

## **Jianbang (Jim) Gan**

Department of Ecosystem Science and Management  
Texas A&M University, College Station, TX 77843

### **I. Education**

Ph.D., Forestry (Economics), Iowa State University, 1990  
M.S., Forestry (Economics and Marketing), Iowa State University, 1988  
B.S., Forest Engineering, Fujian Agriculture and Forestry University (formerly Fujian Forestry College), China, 1982

### **II. Professional Experience**

2008-present Professor, Department of Ecosystem Science and Management (jointly appointed in the Department of Agricultural Economics), Texas A&M University  
2016-present Faculty Affiliate, Texas A&M Energy Institute  
2011-2012 Visiting Fellow, School of Forestry and Environmental Studies, Yale University  
2008-2011 Associate Department Head for Graduate Programs (2009-11) and for Undergraduate Programs (2008-09), Department of Ecosystem Science and Management, Texas A&M University  
2001-2008 Associate Professor (tenured in 2006), Department of Ecosystem Science and Management (jointly appointed in the Department of Agricultural Economics), Texas A&M University  
1992-2001 Faculty (Assistant Professor, 1992-97; Associate Professor, 1997-99; 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  
1991-1992 Postdoctoral Research Associate, Iowa State University  
1986-1990 Graduate Research Assistant, Iowa State University  
1982-1986 Assistant Lecturer, Fujian Agriculture and Forestry University, China

### **III. Awards, Honors, and Special Recognitions and Services**

Partnership Award, US Department of Agriculture (USDA) National Institute of Food and Agriculture (NIFA), 2016 (a team award to the Integrating Research, Education and Extension for Enhancing Southern Pine Climate Change Mitigation and Adaptation Project (PINEMAP), of which I'm an Aim Co-leader and Executive Committee Member, and I received an individual certificate of the award)  
Lead Author of a global scientific assessment on illegal timber trade, 2016 (at invitation of the Collaborative Partnership on Forests that consists of 14 international organizations and secretariats including the UNDP, UNEP, FAO, World Bank, etc.)

Awardee of the Program for the Enhancement of Scholarly and Creative Activities, Texas A&M University, 2011

Research, Development and Innovation Award, Texas Forestry Association, 2010

Nominee for the *Eni* Award (for Non-conventional and Renewable Energy), 2009

Grant Review Panelist for National Science Foundation (NSF), National Academy of Sciences, USDA, Ford Foundation, and Swedish Research Council

Associate Editor: *Canadian Journal of Forest Research*, 2007-16; *Southern Journal of Applied Forestry*, 2008-10; *Forest Science*, 2005 (Guest Associate Editor)

Guest Editor: *Forests*, 2015

Editorial Board member: *International Journal of Forestry Research*, 2008-; *Canadian Journal of Forest Research*, 2007-16

Adjunct Professor, Fujian Agriculture and Forestry University, China, 2005-

Certificate of Appreciation from the President of Tuskegee University, 2001

Faculty Outstanding Performance Award in Teaching for 1996-97, Tuskegee University

Certification of Appreciation for Teaching and Advising, Agricultural Sciences Students Organization, Tuskegee University, 1996

Phi Kappa Phi Honor Society, 1988

Gamma Sigma Delta Agricultural Honor Society, 1987

Xi Sigma Pi Forestry Honor Society, 1987

Biographee in Marquis Who's Who in America, Who's Who in Finance and Business, Who's Who in Science and Technology, and Who's Who in the World

#### **IV. Administrative Responsibilities and Achievements**

*Chair, Departmental Committee for the Society of American Foresters (SAF) Re-accreditation, Ecosystem Science and Management, Texas A&M University, March 2012 - December 2013*

- Led in planning for re-accreditation, developing re-accreditation materials (self-evaluation report), engaging stakeholders, arranging for the on-site visit by the SAF team, and responding to requests and questions from the National SAF Accreditation Committee
- Successfully achieved the re-accreditation of the Forestry program by SAF

*Associate Department Head for Graduate Programs, Ecosystem Science and Management, Texas A&M University, September 2009 - August 2011*

- Oversaw graduate programs in the department
- Developed and managed the department's graduate program budget including fellowships, teaching and research assistantships, graduate endowment funds, and travel grants
- Assisted Department Head in preparation of departmental annual reports and reviews
- Obtained most merit and minority scholarships/fellowships from the college and university among all departments in the college
- Increased the department's graduate enrollment by 42% in two years with 20% of students being minorities

*Associate Department Head for Undergraduate Programs, Ecosystem Science and Management, Texas A&M University, November 2008 - August 2009*

- Planned and executed undergraduate curriculum revision for all five degree programs in the department (newly merged from the previous two departments)
- Developed and implemented an undergraduate recruitment plan (including development of recruitment materials and the brochures of degree programs, Aggieland Saturday events, and summer recruitment activities)

*Coordinator for Forest Resources Program, Tuskegee University, August 1998 - July 2001*

- Oversaw the Program's teaching, research, and stakeholder engagement activities
- Coordinated joint degree programs in Forestry and Wildlife with eight universities across the US (including Auburn, Duke, University of California at Berkeley, etc.)
- Collaborated with Extension personnel and Alabama Forestry Commission in landowner outreach programs
- Represented Dean on the Alabama Forestry Planning Committee and Alabama Consortium for Forestry Education and Research

*Coordinator for International Project Development, Tuskegee University, August 1992 - July 2001*

- Coordinated campus-wide international project development (developed about 50 international research and linkage projects/proposals)
- Coordinated and implemented projects in Africa (Mali, Senegal, Tanzania), Asia (China, Thailand, Philippines), and Latin America (Ecuador, Haiti)
- Praised by US Secretary of State on the success of a Thomas Jefferson Fellows project

## **V. Research**

### **A. Research Program**

My primary research interest is forest economics and management with an emphasis on the economics and policy of bioenergy and bioeconomy, international trade and forest conservation, disturbances (climate change, wildfire, pest infestations, and invasive species) and responses, private landowners, environmental governance, and sustainable forest management. In my research I seek to rigorously bring the framework of economics, engineering, and ecology to bear on important issues of interest to forest managers, industries, and policy makers.

I probe these topics individually and collectively using a variety of methodological approaches depending on the problem being studied. I also actively seek extramural funding to support my program and graduate students and have served as PI/Co-PI for 33 projects with total funding of over \$30 million. I have collaborated with researchers in North America, Europe, Asia, Africa, Oceania, and Latin America. My research results have been published across leading refereed journals in forestry, bioenergy, and related disciplines, including *Applied Energy*, *Biofuels*, *Biomass and Bioenergy*, *Canadian Journal of Forest Research*, *Diversity and Distribution*, *Ecological Economics*, *Ecological Modelling*, *Energy Policy*, *Environmental Management*, *Forest*

*Ecology and Management, Forest Policy and Economics, Forest Science, Journal of Environmental Management, Journal of Forestry, Journal of Sustainable Forests, PLoS ONE, Renewable and Sustainable Energy Reviews, Society and Nature Resources*, etc. and cited in a congressional testimony and the 2007 Intergovernmental Panel on Climate Change (IPCC) Assessment Report. In addition, I have been interviewed by journalists of national and regional newspapers and magazines on my research work in climate change, bioenergy, wildfire, and invasive species and invited to give more than 50 presentations at domestic and international conferences and institutions.

## **B. Grants and Contracts**

- US-India consortium for development of sustainable advanced lignocellulosic biofuel systems, \$6.25 million, 2012-18, US Department of Energy (USDOE) (with P. Pullammanappallil et al.) (My role: Co-PI)
- Assessing socioeconomic impacts of forest biomass based biofuel development on rural communities in the southern United States, \$350,000, 2012-16, USDA NIFA (with P. Lal) (Co-PI)
- Integrating research, education and extension for enhancing southern pine climate change mitigation and adaptation, USDA NIFA, \$20 million, 2011-17 (with T. Martins et al.) (Project Executive Committee, Economics and Policy Aim Co-leader, Co-PI)
- Designing institutional mechanisms for enhancing the efficacy of reduced emissions from deforestation and forest degradation (REDD), Program for the Enhancement of Scholarly and Creative Activities, \$10,000, 2011-12 (PI).
- A graduate program in forest resources: Developing integrated expertise in forest resource management, conservation, and restoration, USDA Food and Agricultural Sciences National Needs Graduate and Postgraduate Fellowship Grants Program, \$234,000, 2009-14 (with K. Krutovsky et al.) (Co-PI)
- Economic and policy analysis of forest biomass for energy production, USDA McIntire-Stennis Program, \$150,000, 2008-13 (PI)
- Location and biomass feedstock production: An economic and environmental analysis, Texas AgriLife Research, \$100,000, 2008-09 (with B.A. McCarl, T. Gerik, and J. Mullet) (Co-PI)
- Potential of East Texas woody biomass residues as a feedstock for Carbonator™ technology, Texas AgriLife Research, \$92,500, 2008-09 (with G. Smith, E. Taylor, D. Foster, and C. Long) (Co-PI)
- Bioenergy development, climate change mitigation, and energy security, a research roundtable at the Third China-US Relations Conference, George Bush Presidential Library Foundation, \$10,000, 2007 (with B.A. McCarl) (PI)
- Cost-benefit analysis of severe invasive plants in southern forests, USDA Forest Service, \$60,000, 2006-09 (with J.H. Miller) (PI)
- Southern critical forestlands assessment, Southern Group of State Foresters, \$97,927, 2006-07 (with R. Srinivasan, J. Jacobs, and M. Messina) (Co-PI)
- Landowner response to state-sponsored wildfire mitigation policy in the southern Black Belt, Joint Fire Science Program, \$122,563, 2005-09 (with C.Y. Johnson) (Co-PI)

Wetland conservation, nature-based tourism, and rural economic development, a research roundtable at the Second Conference of China-US Relations: Trade, Diplomacy, and Research, George Bush Presidential Library Foundation, \$5,000, 2005 (with A. Skadberg and R. Giardino) (PI)

Sustainable forestry for bioenergy and bio-based products, Biomass Research and Development Initiative, \$1,000,000, 2004-07 (with L. Biles, C.T. Smith, C.D. Foster, B.D. Jackson, H.M. Rauscher, and W.G. Hubbard) (Co-PI)

Effects of climate change, forest certification, biotechnology, and industrial concentration on the US forest products industry and trade, USDA National Research Initiative Competitive Grants Program (NRICGP), \$175,000, 2003-07 (with B.A. McCarl and J.W. Mjelde) (PI)

Opportunities and challenges in doing business and trade between China and the US, a research roundtable session at the First Conference of China-US Relations: Past, Present, and Future, George Bush Presidential Library Foundation, \$2,500, 2003 (with G. Tian et al.) (Co-PI)

Effects of tariff reductions and non-tariff barriers on US forest products industries, USDA McIntire-Stennis Program, \$120,000, 2002-08 (PI)

Improving income of socially disadvantaged forestland owners in the South through technical assistance, USDA Fund for Rural America, \$150,000, 1998-2002 (with S.H. Kolison, Jr.) (PI)

Impact assessment of free trade policies on the US forestry sector and southern timber-dependent rural communities, USDA CSREES Higher Education Program, \$269,962, 1997-2001 (with S.H. Kolison, Jr.) (PI)

Evaluation of program participation behavior of limited-resource forest landowners in Alabama, USDA Forest Service Southern Research Station, \$24,000, 1999-2001 (PI)

Sustainable economic growth and environmental protection in Alabama with a focus on Black Belt counties, USDA CSREES Higher Education Program, \$194,288, 1998-2001 (with R. Ankumah) (Collaborator)

Assessment of economic efficiency and environmental impacts of major timber harvest systems in Alabama, USDA Forest Service Southern Research Station, \$30,000, 1997-99 (with S.H. Kolison, Jr.) (Co-PI)

Agriculture-based natural resource research in Senegal, US Agency for International Development (USAID) via Oregon State University, \$75,479, 1997-98 (with S.L. Louis) (PI)

Assessment of Chinese markets for US forest product exports. USDA Scientific Cooperation Program, approximately \$10,000, 1997 (with D. Zhang) (Co-PI)

Restructuring faculty reward systems in the Southern Food System Education Consortium (SOFSEC) institutions, The Kellogg Foundation, \$90,000, 1996-2000 (with S.H. Kolison, Jr.) (Co-PI)

Increasing the participation of minority forestland owners in forestry assistance programs for a sustainable forest management in Alabama, Alabama Forestry Commission, \$25,000, 1996-99 (with S.H. Kolison, Jr.) (Collaborator)

Socioeconomic impacts of reduced public timber harvest on local communities: A case study in Alabama and a decision-making model for national forests, USDA Forest

- Service Southern Research Station, \$25,950, 1996-99 (with S.H. Kolison, Jr.) (Co-PI)
- Improving income generation for pastoral women in Mali, USAID, \$100,000, 1995-98 (with S. Solaiman, G. Howze, and S.L. Louis) (Co-PI)
- Alabama environmental outreach and education, Environmental Protection Agency, \$150,000, 1995-97 (with R. Ankumah, P. Lorentan, and M. Ngandu) (Co-PI)
- Technical assistance to socially disadvantaged forestland owners in selected counties in southeastern Alabama, USDA Farmers Home Administration, \$42,000, 1995 (with S.H. Kolison, Jr.) (PI)
- Ecological-economic assessment of forest ecosystem management regimes in the Tuskegee National Forest and selected private forestlands, USDA Forest Service Southern Research Station, \$93,000, 1994-2000 (with S.H. Kolison, Jr.) (PI)
- The effects of gypsy moth defoliation and mortality on the change in timber values of mixed oak forest stands, USDA Forest Service, \$40,557, 1994-97 (with S.H. Kolison, Jr.) (Collaborator)
- Developing a short-term course in sustainable natural resource management and environmental sciences, USAID, \$82,000, 1994 (with S.L. Louis) (Project Coordinator)
- Economic impacts of the red-cockaded woodpecker interim guidelines: A case study in Alabama, USDA Forest Service Southern Research Station, \$19,000, 1993-95 (with S.H. Kolison, Jr.) (Collaborator)
- Developing a short-term course in sustainable agriculture, USAID, \$68,804, 1993 (with S.L. Louis) ((Project Coordinator)
- Developing a short-term course in livestock production and extension for Thomas Jefferson Fellows, USAID, \$24,000, 1993 (with S.L. Louis) (Project Coordinator)
- Sustainable agriculture and natural resource management (SANREM CRSP) in the Philippines, Burkina Faso, and Honduras, USAID via the University of Georgia, \$396,629 (over \$10 million of total project funding), 1992-97 (with S.L. Louis, M. Ngandu, and E. Rhoden) (Project Coordinator)

### **C. Selected International Research Experience**

- Illegal logging and related timber trade, Global Forest Expert Panels, Collaborative Partnership on Forests, 2016
- Sustainable biomass supply and bioenergy supply chains, International Energy Agency (IEA) Bioenergy, 2003-present
- Development of sustainability principles, criteria, and indicators for forest bioenergy, United Nations Food and Agriculture Organization (FAO), 2009-10
- Economic analysis of biodiesel development, Guatemala, 2007 (Funded by Borlaug Institute)
- Natural resource management and rural development, Senegal, 1998 (Funded by USAID)
- Natural resource management, China Agricultural University, Beijing, China, 1998 (Invited by Chinese Ministry of Agriculture)
- Natural resource management, Asia Institute of Technology (AIT), Bangkok, Thailand, 1998 (Invited by AIT)

Forest Product Trade, China, 1997 (Funded by USDA Foreign Agricultural Service and Chinese Ministry of Forestry)

Community-based natural resource management, Tanzania, 1996 (Funded by USAID)

Sustainable agriculture and natural resource management, Philippines, 1994 (Funded by USAID)

#### **D. Publications**

##### **Refereed Journal Articles**

- Stroman, D.A., U.P. Kreuter, and J. Gan. Balancing property rights and social responsibilities: Perspectives of conservation easement landowners. *Rangeland Ecology and Management*. (in press)
- Clifton, K., J. Gan, and H. Gil. 2016. User's perception on conservation on communal lands in Cumbres de Monterrey National Park, Mexico. *Range Management and Agroforestry* 37(2):133-141.
- Golecha, R., and J. Gan. 2016. Cellulosic biorefinery portfolio and diversification: Strategies to mitigate cellulosic biorefinery risks. *Energy Strategy Reviews* 13/14:147-153.
- Monge, J., H. Bryant, J. Gan, and J. Richardson. 2016. Land use and general equilibrium implications of a forest-based carbon sequestration policy in the United States. *Ecological Economics* 127:102-120.
- Wolde, B., P. Lal, J. Gan, and J. Alavalapati. 2016. Determinants of enrollment in public incentive programs for forest management and their effect on future programs for woody bioenergy: Evidence from Virginia and Texas. *Canadian Journal of Forest Research* 46:775-782.
- Golecha, R., and J. Gan. 2016. Optimal contracting structure between cellulosic biorefineries and farmers to reduce the impact of biomass supply variation: Game theoretic analysis. *Biofuels, Bioproducts and Biorefining* 10:129-138.
- Golecha, R., and J. Gan. 2016. Effects of corn stover year-to-year supply variability and market structure on biomass utilization and cost. *Renewable and Sustainable Energy Reviews* 57:34-44.
- 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. *Applied Energy* 164:321-331.
- Kebede, E., J. Gan, and J.M. Kagochi. 2016. Agriculture based energy for rural household income and wellbeing: East African experience. *Renewable and Sustainable Energy Reviews* 53:1650-1655.
- An, H., J. Gan, and S. Cho. 2015. Assessing climate change impacts on wildfire risk in the United States. *Forests* 6:3197-3211.
- Gan, J., A. Jarrett, and C. Johnson Gaither. 2015. Landowner response to wildfire risk: Adaptation, mitigation or doing nothing. *Journal of Environmental Management* 159:186-191.
- Kabli, M., J. Gan, and L. Ntamo. 2015. A stochastic programming model for fuel treatment management. *Forests* 6:2148-2162.
- Su, S.P., J.Y. Wu, and J. Gan. 2015. Comparative analysis of total factor productivity change among family forestry operators since the forest tenure reform in Fujian,

- Zhejiang and Jiangxi provinces. *Resource Science* 37(1):112-124 (in Chinese with English abstract).
- Zhou, X., Y. Zhou, C. Zhou, Z. Wu, L. Zheng, X. Hu, H. Chen, and J. Gan. 2015. Effects of cutting intensity on soil Physical and chemical properties in a mixed natural forest in southeastern China. *Forests* 6:4495-4509.
- Gan, J., A. Jarrett, and C. Johnson Gaither. 2014. Wildfire risk adaptation: Propensity of forestland owners to purchase wildfire insurance in the southern United States. *Canadian Journal of Forest Research* 44:1376-1382.
- Gan, J., J.W.A. Langeveld, and C.T. Smith. 2014. An agent-based modeling approach for determining corn stover removal rate and transboundary effects. *Environmental Management* 53:333-342.
- Gan, J. 2013. Economic and environmental competitiveness of US-made forest products: Implications for offshore outsourcing. *Journal of Forestry* 111(2):94-100.
- Gan, J., and B. Cashore. 2013. Opportunities and challenges for integrating bioenergy into sustainable forest management certification programs. *Journal of Forestry* 111(1):11-16.
- Gan, J., B. Cashore, and M. Stone. 2013. Impacts of Lacey Act Amendment and Voluntary Agreement Partnerships on illegal logging: Implications for forestry governance. *Journal of Natural Resource Policy Research* 5(4):209-226.
- Gan, J., A. Jarrett, and C. Johnson. 2013. Forest fuel reduction and biomass supply: Perspectives from southern private landowners. *Journal of Sustainable Forestry* 32:28-40.
- Ntaimo, L., J. Arrubla, J. Gan, T. Spencer, C. Stripling, and J. Young. 2013. A simulation and stochastic integer programming approach to wildfire initial attack planning. *Forest Science* 59(1):105-117.
- Gan, J., and C.T. Smith. 2012. Biomass utilization allocation in biofuel production: Model and application. *International Journal of Forest Engineering* 23:38-47.
- Gan, J., C.T. Smith, and J.W.A. Langeveld. 2012. Effects of considering greenhouse gas consequences on fertilizer use in loblolly pine plantations. *Journal of Environmental Management* 113:383-389.
- Poudyal, N.C., C. Johnson Gaither, S. Goodrick, J.M. Bowker, and J. Gan. 2012. Locating spatial variation in the association between wildland fire risk and social vulnerability across six southern states. *Environmental Management* 49:623-635.
- Salam, M.A., S.M.M. Islam, J. Gan, and L.G. Ross. 2012. Crab culture potential in southwestern Bangladesh: Alternative to shrimp culture for climate change adaption. *International Research Journal of Applied Life Sciences* 1(4):15-31.
- Wang, H., W.E. Grant, J. Gan, W.E. Rogers, T.M. Swannack, T.E. Koralewski, J.H. Miller, and J.W. Taylor, Jr. 2012. Integrating spread dynamics and economics to manage Chinese tallow (*Triadica sebifera* (L.) Small) invasions in southern US forestlands. *PLoS ONE* 7(3):e33877. doi:10.1371/journal.pone.0033877.
- Gan, J., and C.T. Smith. 2011. Drivers for renewable energy: A comparison of OECD countries. *Biomass and Bioenergy* 35:4497-4503.



- Gan, J., and C.T. Smith. 2011. Optimal plant size and feedstock supply radius: A modeling approach to minimize bioenergy production costs. *Biomass and Bioenergy* 35:3350-3359.
- Gaither, C.J., N. Poudyal, S. Goodrick, J.M. Bowker S. Malone, and J. Gan. 2011. Wildland fire risk and social vulnerability in the southeastern United States: An exploratory spatial data analysis approach. *Forest Policy and Economics* 13(1):24-36.
- Wang, H, W.E. Grant, T.M. Swannack, J. Gan, W.E. Rogers, T.E. Koralewski, J.H. Miller, and J.W. Taylor, Jr. 2011. Predicted range expansion of Chinese tallow tree (*Triadica sebifera*) in forestlands of the southern United States. *Diversity and Distributions* 17:552–565.
- Gan, J., and C.T. Smith. 2010. Integrating biomass and carbon values with soil productivity loss in determining forest residue removals. *Biofuels* 1(4):539-46.
- Gan, J., and C.T. Smith. 2010. Coupling life-cycle analysis with supply chain optimization in determining biofuel plant size. *Silva Fennica* 44(3):497-510.
- Gan, J., J. Miller, H. Wang, and J. Taylor. 2009. Invasion of tallowtree (*Triadica sebifera*) into southern US forests: Influencing factors and implications for mitigation. *Canadian Journal of Forest Research* 39:1346-1356.
- Jarrett, A., J. Gan, C. Johnson, and I. Munn. 2009. Landowner awareness and adoption of wildfire programs in the southern United States. *Journal of Forestry* 107(3):113-118.
- Gan, J., H.M. Rauscher, C.T. Smith, S. Ashton, L. Biles, D. Cassidy, D. Foster, M.R. Howell, W.G. Hubbard, B. Jackson, C. Mayfield, D.J. Mead, S. Silveira, and E. Taylor. 2008. The Southern US forest bioenergy encyclopedia: Making scientific knowledge more accessible. *Southern Journal of Applied Forestry* 32(1):28-32.
- Curry, G.L., R.N. Coulson, J. Gan, M.D. Tchakerian, and C.T. Smith. 2008. An optimization based system model of disturbance generated forest biomass utilization. *Bulletin of Science, Technology and Society on Renewable Energy and Sustainability* 28(6):486-495.
- Gan, J. 2007. Supply of biomass, bioenergy, and carbon mitigation: Method and application. *Energy Policy* 35:6003-9.
- Gan, J., and B.A. McCarl. 2007. Measuring transnational leakage of forest conservation. *Ecological Economics* 64:423-432.
- Zhang, J., and J. Gan. 2007. Who will meet China's demand for imported forest products? *World Development* 35:2150-2160.
- Gan, J., and C.T. Smith. 2007. Co-benefits of utilizing logging residues for bioenergy production: The case for East Texas, USA. *Biomass and Bioenergy* 31:623-630.
- Mayfield, C. A., Foster, C. D., C. T. Smith, J. Gan, and S. Fox. 2007. Opportunities, barriers, and strategies for forest bioenergy and bio-based product development in the Southern United States. *Biomass and Bioenergy* 31:631-637.
- Gan, J. 2006. Consequences of neglecting national product differentiation in assessing the impact of US-Canada softwood lumber disputes. *Forest Science* 52(4):401-410.
- Gan, J., and C.T. Smith. 2006. Availability of logging residues and their potential for electricity production and carbon displacement in the US. *Biomass and Bioenergy* 30:1011-1020.

- Gan, J., and C.T. Smith. 2006. A comparative analysis of woody biomass and coal for electricity generation under various CO<sub>2</sub> emissions reductions and taxes. *Biomass and Bioenergy* 30:296-303.
- Gan, J. 2006. Substitutability between US domestic and imported forest products: The Armington approach. *Forest Science* 52(1):1-9.
- Gan, J. 2005. Causality among wildfire, ENSO, timber harvest, and urban sprawl: The vector autoregression approach. *Ecological Modelling* 191:304-314.
- Gan, J. 2005. Forest certification costs and global forest product trade and markets: A general equilibrium analysis. *Canadian Journal of Forest Research* 35(7):1731-1743.
- Gan, J., and E. Kebede. 2005. Multivariate probit modeling of decisions on timber harvesting and request for assistance by African-American forestland owners. *Southern Journal of Applied Forestry* 29(3):135-142.
- Gan, J., O. Okwudili, J. Schelhas, G. Wheelock, and M. Dubois. 2005. Does race matter in landowners' participation in conservation incentive programs. *Society and Natural Resources* 18(5):431-445.
- Gan, J. 2004. Effects of China's WTO accession on global forest product trade. *Journal of Forest Policy and Economics* 6(6):509-519.
- Gan, J. 2004. Risk and damage of southern pine beetle outbreaks under global climate change. *Forest Ecology and Management* 191:61-71.
- Onianwa, O., G. Wheelock, B. Gyawali, J. Gan, M. Dubois, and J. Schelhas. 2004. An analysis of factors affecting participation behavior of limited resource farmers in agricultural cost-share programs in Alabama. *Journal of Agribusiness* 22(1):17-29.
- Gan, J., and S. Ganguli. 2003. Effects of global trade liberalization on US forest products industries and trade: A computable general equilibrium analysis. *Forest Products Journal* 53(4):29-35.
- Gan, J., S.H. Kolison, and N.O. Tackie. 2003. African-American forestland owners in Alabama's Black Belt. *Journal of Forestry* 101(3):38-43.
- Kebede, E., J. Gan, and Z. Gebeyehu. 2003. Non-point source pollution and land use pattern linkage: A watershed approach. *Journal of Alabama Academy of Science* 74(3/4):197-209.
- 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. *Journal of Forest Policy and Economics* 2:167-178.
- Gan, J., and J.H. Miller. 2001. In the eye of the beholder: Public views on the aesthetic value of pine stands regenerated by different methods. *Forest Landowner (Manual)* 60(2):16-22.
- Gan, J., S.H. Kolison, and J.H. Miller. 2000. Public preferences of loblolly pine stands regenerated by different site preparation methods in Alabama. *Southern Journal of Applied Forestry* 24(3):145-149.
- Gan, J., S.H. Kolison, J.H. Miller, K. Kabongo, and T.M. Hargrove. 2000. Forest ecosystem management and its impacts on recreational values of loblolly pine stands. *Tuskegee Horizon* 8:23.
- Gan, J., and S.H. Kolison. 1999. Minority forestland owners in southeastern Alabama. *Southern Journal of Applied Forestry* 23(3):175-178.

- Kebede, E., and J. Gan. 1999. The economic potential of vegetable production for limited resource farmers in south central Alabama. *Journal of Agribusiness* 17(1):63-75.
- Gan, J., S.H. Kolison, J.H. Miller, and T.M. Hargrove. 1998. Effects of site preparation on timber and non-timber values of loblolly pine plantations. *Forest Ecology and Management* 107:47-53.
- Zhang, D., J. Liu, J. Granskog, and J. Gan. 1998. China: Changing wood products market. *Forest Products Journal* 48(6):14-20.
- Gan, J., and S.H. Kolison. 1997. Business cycles and forest products industries. *Forest Products Journal* 47(4):23-27.

### **Books and Special Issue**

- Gan, J. (ed.). 2015. Climate Change and Forest Fire. Special Issue of *Forests*. [http://www.mdpi.com/journal/forests/special\\_issues/forest\\_fire](http://www.mdpi.com/journal/forests/special_issues/forest_fire).
- Gan, J., S. Grado, and I. Munn (eds.). 2010. *Global Change and Forestry: Economic and Policy Impacts and Responses*. Nova Science, NY. 347 pp.
- Richardson, J., A. Asikainen, R. Björheden, G. Egnell, J. Gan, B. Lattimore, D. Mead, S. Rose, K. Rosenbaum, C.T. Smith, I. Stupak, B. Titus, and M. Trossero. 2010. *Criteria and Indicators for Sustainable Woodfuels*. United Nations Food and Agriculture Organization (FAO), Rome, Italy. 92 pp.

### **Book Chapters**

- Gan, J. (Lead Author), P.O. Cerutti, M. Masiero, D. Pettenella, N. Andrighetto, and T. Dawson. 2016. Quantifying illegal logging and related timber trade. P. 37-60 in: *Illegal Logging and Related Timber Trade – Dimensions, Drivers, Impacts and Responses*. A Global Scientific Rapid Response Assessment Report, World Series Vol. 35, D. Kleinschmit, S. Mansourian, C. Wildburger, A. Purret (eds.). International Union of Forest Research Organizations (IUFRO), Vienna, Austria.
- Kleinschmit, D., S. Mansourian, C. Wildburger, T. Boekhout van Solinge, B. Cashore, P.O. Cerutti, J. Gan, S. Leipold, P. Pacheco, B. Pokorny, A. Purret, M. Sotirov, and L. Tacconi. 2016. Conclusions. P. 133-136 in: *Illegal Logging and Related Timber Trade – Dimensions, Drivers, Impacts and Responses*. A Global Scientific Rapid Response Assessment Report, World Series Vol. 35, D. Kleinschmit, S. Mansourian, C. Wildburger, A. Purret (eds.). IUFRO, Vienna, Austria.
- Gan, J., C. Hanson, B. Lattimore, G.B.M. Pedroli, E.M. Remedio, and C.T. Smith. Socio-economic benefits and challenges: Land use change and greenhouse gas emissions. Chapter 14 in: *Biofuels in Practice: Technological, Socio-Economic and Sustainability perspectives*. ILM Publications, Hertfordshire, UK. (in press)
- Gan, J. 2012. Economic and policy aspects of integrated forest biorefineries. P. 67-79 in: *Integrated Forest Biorefineries: Challenges and Opportunities*, L. Christopher (ed.). The Royal Society of Chemistry (RSC) Publishing, Cambridge, UK.
- Gan, J., and B.A. McCarl. 2010. Forestry and carbon: Market, measurement and management. P. 1-15 in: *Global Change and Forestry: Economic and Policy Impacts and Responses*, J. Gan, S. Grado, and I. Munn (eds.). Nova Science, NY.

- Gan, J. 2008. Comovement and cyclical patterns of southern pine beetle outbreaks. P. 87-100 *in: Environmental Modeling: New Research*, Paul N. Findley (ed.). Nova Science, NY.
- Gan, J. (ed.). 2008. *Global Change and Forestry: Economic and Policy Implications*. Proceedings of the 2007 Southern Forest Economics Workshop (CD-ROM). Texas A&M University.
- Gan, J. 2005. Incorporating human and natural adaptations in assessing climate change impacts on wildfire occurrence. P. 61-73 *in: New Research on Forest Ecosystems*, A. Burk (ed.). Nova Science, NY.
- Gan, J., and S. Ganguli. 2003. Global trade liberalization and forest product trade patterns. P. 219-228 *in: Forest Policy for Private Forestry: Global and Regional Challenges*, L. Teeter et al. (eds.). CABI Publishing, Wallingford, UK.
- Gan, J., and S. Ganguli. 2003. General equilibrium analysis of impacts of NAFTA and WTO on US forest products industries. P. 305-314 *in: System Analysis in Forest Resources*, G.J. Arthaud and T.M. Barrett (eds.). Kluwer Academic Publishers, Dordrecht, Netherlands.

#### **Other Peer-reviewed Publications**

- Smith, C.T., et al. 2015. Mobilizing sustainable bioenergy supply chains. IEA Bioenergy, <http://www.ieabioenergy.com/publications/mobilizing-sustainable-bioenergy-supply-chains/>.
- Johnson, C., J. Gan, A. Jarrett, M.S. Wyman, S. Malone, K.J. Adams, J.M. Bowker, and T.V. Stein. 2011. Black belt landowners respond to State-sponsored wildland fire mitigation policies and programs. USDA Forest Service General Technical Report SRS-139.
- Gan, J., H.M. Rauscher, C.T. Smith, S. Ashton, L. Biles, D. Cassidy, D. Foster, M.R. Howell, W.G. Hubbard, B. Jackson, C. Mayfield, D.J. Mead, S. Silveira, and E. Taylor. 2009. New knowledge and education systems for development of forest bioenergy systems. P. 115-123 *in: USDA Forest Service General Technical Report SRS-116*.
- Mayfield, C., and J. Gan (senior author). 2007. Economics (of southern forest bioenergy). A section *in: Encyclopedia of Southern Bioenergy Resources*, Forest Encyclopedia Network, <http://www.forestencyclopedia.net/p/p2>.
- Gan, J., and C.T. Smith. 2003. Carbon tax, energy security, and biomass energy production in the United States. P. 25-58 *in: Proceedings of the International Energy Agency Bioenergy (IEA) Task 29 Workshop*, V. Šegon and J. Domac (eds.). Cavtat-Dubrovnik, Croatia.
- Gan, J., S.H. Kolison, and J.P. Colletti. 2000. Efficient and sustainable forest harvest and stock when non-timber benefits are valued. P. 322-329 *in: USDA Forest Service General Technical Report NC-205*.
- Gan, J., S.H. Kolison, J.H. Miller, and T.M. Hargrove. 1998. Site preparation methods and their impact on the timber and non-timber values of forest stands. P. 26-30 *in: USDA Forest Service General Technical Report SRS-20*.

Kolison, S.H., and J. Gan. 1997. Risk analysis of black walnut and red oak production. P. 240-249 in: *Knowledge for the Future of Black Walnut*, J.W. Van Sambeek (ed.). USDA Forest Service General Technical Report NC-191.

### **Extension Publications**

- Gan, J., and C. Mayfield. 2007. Supply of forest biomass for energy: Influencing factors and estimation methods. Southern Forest Research Partnership, Athens, GA.
- Gan, J., and C. Mayfield. 2007. Economics of forest biomass production. Southern Forest Research Partnership, Athens, GA.
- Gan, J., and C. Mayfield. 2007. Forest bioenergy production and rural economic development. Southern Forest Research Partnership, Athens, GA.
- Gan, J., and C. Mayfield. 2007. Bioenergy policy and incentives. Southern Forest Research Partnership, Athens, GA.
- Gan, J., and C. Mayfield. 2007. Benefits to landowners from forest biomass/bioenergy production. Southern Forest Research Partnership, Athens, GA.
- Kolison, S.H., J. Gan, and P. Murdock. 1998. Resources for minority small forest landowners in Alabama. Alabama Forestry Commission. Montgomery, AL.

### **Non-refereed Proceedings Papers**

- Lal, P., E. Kebede, B. Wolde, P. Burli, J. Alavalapati, J. Gan, and E. Taylor. 2014. Assessing socioeconomic impacts of forest biomass based biofuel development on rural communities in the southern United States. In: Proceedings of the Association for the Advancement of Industrial Crops (AAIC) 25<sup>th</sup> Anniversary Meeting, Washington, DC.
- Gan, J. 2008. Economic potential of southern forests for energy production. P. 696-720 in: *Biofuels and Energy: Outlook, Efficiency, and Production* - Presentations from the 2006 TAPPI Forum on Energy and 2007 TAPPI International Conference on Renewable Energy, vol. 2. Technical Association of the Pulp and Paper Industry (TAPPI) Press, Atlanta, GA.
- Gan, J. 2006. Substitutability between US domestic and imported forest products: The Armington approach. P. 279-295 in: Proceedings of US-Canada Forest Products Trade: A Bilateral Technical Symposium. Special Report 125, Michigan Agricultural Experiment Station, East Lansing, MI.
- Gan, J. 2006. International trade and forest conservation leakage. In: Proceedings of the International Conference on Policy Modeling, A. Bayar (ed.). Global Economic Modeling Network, Brussels, Belgium.
- Gan, J. 2004. Wildland fires: What to blame? In: Proceedings of the 2003 Southern Forest Economics Workshop (SOFEW), S. Moffat (ed.). USDA Forest Service Southern Research Station, New Orleans, LA.
- Gan, J. 2002. Effects of China's WTO accession on its forest product markets. P. 186-198 in: Proceedings of the 2002 SOFEW, G.S. Amacher and J. Sullivan (eds.). Virginia Polytechnic Institute and State University.
- Gan, J., and X. Chen. 2001. Sustainable forestry: Principles and challenges. In: Proceedings of the International Symposium of Sustainable Development Strategies for Forest Products Industries. Fujian, China. (in Chinese)

- Gan, J., and S. Ganguli. 2001. A CGE approach to assessing the effects of NAFTA and WTO on US forestry sectors. P. 519-521 *in*: Proceedings of the 2000 Society of American Foresters (SAF) Convention. Washington, DC.
- Kabongo, K., J. Gan, S.H. Kolison, and J.H. Miller. 1999. Valuation of non-priced forest output resulting from different site preparation methods. P. 320-324 *in*: *Timber Investments: Improving the Odds*, Proceedings of the 1999 SOFEW, I.A. Munn et al. (eds.). Mississippi State University.
- Parmer, A., J. Gan, and S.H. Kolison. 1999. Assessment of the economic efficiency and environmental impact of major timber harvesting systems in Alabama. P. 262-267 *in*: *Timber Investments: Improving the Odds*, Proceedings of the 1999 SOFEW, I.A. Munn et al. (eds.). Mississippi State University.
- Gan, J., S.H. Kolison, and J.H. Miller. 1998. Public preferences of different forest ecosystem management regimes. P. 97-99 *in*: Ontario Forest Research Information Paper No. 141, R.G. Wagner and D.G. Thompson (eds.). Sault Ste. Marie, Canada.
- Miller, J.H., J. Gan, S. Kolison, R. Boyd, K. McNabb, and G. Lockaby. 1998. Ecologically and economically sustainable site preparation methods for loblolly pine in the southeastern United States. P. 445-447 *in*: Ontario Forest Research Information Paper No. 141, R.G. Wagner and D.G. Thompson (eds.). Sault Ste. Marie, Canada.
- Gan, J., S.H. Kolison, J.H. Miller, and T.M. Hargrove. 1997. Non-timber benefits generated by different forest ecosystem management regimes: A case of the Tuskegee National Forest. P. 457-458 *in*: Proceedings of the 1996 SAF Convention. Washington, DC.
- Kolison, S.H., J. Gan, and R.L. Busby. 1997. Who is going to pay most for protecting the red cockaded woodpecker in Alabama? P. 455-456 *in*: Proceedings of the 1996 SAF Convention. Washington, DC.
- Young, L., J. Gan, and R. Ankumah. 1997. Major environmental issues and their impacts on local residents in Mobile and Baldwin counties, Alabama. *In*: Proceedings of the 1997 SOFEW, R. Kluender (ed.). Little Rock, AR.
- Akuley, A., S. Kolison, and J. Gan. 1996. Development, significance, and future of the "twenty-five percent returns to counties." P. 319-322 *in*: Proceedings of the 1996 SOFEW, J. Greene (ed.). Gatlinburg, TN.
- Hargrove, T., J. Gan, and S.H. Kolison. 1996. Public desire for and valuation of non-timber products from the Tuskegee National Forest. P. 143-148 *in*: Proceedings of the 1996 SOFEW, J. Greene (ed.). Gatlinburg, TN.
- Kolison, S.H., R.L. Busby, J. Gan, and R. Zabawa. 1996. The potential economic impacts of protecting the red-cockaded woodpecker in national forests in Alabama. P. 377-386 *in*: Proceedings of the 1996 SOFEW, J. Greene (ed.). Gatlinburg, TN.
- Gan, J., J.P. Colletti, and S.H. Kolison. 1995. A compromise programming approach to integrated natural resource management. P. 378-386 *in*: *Management Systems for a Global Economy with Global Resource Concerns*, J. Sessions and J.D. Brodie, (eds.). Oregon State University.
- Gan, J., S.H. Kolison, and D. Stokke. 1995. Variations in timber prices and their implications for black walnut and red oak plantations. P. 358-368 *in*: Proceedings of the 1995 SOFEW, J. Caulfield and S. Bullard (eds.). New Orleans, LA.

- Kolison, S.H., and J. Gan. 1995. The economic potential of the forestry sector in southeastern Alabama's less developed counties. P. 517-518 in: Proceedings of the 1994 SAF Convention. Washington, DC.
- Colletti, J., C. Ball, W. Premachandra, C. Mize, R. Schultz, L. Rule, and J. Gan. 1994. A socioeconomic assessment of the Bear Creek watershed. In: Proceedings of the 3rd North American Agroforestry Conference. Iowa State University.
- Colletti, J.P., W. Premachandra, R.C. Schultz, L.C. Rule, and J. Gan. 1994. Public attitudes and economic values of a riparian buffer strip. In: Proceedings of the 1993 SAF Convention. Washington, DC.
- Maiga, S.H., R.O. Ankumah, M. Ngandu, and J. Gan. 1994. Development of environmental indicators in the Black Belt counties of Alabama. In: Proceedings of the 52nd Professional Agricultural Workers Conference (PAWC). Tuskegee University.
- Gan, J., S.H. Kolison, and A.T.G. Siaway. 1993. Pulpwood production in Alabama: A supply and demand analysis. P. 201-206 in: *Policy and Forestry -- Design, Evaluation, and Spillover*, Proceedings of the 1993 SOFEW, D. Wear (ed.). Duke University.
- Colletti, J., W. Premachandra, R. Schultz, and L.C. Rule, and J. Gan. 1993. A socio-economic assessment of an Iowa watershed. In: Proceedings of the Riparian Ecosystems in the Humid US – Functions, Values, and Management Conference. Atlanta, GA.
- Gan, J., and J.P. Colletti. 1992. Importance of the Southeast in US crop, livestock, and forest production. In: *Challenges in Agriculture and Rural Development*, Proceedings of the 50th PAWC. Tuskegee University.
- Colletti, J.P., and J. Gan. 1987. A linear programming model of traditional farm crops, livestock and SRIC operations. P. 108-114 in: Proceedings of the IEA/BA Task II Workshop in Economic Evaluations of Short-Rotation Biomass Energy Systems. Duluth, MN.

### **Abstracts**

- Gan, J., C. Lalonde, M. Wellisch, C.T. Smith, C. Drury, and J. Yang. 2015. Determining optimal removal rate and regional supply of corn stover in Ontario, Canada. In: Proceedings of the 2015 IEA Bioenergy Conference, Berlin, Germany.
- Gan, J. 2015. Valuing ecosystem services of different loblolly pine stand structures. In: Proceedings of Taiwan Strait Forum on Biodiversity, Forest Protection and Culture. Daiyun Mountain National Nature Reserve, China.
- Kakkar et al. 2015. Computational sustainability: Preliminary lessons from the US-India Consortium for Development of Sustainable Advanced Biofuel Production Systems. In: Proceedings of the XXIX Gujarat Science Congress, Ahmedabad, India.
- Gan, J., A. Jarrett, and C. Johnson Gaither. 2014. Propensity of landowners to purchase wildfire insurance: Implications for adaptation to wildfire risk under climate variability. In: Proceeding of the 13<sup>th</sup> Annual Hawaii International Conference on Social Sciences. Honolulu, HI.

- Gan, J. 2006. Supply of electricity and CO<sub>2</sub> displacement from logging residues. In: Proceedings of the 2006 SOFEW. Knoxville, IN.
- Jarrett, A, and J. Gan. 2006. Finding the balance: An overview of wildfire hazard mitigation and biomass/bioenergy incentive programs. In: Proceedings of the 2006 SOFEW. Knoxville, IN.
- Gan, J., and S. Ganguli. 2001. Global trade liberalization and forest product trade patterns. In: Abstracts of the Global Initiatives and Public Policies: First International Conference on Private Forestry in the 21<sup>st</sup> Century. Atlanta, GA.
- 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. P. 70 in: Proceedings of the International Symposium 150 Years of the Faustmann Formula: Its Consequences for Forestry and Economics in the Past, Present and Future, S.J. Chang (ed.). Darmstadt, Germany.
- Gan, J., S.H. Kolison, and J.H. Miller. 2000. Public preferences of loblolly pine (*Pinus taeda*) stands resulting from forest ecosystem management. In: Abstracts of the Twelfth Biennial Research Symposium of the Association of Research Directors (ARD), Inc. Washington, DC.
- Murdock, P., and J. Gan. 2000. Socioeconomic impacts of reduced timber harvesting in Alabama National Forests on local communities. In: Abstracts of the Twelfth Biennial ARD Research Symposium. Washington, DC.
- Gan, J., and S.H. Kolison, Jr. 1997. How do business cycles impact the performance of forest products industries? In: Abstracts of the 1997 Annual Meeting of the Forest Products Society. Vancouver, Canada.
- Gan, J., S.H. Kolison, J.H. Miller, and T.M. Hargrove. 1997. Impact of forest ecosystem management on the timber and non-timber values of forest stands. In: Abstracts of the Eleventh Biennial ARD Research Symposium. St. Antonio, TX.
- Dieng, A, and J. Gan. 1997. Foreign trade of agricultural products and inputs and its implications for food self-sufficiency in Senegal. In: Abstracts of the Eleventh Biennial ARD Research Symposium. St. Antonio, TX.
- Gan, J., S.H. Kolison, and A.T.G. Siaway. 1994. Opportunities and constraints of minority forestland owners in selected counties in Alabama. P. 41 in: Proceedings of the 1994 SOFEW, D. Newman and M. Aronow (eds.). The University of Georgia.
- Kolison, S.H., J. Gan, and A.T.G. Siaway. 1994. Forest-based industries as viable options for rural development and economic diversity in southeastern Alabama. P. 42 in: Proceedings of the 1994 SOFEW, D. Newman and M. Aronow (eds.). The University of Georgia.
- Gan, J., S.H. Kolison, and A.T.G. Siaway. 1994. Characteristics of socially disadvantaged forestland owners in southeastern Alabama. In: Abstracts of the Tenth Biennial ARD Research Symposium. New Orleans, LA.
- Freeman, A., J. Gan, and N. Baharanyi. 1994. Landowners' attitudes toward wildlife population increase in Macon county. In: Abstracts of the Tenth Biennial ARD Research Symposium. New Orleans, LA.
- Kolison, S.H., J. Gan, and A.T.G. Siaway. 1994. The potential of forest-based industries in enhancing rural development and economic diversity in selected



- southeast Alabama counties. In: Abstracts of the Tenth Biennial ARD Research Symposium. New Orleans, LA.
- Siaway, A.T., J. Gan, and S.H. Kolison, Jr. 1994. Socioeconomic determinants of out-migration in Alabama. In: Abstracts of the Tenth Biennial ARD Research Symposium. New Orleans, LA.

### **Technical and Other Reports**

- Gan, J., A. Jarrett, and C. Johnson Gaither. 2015. Insurance as an adaptation to wildfire risk under climate change: Evidence from southeastern family forestland owners. P. 32-33 in: Year 4 Annual Report of the PINEMAP Project. University of Florida.
- Nianogo, A.J., S.L. Louis, J. Gan, et al. 1996. Traditional small ruminant husbandry in the Donsin watershed: Productivity and environmental impacts. SANREM CRSP Program Highlights BF10-1. The University of Georgia.
- Rosacker, J., J. Colletti, L. Rule, A. Skadberg, J. Gan, J. Stubben, and R. Faltonson. 1992. Winnebago Forest and Agriculture Alternatives Feasibility Study. Final Project Report submitted to the Winnebago Tribe of Nebraska and the Bureau of Indian Affairs. 130 pp.
- Colletti, J.P., L. Gnewikow, J. Gan, C. Ball, A. Skadberg, R. Schultz, and J. Regula. 1992. A Monoculture Viability Trial of Woody Crops for Energy Production. Final Project Report submitted to USDOE. 87 pp.
- Rosacker, J., J. Colletti, L. Rule, A. Skadberg, J. Gan, J. Stubben, and R. Faltonson. 1991. Winnebago Forest and Agriculture Alternatives Feasibility Study. Assessment Report submitted to the Winnebago Tribe of Nebraska and the Bureau of Indian Affairs. 48 pp.

## **E. Presentations**

### **Invited Presentations**

- Gan, J. 2016. Evidence and measurements of transfer effects: The case of forest conservation leakage. Transfer Effect Workshop, Environmental Defense Fund and the Bren School of Environmental Science and Management, University of California at Santa Barbara.
- Gan, J. 2016. Economics of illegal logging and timber trade. Scientific Meeting of IUFRO Global Forest Expert Panels, Vienna, Austria.
- Gan, J. 2016. Trade-induced leakage in forest conservation: Implications for REDD and offshore outsourcing. Chinese Academy of Sciences, Xiamen, China.
- Gan, J. 2016. Urbanization, climate variability, and wildfire. Chinese Academy of Sciences, Xiamen, China.
- Gan, J. 2016. Climate variability and wildfire: Causality, projection, and response. ESSM Departmental Seminar, Texas A&M University.
- Gan, J. 2016. Forest disturbances and climate variability. Annual meeting of the Texas chapter of the Society of American Foresters, Lofkin, TX.
- Bentsen, N.S., P. Lamers, C. Lalonde, M. Wellisch, V.H. Dale, I. Bonner, J. Jacobson, I. Stupak, J. Gan, and P. Girouard. 2016. Mobilizing agricultural crop residues for

- energy and higher value bio-products. IEA Bioenergy ExCo77 Workshop in collaboration with GSE, FAO, and IRENA, Rome, Italy.
- Gan, J. 2015. Energy, environment, and economy: Global bioenergy development. Fujian Agriculture and Forestry University, China.
- Gan, J. 2015. Valuing ecosystem services of different loblolly pine stand structures. Taiwan Strait Forum on Biodiversity, Dehua, China.
- Gan, J., H. An, and K. Clifton. 2014. Climate change impact on southern pine beetle infestations. SAF Convention, Salt Lake City, UT.
- Gan, J. 2014. Transnational leakage of forest conservation: Implications for REDD and offshore outsourcing. IUFRO Global Forum on Ecological Economics in Forestry, Nanjing Forestry University, China.
- Gan, J. 2014. Global and US forest resources and management. University of Houston.
- Gan, J. 2014. Why should buy US-made forest products?--environmental and economic perspectives. Annual Meeting of Texas Chapter of the Society of American Foresters, Athens, TX
- Gan, J. 2013. Forest product supply chains: An overview. Fujian Agriculture and Forestry University, China.
- Cashore, B., J. Gan, and M. Stone. 2012. Can legality verification ratchet up global forest governance?—theory, empirical evidence, and economic analysis. USDA Forest Service International Program, Washington, DC.
- Gan, J. 2012. Biomass supply beyond physical availability: Ecological, economic and social perspectives. Bioenergy Symposium, Tuskegee University (sponsored by USDA Office of Chief Economist).
- Gan, J. 2012. Invasion of Chinese tallow in US southern forests. Yale Forestry Forum, Yale University.
- Gan, J. 2011. Transnational leakage of forest conservation: Concept, measurement and implication. Seminar and Lecture Series, School of Forestry and Environmental Studies, Yale University.
- Gan, J. 2011. Writing for publication. Putian Institute, China.
- Gan, J. 2011. Bioenergy supply chains. Fujian Agriculture and Forest University, China.
- Gan, J. 2011. Invasions of Chinese tallow on southern forestlands. Southern University.
- Gan, J. 2011. Adaptation and leakage: Two issues in assessing climate change impact and mitigation. Southern University.
- Gan, J. 2009. Biomass supply from southern family forestlands: Economic perspectives. Virginia Polytechnic Institute and State University.
- Gan, J. 2009. Integrating biophysical and socioeconomic considerations into biomass supply assessment. SAF Convention, Orlando, FL.
- Gan, J., J. Miller, H. Wang, and J. Taylor. 2009. Tallowtree invasion on southern forestland: Occupation, predicted spread, and mitigation. SAF Convention, Orlando, FL.

- Gan, J. 2009. Principles, criteria and indicators for economic sustainability of woodfuel production. United Nations Food and Agricultural Organization (FAO), Rome, Italy.
- Gan, J. 2008. Economic and environmental reality and myth of forest bioenergy. University of Texas, San Antonio.
- Gan, J. 2008. Responsible forest management. Texas A&M University Student Governance Association.
- Gan, J. 2007. Economic potential of forest biomass for energy production and GHG mitigation. The Third China-US Relations Conference, Washington, DC.
- Gan, J. 2007. Using forest biomass for electricity production: Economic and environmental perspectives. The Third China-US Relations Conference, Washington, DC.
- Gan, J. 2007. Is forest bioenergy development good or bad to sustainable forest management? IUFRO Division VI Symposium: Integrative Science for Integrative Management, Saariselkä, Finland.
- Gan, J. 2007. Economic potential of southern forests for energy production. Technical Association of the Pulp and Paper Industry (TAPPI) International Symposium on Bioenergy, Atlanta, GA.
- Gan, J., B.A. McCarl, and J. Mjelde. 2006. Effects of climate change, forest certification, biotechnology, and industry concentration on the US forest products industry and trade, USDA Agricultural Markets and Trade Project Directors Meeting, Washington, DC.
- Gan, J. 2006. Impacts of forest biomass and bioenergy development on local and regional economies. Energy from Wood Conference, Raleigh, NC (sponsored by North Carolina Cooperative Extension Service, Duke University, and NC Division of Forest Resource).
- Gan, J. 2005. Research in forest economics. Fujian Agriculture and Forestry University, China.
- Gan, J. 2005. Forest bioenergy. Fujian Agriculture and Forestry University, China.
- Smith, C.T., and J. Gan. 2005. An analysis of the forest biomass value chain in the United States. Status, Trends, and Future of the South's Forest and Agricultural Biomass Conference, Athens, GA.
- Gan, J. 2005. Substitutability between US domestic and imported forest products: The Armington approach. US-Canada Forest Products Trade Symposium, Michigan State University.
- Gan, J. 2004. Sustainable production of forest bioenergy/bio-based products. Workshop on Bioenergy and Bio-based Products from Sustainable Forest Management in the Southern United States, Houston, TX.
- Smith, C.T., and J. Gan. 2004. Forest biomass and bioenergy: Opportunities and barriers. Temple-Inland, Inc., Diboll, TX.
- Gan, J. 2004. Sustainable forest certification and global forest product trade. SAF and Canadian Institute of Forestry (CIF) Joint Convention, Edmonton, Canada.
- Gan, J. 2004. Opportunities and challenges in exporting US forest products to China. Temple-Inland, Inc., Diboll, TX.

- Gan, J. 2003. Causality relationships among wildland fire, ENSO, timber harvest, and urban sprawl. Department of Agricultural Economics, Texas A&M University.
- Gan, J. 2001. Valuation of non-market goods from forests. Fujian Society of Foresters, China.
- Gan, J. 2001. Research and education in forest economics and policy. Fujian Agriculture and Forestry University, China.
- Gan, J. 2001. US forestry, ecotourism, and natural reserves. Wuyishan National Natural Heritage Reserve, China.
- Gan, J. 2001. Forest management and policy in the United States. Fujian Department of Forestry, China.
- Gan, J. 2001. Sustainable forestry: Opportunities and challenges. International Symposium on Sustainable Development Strategies for Fujian Forest Products Industry, Fuzhou, China.
- Gan, J. 2000. Non-industrial private forests and owners: Research, applications, and perspective. School of Forest Resources, University of Arkansas-Monticello.
- Gan, J. 2000. Minority forestland owners and technical assistance. Tennessee State University.
- Gan, J. 1999. Public preferences for non-timber benefits of loblolly pine (*Pinus taeda*) stands generated by different site preparation methods. Mississippi State University.
- Kolison, S.H., and J. Gan. 1997. Making of the 21st century's forest resource economists. SOFEW, Little Rock, AR
- Gan, J. 1996. Modeling integrated natural resource management using compromise programming. Department of Agricultural Economics and Rural Sociology, Auburn University.
- Kolison, S.H., and J. Gan. 1995. The 21st century forester: Expectations and propensities. SAF Convention, Portland, ME.

### **Other Presentations**

Presentations at professional conferences: Approximately 95 (*the list of presentations is available upon request*)

## **VI. Teaching**

### **A. Teaching Program**

I have had 28 years of college teaching experience and am fully committed to teaching excellence. My teaching experience includes the instruction of classes at both graduate and undergraduate levels and the supervision and advising of undergraduate and graduate students. I have taught both forestry and agricultural economics courses with concentration on forest/natural resource management, economics, and related subjects. The courses that I have taught represent a core component of the curricula for the degree programs in the academic units where I have worked. Approximately 2000 students have been enrolled in my classes. In addition to instruction, I have led and participated in developing new curricula and courses and restructuring existing ones to better meet the evolving curriculum needs.

## B. Courses Taught

**Table 1. Summary of courses taught.**

| Course Code                                | Course Title  | Credit Hours | Average Enrollment | Frequency           |
|--|---|--------------|--------------------|---------------------|
| <b>Texas A&amp;M University since 2001</b> |   |              |                    |                     |
| <i>Undergraduate</i>                       |   |              |                    |                     |
| ESSM 308/<br>FRSC 302                      | Fundamentals of Environmental Decision-Making                                     | 3            | 80                 | Annual              |
| FRSC 404                                   | Forest Management   | 3            | 15                 | Annual<br>(2001-12) |
| ESSM 405                                   | Forest Resource Assessment and Management (Senior capstone)                       | 3            | 18                 | Annual<br>(2012-)   |
| FRSC 405                                   | Integrated Forest Resource Analysis and Planning (Senior capstone)                | 4            | 12                 | Annual<br>(2001-12) |
| ESSM 491                                   | Undergraduate Research  | 1-5          | Variable           | Variable            |
| <i>Graduate</i>                            |   |              |                    |                     |
| AGEC 695                                   | Frontiers in Natural Resource Economics: Economics of Climate Change <sup>a</sup> | 3            | 7                  | Variable            |
| ESSM 605                                   | The Research Process  | 2            | 10                 | Annual              |
| ESSM 681                                   | Seminar   | 1            | Variable           | Variable            |
| ESSM 685                                   | Directed Studies  | 1-3          | Variable           | Variable            |
| ESSM 691                                   | Research  | 1-9          | Variable           | Variable            |
| <b>Tuskegee University, 1992-2001</b>      |   |              |                    |                     |
| <i>Undergraduate</i>                       |   |              |                    |                     |
| 1FOR 205                                   | Introduction to Forestry  | 3            | na <sup>b</sup>    | Annual              |
| 1FOR 402                                   | Forest Mensuration  | 3            | na                 | Variable            |
| 1FOR 405                                   | Forest Economics  | 3            | na                 | Variable            |
| <i>Graduate</i>                            |   |              |                    |                     |
| 1AGE 502                                   | Natural Resource Economics  | 3            | na                 | Annual              |
| 1AGE 513                                   | Production Economics <sup>a</sup>   | 3            | na                 | Annual              |
| 1AGE 600                                   | Graduate Seminar  | 1            | na                 | Variable            |
| 1AGE 604                                   | Microeconomics  | 3            | na                 | Annual              |
| 1AGE 614                                   | Agricultural Policy   | 3            | na                 | Variable            |
| 1AGE 615                                   | Quantitative Methods (Econometrics)   | 3            | na                 | Annual              |
| 1AGE 630                                   | Special Problems in Agricultural Economics  | 1-3          | na                 | Variable            |
| 1AGE 700                                   | Research in Agricultural Economics  | 1-9          | na                 | Variable            |
| 1ESC 595                                   | Special Problems in Environmental Science   | 1-3          | na                 | Variable            |
| 1ESC 700                                   | Research in Environmental Science   | 1-9          | na                 | Variable            |

<sup>a</sup> These courses were co-taught with other professors.

<sup>b</sup> The number of students was not recorded.

**Table 2. Guest lectures**

| <b>Course Code</b> | <b>Course Title</b>                   | <b>Semester</b>        | <b>Institution</b> |
|--------------------|---------------------------------------|------------------------|--------------------|
| ESSM 601           | Advances and Issues in Forest Science | 2005, 2007, 2010, 2011 | TAMU               |
| PLSS 100           | World Food and Fiber                  | 1993, 1996             | Tuskegee           |

**C. Course and Curriculum Development*****Texas A&M University***

- 2011-12 Revised ESSM 405 (Forestry capstone course) and developed it into a W (writing intensive) course
- 2010 Chaired Subcommittee on Undergraduate Management Core Curriculum, Department of Ecosystem Science and Management
- 2009 Served on a college committee to develop a strategic plan for globalization of undergraduate and graduate curricula
- 2008-09 Led in curriculum development for five undergraduate degree programs in the Department of Ecosystem Science and Management
- 2004 Led in curriculum development for the International Forestry emphasis
- 2004 Completely re-designed the Fundamentals of Environmental Decision-Making course. It has become a major service course for the department and attracted students from six colleges
- 2004 Revised the Manufacturing and Applications of Wood Products course
- 2002 Completely re-designed the Research Process course by adding philosophy of science, critical thinking, and research ethics and emphasizing research proposal development and review. It has become a required course for Forestry graduate students
- 2001 Developed the Integrated Forest Resource Analysis and Planning course, a capstone course for the Forestry major
- 2001 Re-designed the Forest Management course to emphasize sustainable ecosystem management and to incorporate emerging issues such as climate change, biomass/bioenergy, and real estate management

***Tuskegee University***

- 1998-2001 Led in curriculum and course development/revisions for the Forestry and Wildlife Biology degree programs, including joint degree programs (2+2 and 2+3) with eight universities across the US

**D. Graduate Student Supervision****Chair/Co-chair*****Texas A&M University***

- Soyoung Lee, Ecosystem Science and Management (Ph.D., in progress)
- Jorge Amaro Bastos Alves, Science and Environmental Technology, Universidade do Vale do Itajaí, Brazil (Joint Supervisor) (Ph.D., in progress)
- Yavuz Doner, Ecosystem Science and Management (M.S., in progress)
- David Mushal, Natural Resource Development (Master, in progress)

- Juanita Huff, Ecosystem Science and Management, May 2016. Dissertation title: “Impacts of climate change on landscape services associated with tourism in Big Bend National Park.” (Ph.D.)
- Hyunjin An, Ecosystem Science and Management, December 2015. Dissertation title: “Three essays on climate change, pine beetle risk, forest productivity and forestland value.” (Ph.D.)
- Eboni Hall, Natural Resource Development, August 2015 (Master, non-thesis, co-chaired with J. Vogel)
- Dianne Stromann, Ecosystem Science and Management, December 2014. Dissertation title: “Assessing perpetual conservation easements as a tool for land protection: The private landowner perspective.” (Ph.D., co-chaired with U. Kreuter)
- Wenjun Chen, Ecosystem Science and Management, August 2014. Dissertation title: “Adaptation to climate change in an arid and semiarid area in China--An analysis of rural livelihood in Inner Mongolia using county and household level data.” (Ph.D.)
- Kathryn Clifton Ramirez, Rangeland Ecosystem and Management, May 2014. Dissertation title: “Linking institutional characteristics to communal natural resource conservation in Cumbres de Monterey National Park.” (Ph.D.)
- Darmawan Prasodjo, Agricultural Economics, May 2011. Dissertation title: “An economic study of carbon capture and storage system design and policy.” (Ph.D., co-chaired with B.A. McCarl)
- Hsiao-Hsuan Wang, Forestry, December 2009. Dissertation title: “Occupation, dispersal, and economic impact of major invasive plant species in southern US forests.” (Ph.D.)
- En Zhu, Agricultural Economics, August 2007. Dissertation title: “The role of US agricultural and forestry activities in global climate change mitigation.” (Ph.D., co-chaired with B.A. McCarl)
- Adam Jarrett, Forestry, December 2007. Thesis title: “Landowner perception, awareness and adoption of wildfire programs in the southern United States.” (M.S.)
- Darren Ream, Forestry, May 2009 (M.S., non-thesis)

***Tuskegee University (all M.S. students)***

- Amadou Diop, Agricultural Economics, May 2001. Thesis title: “Effects of global trade liberalization and environmental policies on the US economy: A computable general equilibrium analysis.”
- Sabyasachi Ganguli, Agricultural Economics, May 2000. Thesis title: “Impact assessment of NAFTA and WTO on US forestry.”
- Tracy L. Lane, Environmental Science, May 2000. Thesis title: “Environmental concerns and US imports and exports of softwood lumber.”
- Philip C. Murdock, Environmental Science, May 2000. Thesis title: “The socioeconomic impacts of reduced timber harvesting in Alabama National Forests on local communities.”
- K. Kabongo, Agricultural Economics, May 1999. Thesis title: “Valuation of non-priced forest output from industrial forests.”

- Andrea M. Parmer, Agricultural Economics, May 1999. Thesis title: “Assessment of economic efficiency and environmental impact of major timber harvesting systems in Alabama.”
- Alioune Dieng, Agricultural Economics, May 1998. Thesis title: “Cereal supply and demand in Senegal, 1960-1995: Implications for food self-sufficiency.”
- Kimberlee C. Higgs, Agricultural Economics, May 1998. Thesis title: “Uncertainties and changes in market conditions: Implications for feeder calf production in Alabama.”
- Latascha C. Young, Environmental Science, May 1997. Thesis title: “Environmental concerns and their impact on the residents of Baldwin and Mobile counties in Alabama.”
- Tasha M. Hargrove, Agricultural Economics, May 1997. Thesis title: “Valuation and marketing strategies of the non-priced commodities from the Tuskegee National Forest.”
- Rory Stephen, Environmental Science. Thesis title: “The participation in government sponsored forestry programs by owners of forest lands adjacent to the Tuskegee National Forest.” (not finished when I left Tuskegee)
- April Freeman, Agricultural Economics. Thesis title: “Landowners’ attitudes towards increased wildlife population in Macon County, Alabama.” (not finished when I left Tuskegee)
- Terrelyn S. Turman, Agricultural Economics. Thesis title: “Marketing strategies for small livestock farmers in selected Black Belt counties in Alabama.” (not finished when I left Tuskegee)

### **Committee Member**

#### ***Texas A&M University***

- Siyi Feng, Agricultural Economics (Ph.D., in progress)
- Kevin Fasnacht, Agricultural Economics (M.S., in progress)
- Clay Thompson, Wildlife and Fisheries Science (M.S., in progress)
- Mohannad Kabli, Industrial and Systems Engineering (M.S., in progress)

- Sung Ju Cho, Agricultural Economics, December 2015 (Ph.D.)
- Jinxiu Ding, Agricultural Economics, May 2014 (Ph.D.)
- Ruth A. Amuta, Agricultural Economics, December 2012 (Ph.D.)
- Ji Yun Park, Agricultural Economics, December 2012 (Ph.D.)
- Juan Monge, Agricultural Economics, August 2012 (Ph.D.)
- Yuquan Zhang, Agricultural Economics, December 2011 (Ph.D.)
- Xavier Villavicencio, Agricultural Economics, May 2010 (Ph.D.)
- Jody Campiche, Agricultural Economics, May 2009 (Ph.D.)
- Kenneth D. McGee, Educational Psychology, May 2002 (Ph.D.)
- Ilyas J. Najmuddin, Geophysics, December 2002 (Ph.D.)
- Won Ju Lee, Industrial Engineering, August 2006 (M.S.)

#### ***University of Toronto, Canada (External Examiner of Ph.D. dissertation)***

- Martin H. Kijazi, Forestry, August 2007 (Ph.D.)



*Fujian Agriculture and Forestry University, China (Chair of thesis defense committees)*  
12 students (7 M.P.A. and 5 M.S.)

***Tuskegee University (All M.S. students)***

Austin Percival, Agricultural Economics, 2001  
Andrei Cotton, Agricultural Economics, 2001  
Regine Louis, Environmental Science, 2000  
Evelyn Boateng, Agricultural Economics, 1999  
John Kagochi, Agricultural Economics, 1999  
Annonya Akuley, Agricultural Economics, 1998  
Carmelita Cavaness, Environmental Science, 1998  
Andrea Y. Foye, Agricultural Economics, 1998  
Mour Gueye, Plant and Soil Science, 1998  
Qinhua Liao, Environmental Science, 1998  
Geoffrey Eveas, Agricultural Economics, 1997  
Charmaine Parchment, Environmental Science, 1997  
Reginald Plummer, Agricultural Economics, 1997  
Tammy Smith, Agricultural Economics, 1997  
Paul Hinds, Environmental Science, 1996  
Octavia Jackson, Agricultural Economics, 1996  
Youssef Diabate, Agricultural Economics, 1995  
Allen Herrera, Environmental Science, 1995  
Melanie Lunsford, Agricultural Economics, 1995  
Souhayata Maiga, Environmental Science, 1995  
Abdulkudos A. Almarwani, Agricultural Economics, 1994  
Gerald Essono, Agricultural Economics, 1994  
Henry Gaga, Agricultural Economics, 1994  
Melise D. Huggins, Agricultural Economics, 1993  
Monique N. Ouli, Agricultural Economics, 1993

**E. Supervision of Research Associates and Visiting Scholars/Scientists**

Sen Lin, Visiting Scholar, Lecturer, Fujian Agriculture and Forestry University, China, 2016-17  
Rongzu Qi, Visiting Scholar, Professor and Dean, Fujian Agriculture and Forestry University, China, 2014-15  
Shipeng Su, Visiting Scholar, Professor and Associate Dean, Fujian Agriculture and Forestry University, China, 2013-14  
M.A. Salam, IDB Fellow, Associate Professor, Bangladesh Agricultural University, 2011  
Sangdo (Sam) Choi, Research Associate, 2010  
Thanigaivel Kulandaivelu, Research Associate, 2010  
Girirengan Seshadri, Research Associate, 2009  
Charly Facheux, Norman E. Borlaug International Science and Technology Fellow, Cameroon, 2006

Cheryl Mayfield, Research Associate, 2005-09 (co-supervisors: C.T. Smith and D. Foster)

Elizabeth M. Remedio, Fulbright Scholar, Professor and Head of the Department of Economics, University of San Carlos, Philippines, 2005

Jianhui Yu, Visiting Scholar, Professor and Vice President of Fujian Agriculture and Forestry University, China, 2002-03

Anli Yang, Visiting Scholar, Economist, People's Bank of China, Shanghai, 1993-94

#### **F. Undergraduate Advising**

Caleb Pagel, Undergraduate Teaching Intern, 2017

Randall Martin, Undergraduate Teaching and Research Intern, 2016

Berry Isensee, Undergraduate Teaching Intern, 2015

Adam Jarrett, Undergraduate Research Assistant, 2005

Advised approximately 20 students per year in Forestry and Wildlife Biology at Tuskegee University, 1998-2001

#### **G. International Teaching Experience**

Invited to give lectures to graduate students, Fujian Agriculture and Forestry University, China, June 2015

Invited to give lectures to graduate students, Lanzhou University, China, July 2011

Invited to give lectures to graduate students, College of Economics and Business Management, Fujian Agriculture and Forestry University, China, November 2005 and July 2006.

Invited by Chinese Ministry of Forestry to teach a three-week intensive course on forest management decision-making at Nanjing Forestry University, China, July 1995.

Co-taught a four-week intensive course in sustainable natural resource management and environmental sciences for Haitian participants, 1994 and 1995.

Co-taught a four-week intensive course in sustainable agriculture and natural resource management for Haitian participants, 1993.

Co-taught a four-week intensive course in sustainable agriculture and natural resource management for Thomas Jefferson Fellows from Tanzania, 1993.

### **VII. Service**

I have served in a variety of capacities, including associate department head, chair of various departmental committees, national and international grants review panelist, associated editor and guest editor of scientific journals, chair of a national/international conference, representative to a state forestry planning committee, and advisor to student clubs. Additionally, I have been engaged in professional interactions with (as well as providing service to) landowners, industries, and national and international organizations.

#### **A. Department, College, and University Service**

Chair, Department's Awards Committee, 2016-

Member, Forest Biologist Faculty Search Committee, 2016

Coach, Texas A&M University's SAF Quiz Bowl Team, 2016

Member, Texas A&M University Scholars Interview Panel, 2013

Chair, SAF Re-accreditation Committee, Department of Ecosystem Science and Management, 2012-13

Member, Promotion and Tenure Committee, Department of Ecosystem Science and Management, 2007-15

Member, Human Dimensions Faculty Search Committee, Department of Ecosystem Science and Management, 2012-13

Evaluator, Graduate Merit Scholarship, Office of Graduate Studies, 2010

Member, Graduate Program Council, College of Agriculture and Life Science, 2009-11

Chair, Graduate Admissions Committee and Graduate Scholarships Committee, Department of Ecosystem Science and Management, 2009-11

Member, Task Force for Curriculum Globalization, College of Agriculture and Life Science, 2009.

Chair, Seminar Committee, Department of Ecosystem Science and Management, 2009.

Chair, Forest Ecologist Faculty Search Committee, Department of Ecosystem Science and Management, 2008-09.

Chair, Undergraduate Programs Committee and Undergraduate Scholarships Committee, Department of Ecosystem Science and Management, 2008-09

Faculty Advisor, Student Chapter of the Society of American Foresters and the Forestry Club, 2008-09.

Member, Graduate Programs Committee, Department of Ecosystem Science and Management, 2007-09

Member, Exploratory Committee, College of Agriculture and Life Sciences, 2005

Member, Undergraduate Programs Committee, Department of Forest Science, 2001-06

Chair, Ad Hoc Committee on developing a curriculum for an International Forestry emphasis, Department of Forest Science, 2004-05

Member, Forest Resources Program Council of Tuskegee University, 1998-2001

Secretary, Interdisciplinary Working Committee, Tuskegee University, 1994-98

Member, Faculty Panel and Technical Program Committee of the Tuskegee University and Sokoine University (Tanzania) institutional linkage project, 1996-2001

Dean's representative to Alabama Consortium for Forestry Education and Research, 1998-2001

Dean's representative to Alabama (State) Forestry Planning Committee, 1998-2001

Department's representative to the University's Y2K Committee, 1999-2000

Faculty Advisor, Forestry Club, 1998-2001

## **B. Service to Professional Organizations**

Chair, 2007 Southern Forest Economics Workshop (SOFEW)

Co-chair, Research Roundtable on Bioenergy Development, Climate Change Mitigation, and Energy Security at the Third George Bush China-US Relations Conference, Washington, DC, 2007

Co-chair, Research Roundtable on Wetland Conservation, Nature-Based Tourism, and Rural Economic Development at the Second George Bush China-US Relations Conference, Beijing, China, 2005

Session moderator, 2004 SOFEW

Session moderator, Roundtable on Trade and Business Development at the First George Bush China-US Relations Conference, College Station, Texas, 2003  
Member, Steering Committee for the Symposium on Embracing Diversity in Natural Resources: Blueprint to Success, 1994  
Field Trip Coordinator, International Workshop on Participatory Collaborative Research Methodologies, 1995  
Treasurer, Tuskegee University's Chapter of Gamma Sigma Delta Agricultural Honor Society, 1994-96  
Member, Modeling and Economic Working Group and the Philippines Site Group for the Sustainable Agriculture and Natural Resource Cooperative Research Support Program (SANREM CRSP), 1992-98

### **C. Grant Proposal, Manuscript, and Tenure/Promotion Review**

#### **Funding Agencies**

##### ***Panelist***

Swedish Research Council, 2015  
USDA NIFA Environmental and Resource Economics, 2015  
US National Academy of Sciences and Ford Foundation, 2013, 2014  
USDA NIFA Coordinated Agricultural Projects (CAP), 2013  
NSF Chemical, Bioengineering, Environmental, and Transport Systems (CBET), 2009  
NSF Graduate Fellowships, 2007, 2010  
USDA NIFA Threshold in AgroEcosystems, 2011  
USDA NIFA Management in AgroEcosystems, 2011  
USDA NIFA Prosperity of Small- and Medium-Sized Farms, 2010  
USDA NIFA Rural Communities, 2010  
USDA Forest Service Biomass R&D, 2009  
USDA CSREES Higher Education Challenge Grants, 2006  
USDA CSREES National Needs Graduate and Postgraduate Fellowships, 2005, 2007, 2010  
USDA CSREES Higher Education Multicultural Scholars, 2005, 2006, 2008  
USDA CSREES 1890 Institution Teaching and Research Capacity Building Grants Program, 2003-05

##### ***Ad hoc reviewer***

USDA NIFA Sustainable Bioenergy, 2011  
NSF Chemical, Bioengineering, Environmental, and Transport Systems, 2010  
USDA NIFA Sustainable Bioenergy, 2010  
USDOE Sun Grant, 2008  
USDA Small Business Innovation Research (SBIR), 2007  
US Civilian Research and Development Foundation (CRDF), 2006  
USDA CSREES National Needs Graduate and Postgraduate Fellowship, 2006  
NSF Economics, 2004  
USDA National Research Initiative Competitive Grants Program (NRICGP) (Trade and Markets), 1998, 2008

US National Research Council, 1993  
Invited to serve as overseas peer review expert for the National Natural Science  
Foundation of China, 2003

### **Journals**

**Readers Advisory Panelist:** Nature, 2009-10

**Guest Editor:** Forests, 2015

**Associate Editor:** Canadian Journal of Forest Research, 2007-16; Southern Journal  
Applied Forestry, 2008-10

**Editorial Board:** International Journal of Forestry Research, 2008-; Canadian Journal  
of Forest Research, 2007-16

**Guest Associate Editor:** Forest Science, 2005

### ***Ad hoc Reviewer***

*Agroforestry Systems, Biomass and Bioenergy, Canadian Journal of Forest  
Research, Choices, Ecological Economics, Energy Policy, Environmental  
Conservation (An International Journal of Environmental Science), Environmental  
and Resource Economics, Forests, Forest Science, GeoJournal, International  
Journal of Forest Engineering, Journal of Agricultural and Applied Economics,  
Journal of Environmental Management, Journal of Forest Economics, Journal of  
Forest Policy and Economics, Journal of Forestry, Journal of Sustainable Forestry,  
Journal of Tropical Forest Science, Land Economics, Philippine Journal of  
Science, Resource and Environmental Economics, Southern Journal of Applied  
Forestry, Tuskegee Horizon, World Development*

### **Organizations**

#### ***Ad hoc Reviewer***

USDA Forest Service: Technical Assistance Review of Human and Natural  
Systems Research, 2014

USDA Forest Service: Factsheet on invasive species, 2012

USDA Forest Service: Manuscripts for journal submission, 2011, 2012

USDA: Southern Forest Future Project, 2011

Texas Forest Service: Ecosystem service valuation, 2013

Hindawi Publishing Corporation: Special Issue Proposals for the International  
Journal of Forestry Research, 2011, 2012, 2013

International Union of Forest Research Organizations (IUFRO): Book review, 2009

Elsevier: Book proposal review, 2007, 2015

USDOE and USDA: Review of a national assessment on biomass availability (the  
billion tons report), 2005

Forest Policy Center, Auburn University: Manuscript review for a book, 2001

McGraw-Hill: Book reviews, 1998, 2000

Association of Research Directors, Inc.: Manuscript reviews for the best paper  
award, 1995-2000

Sustainable Agriculture and Natural Resource Management Cooperative Research  
Support Program (SAREM CRSP): Research proposal reviews, 1995-98

***Tenure and Promotion Reviewer***

Auburn University, Iowa State University, Lakehead University (Canada),  
Michigan State University, Montclair State University, University of Missouri, and  
US Forest Service

**D. Professional Affiliations**

Society of American Foresters  
International Society of Forest Resource Economics  
Southern Forest Economics Workers (SOFEW)  
Texas Forestry Association  
Midwest Forest Economics Association  
Sigma Xi Research Society

**E. Consultancy and Industry Service**

AdventGX™  
Borlaug Institute  
Forest Capital Partners, LLC  
Heinz Center for Science, Economics, and the Environment  
International Energy Agency (IEA) Bioenergy  
International Union of Forest Research Organizations (IUFRO)  
OSI Restaurant Partners, LLC  
Pinchot Institution for Conservation  
Southeast Region Biomass Energy Feedstock Partnership  
Southeastern Consortium for International Development (SECID)  
Southern Forestry Research Partnership  
Technical Association of the Pulp and Paper Industry (TAPPI)  
Temple-Inland, Inc.  
Texas Forest Industries Council  
Tuskegee University  
United Nations Environmental Programme (UNEP)  
United Nations Food and Agriculture Organization  
US Agency for International Development  
US Department of Agriculture (Foreign Agricultural Service, Forest Service)