

Ayorinde Ogunyiola
Department of Political Science and Sociology
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EDUCATION

South Dakota State University, United States Ph.D. Sociology	2021
Jomo Kenyatta University of Agriculture and Technology & Pan African University, Kenya MS Mathematics (finance)	2017
University of Ibadan, Nigeria MS Economics	2014
Ahmadu Bello University, Nigeria BS Economics	2010

RESEARCH INTERESTS

Climate Change; Precision Agriculture; Responsible Innovation; Science and Technology Studies; Computational Social Science

EMPLOYMENT

Current Position

Murray State University, KY <i>Assistant Professor, Department of Political Science and Sociology</i>	2022 – present
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Prior Employment

Purdue University, West Lafayette, Indiana <i>Post-Doctoral Fellow, Department of Forestry and Natural Resources</i>	2021 – 2022
University of Illinois at Urbana-Champaign, Illinois <i>NSF-INFEWS Graduate Fellow, National Center for Supercomputing Applications (NSCA)</i>	2019 – 2021
South Dakota State University, Brookings, South Dakota <i>Graduate Research Assistant</i>	2019 - 2021
South Dakota State University, Brookings, South Dakota <i>Graduate Teaching Assistant</i>	2018 - 2020
Jomo Kenyatta University of Agriculture & Technology, Kenya <i>Lecturer, Department of Economics, Accounting & Finance</i>	2016 - 2017
Centre for Growth and Development <i>Research Associate</i>	2010 – 2015

FELLOWSHIPS & AWARDS

Don Lavoie Fellow, Mercatus Center, George Mason University	2022
NSF INFEWS Graduate Mentor Fellow	
University of Illinois at Urbana-Champaign. (\$5000)	2020 – 2021
Robert T. and Mary K. Wagner Graduate Scholarship in Sociology	2021
Travel Award, The Rural Sociological Society	2020
Travel Award, Midwest Sociological Association	2020
Travel Award, Midwest Sociological Association	2019
African Union Fellowship	2014 – 2016
Oyo State Government Scholarship	2013-2014

RESEARCH GRANTS

Natural Hazard Center (US\$10,000)	2024
Social Science Research Council	2023
Excellence in Computational Social Science Research, SICSS-Howard Mathematica (\$2,500)	2022
African – ai- Japan Research Grant (US\$3,000)	2016 - 2017

PUBLICATION

Selected Peer-Reviewed Articles

1. **Ogunyiola, A.**, Stock, R., & Gardezi, M. (2024). Precision agriculture and the future of agrarian labor in the US food system. *Agriculture and Human Values*, 1-21. <https://doi.org/10.1007/s10460-024-10615-x>
2. **Ogunyiola, A.** The changing face of Agrarian labor in the age of artificial intelligence and machine learning: balancing benefits and risks. *AI & Soc* (2024). <https://doi.org/10.1007/s00146-023-01859-y>
- 3.
4. **Ogunyiola, A.**, & Gardezi, M. (2022). Restoring sense out of disorder? Farmers' changing social identities under big data and algorithms. *Agriculture and Human Values*. <https://doi.org/10.1007/s10460-022-10334-1>
5. **Ogunyiola, A.**, Gardezi, M., and Vij, S. (2022). Smallholder farmers' engagement with climate-smart agriculture in Africa: Role of local knowledge and upscaling. *Climate Policy*. <https://doi.org/10.1080/14693062.2021.2023451>
6. Stablein, M. J., Gonzalez Cruz, J., Fidan, E. N., Talbot, J., Reed, S. P., Walters, R. S., **Ogunyiola, A.**, Frey M.F., Ramirez, M. Casanovag, R.B., Heemstraa, J., Marshalla, A. & Rodríguez, L. F. (2022). Compound[ing] disasters in Puerto Rico: Pathways for virtual transdisciplinary collaboration to enhance community resilience. *Global Environmental Change*, 76, 102558. <https://doi.org/10.1016/j.gloenvcha.2022.102558>
7. Gardezi, M., Michael, S., Stock, R., Vij, S., **Ogunyiola, A.**, and Ishtiaque, A. (2022). Prioritizing climate-smart agriculture: An organizational and temporal review. *Wiley Interdisciplinary Reviews: Climate Change*, WCC755. <https://doi.org/10.1002/wcc.755>
8. Gardezi, M., Adereti, D. T., Stock, R., & **Ogunyiola, A.** (2022). In pursuit of responsible innovation for precision agriculture technologies. *Journal of Responsible Innovation*, 1-24. <https://doi.org/10.1080/23299460.2022.2071668>

9. Dada, O., & **Ogunyiola, A.** (2021). A preliminary impact assessment of social distancing on food systems and greenhouse gas emissions. *Journal of Human Behavior in the Social Environment*, 31(1-4), 254-261. <https://doi.org/10.1080/10911359.2020.1816242>
10. Avemegah, E., Gu, W., Abulbasher, A., Koci, K., **Ogunyiola, A.**, Eduful, J., Li, S., Barington, K., Wang, T., Kolady, D., Perkins, L., Leffler, A.J Kovács, P., Clark, J. D. Clay, D., E. & Ulrich-Schad, J. D. (2021). An Examination of Best Practices for Survey Research with Agricultural Producers. *Society & Natural Resources*, 34(4), 538-549. <https://doi.org/10.1080/08941920.2020.1804651>
11. **Ogunyiola, A.**, Mwita, P.N., & Njenga, C., (2017) Estimating Dependence structure and risk of a financial market crash. *International Journal of Statistics and Probability*, 5(6), 85-93.
12. **Ogunyiola, A.**, (2015) An Analysis of Shale Oil Development and Its Implications for OPEC Exporting Nations: Evidence from Nigeria. *Nigerian Association of Energy Economists/International Journal of Energy Economist*. April 26-28, 2015.
13. **Ogunyiola A.**, and Garba, AG, (2014) An Analysis of the Structural and Employment Implications of the 2014 GDP Rebasing in Nigeria. *Journal of Economic Studies (NJES)*, 183 – 200.

Peer-Reviewed Book Chapter

1. Posadas B., **Ogunyiola A.**, & Niewolny K. (2023) "Socially responsible AI assurance in precision agriculture for farmers and policymakers." In *AI assurance towards trustworthy, explainable, safe, and ethical AI*, Elsevier: <https://doi.org/10.1016/B978-0-32-391919-7.00028-7>
2. Ishara, J., **Ogunyiola, A.**, Matendo, R., Kiyala, J.C.K., Karume, K. (2024). Climate Change and Its Implications on Food Security in the Great Lakes Region. In: Kiyala, J.C.K., Chivasa, N. (eds) *Climate Change and Socio-political Violence in Sub-Saharan Africa in the Anthropocene. The Anthropocene: Politik—Economics—Society—Science*, vol 37. Springer, Cham. https://doi.org/10.1007/978-3-031-48375-2_5

ARTICLES UNDER REVIEW

1. **Ogunyiola, A.**, and Gardezi, M., "Perceptions and expectations of food system actors about big data ownership, privacy, and security" Under review
2. Gardezi, M., Prutzer E., **Ogunyiola, A.**, Ryan B., and Asim, Z., "Envisioning the role of precision agriculture for sustainability." Under review
3. **Ogunyiola A.** Echoes of climate justice: Loss and damage fund – a win for developing countries and small island developing states?

COURSES TAUGHT

Introduction to Sociology; Medical Sociology; Research Methods; Macroeconomics; Health Economics; Econometrics

INVITED TALKS

1. "Exploring the socio-ethical dilemmas of precision agriculture." Virginia Polytechnic Institute and State University. March 2021

Conference Presentations

1. Artificial intelligence and machine learning-powered GIS for proactive disaster resilience in a changing climate - Justin Diehr; **Ayorinde Ogunyiola** & Oluwabunmi Dada EASST-4S 2024 Amsterdam: Making and Doing Transformations Amsterdam – Netherlands, 2024
2. Data fluencies research development workshop on labor and Technology Vancouver, Canada 2023
3. Factors influencing farmer's Willingness to Use Extended Rotations: A Comparative Study in Indiana and Iowa. *Soil and Water Conservation Society*. Denver Colorado. August 3, 2022.
4. Characterizing success within Farmer-led Networks across the United States. *Soil and Water Conservation Society*. Denver Colorado. August 3, 2022.
5. Virtual Transdisciplinary Collaborations in Disaster Relief and Resilience. *University of Idaho*, May 5, 2022.
6. Envisioning the role of precision agriculture in food system sustainability transitions. Society for Social Studies of Science Annual Meeting 2021 – "Virtual Toronto"
7. Prioritizing Climate-smart Agriculture (CSA): An organizational analysis. *South Dakota State University Data Science symposium*. February 5, 2019.
8. Poster presentation: Women and poverty in Saudi Arabia. *Midwest Sociological Association*. Chicago. April 20, 2019.
9. Shrinking Middle Class in the United States: The Role of Occupational Change. *Midwest Sociological Association* April 19, 2019
10. An Analysis of Shale Oil Development and Its Implications for OPEC Exporting Nations: Evidence from Nigeria. *NAEE/IAEE, University of Ibadan*, 2015.
11. An Analysis of the Structural and Employment Implications of the 2014 GDP Rebased in Nigeria. Nigerian Economics Society. Abuja, February 2014.

Professional Service

Peer Reviewer for:

Journal of Rural Studies, Society and Natural Resources, Rural Sociology, Climate Policy, National Science Foundation; United States Department of Agriculture

Professional Memberships

S4 Society for Social Studies of Science; Rural Sociological Society; Midwest Sociological Society; American Sociological Association

TECHNICAL KNOWLEDGE

Proficient Knowledge in SPSS, R, Python, Matlab, C++, S-PLUS, Eviews, STATA, SAS, ArcMap, and ArcGIS Online.