate Office Fellowship and International Scholars and Programs Travel Fund, Michigan State University, 2005.
8. Graduate Travel Grant, Northeastern Agricultural and Resource Economics Association, 2001.
9. Field Work Fellowship, Renmin University of China. Beijing, P.R. China, 1994.