

Xiaoshang Deng

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Education

Colorado State University, PhD in Agricultural and Resource Economics (2026 –)

Purdue University, MS in Agricultural Economics (2024 – 2026)

Thesis: Water and Nutrient Management Strategies in Corn-Soybean Systems: Economic and Environmental Performance

Advisor: Prof. Juan Sesmero

Northeast Agricultural University, Bachelor of Management/Agricultural Economics (2020 – 2024)

Thesis: Effects of Standardized Dairy Farming on Technical Efficiency: Evidence from Heilongjiang Province

Advisor: Prof. Bing Jiang

Journal Publications (*corresponding author)

Yu, T., Lyu, M., Qu, R., Yang, Y., Zhang, Y., Niu, K., Liu, H., & **Deng, X.*** (in press). Can EU-27 achieve the decarbonization target in the energy sector? A scenario analysis based on an extended STIRPAT model. *Energy Foresight*. <https://doi.org/10.1016/j.engfor.2026.09.002>

Tang, S., Li, S., Luo, Z., Chen, J., **Deng, X.**, & Zheng, L. (2026). Beyond the red ink: How firms reconcile performance failures with environmental social responsibility. *Humanities and Social Sciences Communications*. Advance online publication. <https://doi.org/10.1057/s41599-026-08181-0>

Yu, T., Chen, X., Liu, X., Chen, H., Tang, S., Cui, L., Liu, H., Niu, K., & **Deng, X.*** (2025). Dynamic relationship between renewable energy, economic development, and energy security based on SVAR and ARDL–ECM models: Evidence from China. *Applied Energy*, 402, 126886. <https://doi.org/10.1016/j.apenergy.2025.126886>

Niu, K.-Y., Xu, X.-B., **Deng, X.***, Zhao, Q.-R., Li, S.-P., Dong, L.-F., & Cheng, M.-Q. (2025). Dynamics and drivers of China's crop production carbon emissions in 2001–2021: A micro–macro data integration study. *Advances in Climate Change Research*, 16(6), 1298–1311. <https://doi.org/10.1016/j.accres.2025.09.006>

Deng, X., Niu, K., Xu, X., Li, C., & Zhang, L. (2024). Does the closure of polluting enterprises improve rural livelihoods? Evidence from rural China. *Sustainable Development*, 32(5), 5513–5537. <https://doi.org/10.1002/sd.2984>

Jiang, B., Cui, L., **Deng, X.**, Chen, H., & Tang, W. (2024). Understanding the consumer–citizen gap in Chinese public attitudes toward farm animal welfare. *Scientific Reports*, 14, 6426. <https://doi.org/10.1038/s41598-024-57280-y>

Jiang, B., Tang, W., Li, M., Yang, G., **Deng, X.**, & Cui, L. (2023). Assessing land resource carrying capacity in China's main grain-producing areas: Spatial–temporal evolution, coupling coordination, and obstacle factors. *Sustainability*, 15(24), 16699. <https://doi.org/10.3390/su152416699>

Cui, L., Tang, W., **Deng, X.**, & Jiang, B. (2023). Farm animal welfare is a field of interest in China: A bibliometric analysis based on CiteSpace. *Animals*, 13(19), 3143. <https://doi.org/10.3390/ani13193143>

Jiang, B., Tang, W., Cui, L., & **Deng, X.** (2023). Precision livestock farming research: A global scientometric review. *Animals*, 13(13), 2096. <https://doi.org/10.3390/ani13132096>

Jiang, B., **Deng, X.***, Chen, H., Cui, L., & Tang, W. (2023). Research trends and hotspots in climate adaptation of the agricultural system: A bibliometric analysis. *Frontiers in Sustainable Food Systems*, 7, 1158904.

<https://doi.org/10.3389/fsufs.2023.1158904>

Deng, X., Yang, Q., Zhang, D., & Dong, S. (2022). Application of conservation tillage in China: A method to improve climate resilience. *Agronomy*, 12(7), 1575. <https://doi.org/10.3390/agronomy12071575>

Yu, T., Mahe, L., Li, Y., Wei, X., **Deng, X.**, & Zhang, D. (2022). Benefits of crop rotation on climate resilience and its prospects in China. *Agronomy*, 12(2), 436. <https://doi.org/10.3390/agronomy12020436>

Research Experience

Colorado State University, Graduate Research Assistant (Aug 2026 –)

Supervisor: Prof. Amanda Countryman

Purdue University, Graduate Research Assistant (Aug 2024 – May 2026)

Supervisor: Prof. Juan Sesmero

IAED, Chinese Academy of Agricultural Sciences (May 2022 – Aug 2024)

Supervisor: Prof. Kunyu Niu

BSSC, University College London (Apr 2023 – Sep 2024)

Supervisor: Prof. Zhifu Mi

Teaching Experience

Colorado State University, Graduate Teaching Assistant (Aug 2026 –)

AREC 230: Agricultural Data Management and Analysis (Instructor: Prof. Nicholas Magnan)