

JIANBANG GAN, PH.D.

CURRICULUM VITAE

EDUCATION

Ph.D., Forestry (Economics), Iowa State University
M.S., Forestry (Economics and Marketing), Iowa State University
B.S., Forest Engineering, Fujian Agriculture and Forestry University

PROFESSIONAL EXPERIENCE

2008-present Professor, Department of Ecology and Conservation Biology (2020-present) and Department of Ecosystem Science and Management (2008-2019), Texas A&M University

2016-present Faculty Affiliate, Texas A&M Energy Institute

2018 (spring) Visiting Scientist, Scion (a Crown Research Institute), New Zealand

2011-2012 Visiting Fellow, School of Forestry and Environmental Studies, Yale University

2008-2011 Associate Department Head for Graduate Programs (2009-2011) and for Undergraduate Programs (2008-2009), Department of Ecosystem Science and Management, Texas A&M University

2001-2008 Associate Professor, Department of Ecosystem Science and Management, jointly appointed in Agricultural Economics, Texas A&M University

1992-2001 Faculty (Assistant Professor, 1992-1997; Associate Professor, 1997-1999; Professor 1999-2001), jointly appointed in Forest Resources and Agricultural Economics Programs, Tuskegee University

1998-2001 Coordinator for Forest Resources Program, Tuskegee University

1992-2001 Coordinator for International Project Development, Tuskegee University

Contact

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SCHOLARLY ACTIVITY

Special Recognitions and Services

- > Forestry Research Advisory Council (national), 2022-2025 (appointed by the U.S. Secretary of Agriculture).
- > Partnership Award for Mission Integration of Research, Education, and Extension, U.S. Department of Agriculture (USDA) National Institute of Food and Agriculture (NIFA), 2016.
- > Lead Author of a global scientific assessment on illegal logging and related timber trade (UNEP, IUFRO), 2016.
- > Grant Review Panelist for National Science Foundation (NSF), National Academy of Sciences, USDA, Ford Foundation, University of California, and Swedish Research Council.
- > Associate Editor: *Frontiers in Energy Research* and *Frontiers in Bioengineering and Biotechnology*, 2022-present; *Canadian Journal of Forest Research*, 2007-2016; *Southern Journal of Applied Forestry*, 2008-2010; *Forest Science*, 2005 (Guest)
- > Guest Editor: *Climate*, 2021-2024; *Frontiers in Energy Research*, 2021-2022; *Forests*, 2015, 2023-2024.
- > Research, Development and Innovation Award, Texas Forestry Association, 2010.
- > Nominee for the Eni Award (for Non-conventional and Renewable Energy) by the Eni Award Secretariat, Italy, 2009.
- > Certificate of Appreciation from the President of Tuskegee University, 2001.
- > Faculty Outstanding Performance Award in Teaching, Tuskegee University, 1997.

Key Extramural Funding

PI/Co-PI for >35 projects with total funding of approximately \$35 million

- > Developing and harnessing climate-smart commodities from hardwood restoration for small and underserved landowners in the southern bottomland region. USDA, \$3.71 million, 2023-2028 (with N. Tian *et al.*) (Co-PI and Project Executive Committee)
- > Optimizing landscape fuel treatment and fire response operations. Joint Fire Science Program, \$398,709, 2023-2026 (with L. Ntamo) (PI)
- > Collaborative research: Fuel treatment planning optimization for wildfire management, NSF, \$550,000, 2020-2024 (with O. Prokopyev and L. Ntamo) (Co-PI)
- > U.S.-India consortium for development of sustainable advanced lignocellulosic biofuel systems, U.S. Department of Energy, \$6.25 million, 2012-2017 (with P. Pullammanappallil *et al.*) (Co-PI)
- > Integrating research, education and extension for enhancing southern pine climate change mitigation and adaptation, USDA, \$20 million, 2011-2017 (with T. Martin *et al.*) (Project Executive Committee, Economics and Policy Aim Co-leader, Co-PI)

Selected Publications

- > Gan, J. 2025. Disentangling the drivers of wildfires: The risk of wildfires varies across regions with different vegetation. *Science* 387(6729):22-23. DOI: [10.1126/science.adu5463](https://doi.org/10.1126/science.adu5463)
- > Lagos, T., *et al.* 2025. Bilevel optimization approach for fuel treatment planning. *Eur. J. Oper. Res.* 320:205-218. <https://doi.org/10.1016/j.ejor.2024.07.014>
- > Tian, N., J. Gan, and G. Holley. 2023. Assessing feral swine damage in the western gulf region of Arkansas, Louisiana, and Texas. *Biol. Invasions* 25:1527-1540. <https://doi.org/10.1007/s10530-022-02994-1>
- > An, H., and J. Gan. 2022. Periods and amplitudes of southern pine beetle infestations under climate change. *Climate* 10(9):126. <https://doi.org/10.3390/cli10090126>
- > Gan, J., *et al.* 2022. Synchronized movement between US lumber futures and southern pine sawtimber prices and COVID-19 impacts. *Can. J. Forest Res.* 52(4):614-621. <https://doi.org/10.1139/cjfr-2021-0326>
- > Ma, Z., *et al.* 2021. Material flow patterns of global waste paper trade and potential impacts of China's import ban. *Environ. Sci. Technol.* 55(13):8492-8501. <https://doi.org/10.1021/acs.est.1c00642>
- > Gan, J., I. Stupak, and C.T. Smith. 2019. Integrating policy, market, and technology for sustainability governance of agriculture-based biofuel and bioeconomic development in the US. *Energ. Sustain. Soc.* 9(1):43. <https://doi.org/10.1186/s13705-019-0223-2>
- > Lewison, R., *et al.* 2019. Accounting for unintended consequences of resource policy: Connecting research that addresses displacement of environmental impacts. *Conserv. Lett.* e12628. <https://doi.org/10.1111/conl.12628>
- > Golecha, R., and J. Gan. 2016. Effects of corn stover year-to-year supply variability and market structure on biomass utilization and cost. *Renew. Sust. Energ. Rev.* 57:34-44. <https://doi.org/10.1016/j.rser.2015.12.075>
- > Golecha, R., and J. Gan. 2016. Biomass transport cost from field to conversion facility when biomass yield density and road network vary with transport radius. *Appl. Energ.* 164:321-331. <https://doi.org/10.1016/j.apenergy.2015.11.070>
- > Gan, J., A. Jarrett, and C. Johnson Gaither. 2015. Landowner response to wildfire risk: Adaptation, mitigation or doing nothing. *J. Environ. Manage.* 159:186-191. <https://doi.org/10.1016/j.jenvman.2015.06.014>
- > Gan, J., and C.T. Smith. 2011. Drivers for renewable energy: A comparison of OECD countries. *Biomass Bioenerg.* 35:4497-4503. <https://doi.org/10.1016/j.biombioe.2011.03.022>
- > Gan, J., and C.T. Smith. 2011. Optimal plant size and feedstock supply radius: A modeling approach to minimize bioenergy production costs. *Biomass Bioenerg.* 35:3350-3359. <https://doi.org/10.1016/j.biombioe.2010.08.062>
- > Gaither, C.J., *et al.* 2011. Wildland fire risk and social vulnerability in the southeastern US: An exploratory spatial data analysis approach. *Forest Policy Econ.* 13(1):24-36. <https://doi.org/10.1016/j.forpol.2010.07.009>
- > Gan, J. 2007. Supply of biomass, bioenergy, and carbon mitigation: Method and application. *Energ. Policy* 35:6003-6009. <https://doi.org/10.1016/j.enpol.2007.08.014>
- > Gan, J., and B.A. McCarl. 2007. Measuring transnational leakage of forest conservation. *Ecol. Econ.* 64:423-432. <https://doi.org/10.1016/j.ecolecon.2007.02.032>

- > Gan, J. 2005. Causality among wildfire, ENSO, timber harvest, and urban sprawl: The vector autoregression approach. *Ecol. Model.* 191:304-314. <https://doi.org/10.1016/j.ecolmodel.2005.05.013>
- > Gan, J., et al. 2005. Does race matter in landowners' participation in conservation incentive programs? *Soc. Natur. Resour.* 18(5):431-445. <https://doi.org/10.1080/08941920590924792>
- > Gan, J. 2004. Risk and damage of southern pine beetle outbreaks under global climate change. *Forest Ecol. Manag.* 191:61-71. <https://doi.org/10.1016/j.foreco.2003.11.001>
- > Gan, J., S.H. Kolison, and N.O. Tackie. 2003. African-American forestland owners in Alabama's Black Belt. *J. Forest.* 101(3):38-43. <https://doi.org/10.1093/jof/101.3.38>
- > Gan, J., S.H. Kolison, and J.P. Colletti. 2001. Optimal forest stock and harvest with valuing non-timber benefits: A case of the US coniferous forests. *Forest Policy Econ.* 2:167-178. [https://doi.org/10.1016/S1389-9341\(01\)00051-X](https://doi.org/10.1016/S1389-9341(01)00051-X)

Courses Taught

At Texas A&M University

- > ECCB 308 (ESSM 308): Fundamentals of Environmental Decision-Making (3 cr.)
- > ECCB 405 (ESSM 405): Forest Resource Assessment and Management (senior capstone, writing intensive) (3 cr.)
- > ECCB 285/485W: Directed Studies (1 cr.)
- > ECCB 605 (ESSM 605): The Research Process (2 cr.)
- > ECCB 685 (ESSM 685): Directed Studies (1-3 cr.)
- > ECCB 691 (ESSM 691): Research (1-9 cr.)
- > ESSM 491: Undergraduate Research (1 cr.)
- > ESSM 681: Seminar (1 cr.)
- > FRSC 404: Forest Management (3 cr.)
- > FRSC 405: Integrated Forest Resource Analysis and Planning (3 cr.)
- > WFSC 484: Internship (1 cr.)
- > AGE 695: Frontiers in Natural Resource Economics: Economics of Climate Change (3 cr.) (co-taught)

At Tuskegee University

- > 1FOR 205: Introduction to Forestry (3 cr.)
- > 1FOR 402: Forest Mensuration (3 cr.)
- > 1FOR 405: Forest Economics (3 cr.)
- > 1AGE 502: Natural Resource Economics (3 cr.)
- > 1AGE 513: Production Economics (3 cr.) (co-taught)
- > 1AGE 600: Graduate Seminar (1 cr.)
- > 1AGE 604: Microeconomics (3 cr.)
- > 1AGE 614: Agricultural Policy (3 cr.)
- > 1AGE 615: Quantitative Methods (Econometrics) (3 cr.)
- > 1AGE 630: Special Problems in Agricultural Economics (1-3 cr.)
- > 1AGE 700: Research in Agricultural Economics (1-9 cr.)
- > 1ESC 595: Special Problems in Environmental Science (1-3 cr.)
- > 1ESC 700: Research in Environmental Science (1-9 cr.)