

MITCH RENKOW
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Chapel Hill, NC 27517 U.S.A.

EDUCATION

Ph.D. July 1988, Department of Economics and Business, North Carolina State University, Raleigh, North Carolina.

M.S. May 1982, Department of Agricultural Economics, University of Wisconsin, Madison, Wisconsin.

B.S. March 1978, Department of Agricultural and Resource Economics, University of California, Berkeley, California.

PROFESSIONAL EXPERIENCE

Visiting Professor, 2004, Department of Economics, Waikato Management School, The University of Waikato, Hamilton, New Zealand.

Professor and Extension Specialist, 2003 - present, Department of Agricultural and Resource Economics, North Carolina State University, Raleigh, North Carolina (50% extension, 30% research, 20% teaching).

Associate Professor and Extension Specialist, 1997 - 2003, Department of Agricultural and Resource Economics, North Carolina State University, Raleigh, North Carolina (50% extension, 30% research, 20% teaching).

Research Affiliate, 1997 - 2002, Economics Program, International Maize and Wheat Improvement Center (CIMMYT), El Batan, Mexico.

Assistant Professor and Extension Specialist, 1991 - 1997, Department of Agricultural and Resource Economics, North Carolina State University, Raleigh, North Carolina (70% extension, 30% research).

Rockefeller Foundation Research Fellow, 1988 - 1990, International Maize and Wheat Improvement Center (CIMMYT), El Batan, Mexico.

Research Scholar, 1987, International Crops Research Institute for the Semi-Arid Tropics (ICRISAT), Hyderabad, India.

Consultant, 1986, Sigma One Corporation, Raleigh, North Carolina.

Research Assistant, 1984 - 1987, North Carolina State University, Raleigh, North Carolina.

Agricultural Economist, 1981 - 1983, Sigma One Corporation, Raleigh, North Carolina.

Foreign Service Intern, 1981, American Embassy, Dar es Salaam, Tanzania.

SCHOLARLY AND PROFESSIONAL HONORS

ReCONNECT Rural and Urban NCSU Faculty Chair, Institute for Emerging Issues, NC State University, 2019.

Opal Mann Green Award for Engagement of the NC Cooperative Extension Service (shared with others) for accomplishments associated with the “Stronger Economies Together” regional development project in three North Carolina counties, 2014.

Associate Editor, *American Journal of Agricultural Economics*, 2008-2011.

Member, Editorial Board, *Review of Agricultural Economics*, 2004-2009.

Member, Editorial Council, *Journal of Agricultural and Applied Economics*, 2002-2005.

Fellow, Rural Development Research Consortium, 2003-present

Senior Research Fellow, Southern Rural Development Center, 2002-2003.

Outstanding Journal Article in the *American Journal of Agricultural Economics*, American Agricultural Economics Association, 1990.

Kenneth Keller Award for Outstanding Doctoral Dissertation, North Carolina State University College of Agriculture and Life Sciences, 1988.

PUBLICATIONS

Journal Articles

1. Kandilov, Amy, Ivan Kandilov, Xiangping Liu, and Mitch Renkow. 2017. “The Impact of Broadband on U.S. Agriculture: An Evaluation of the USDA Broadband Loan Program.” *Applied Economic Perspectives and Policy* 39(4): 635–661.
2. Dinterman, Robert F. and Mitch Renkow. 2017. “Evaluation of USDA's Broadband Loan Program: Impacts on Broadband Provision.” *Telecommunications Policy* 41(2): 140-153.
3. Jeuck, James, Frederick Cabbage, Robert Abt, Robert Bardon, James McCarter, John Coulston, and Mitch Renkow. 2014. “Assessing Independent Variables Used in Econometric Modeling Forest Land Use or Land Cover Change: A Meta-analysis.” *Forests* 5(7): 1532-1564.
4. Frey, Gregory E., Hugo E. Fassola, A. Nahuel Pachas, Luis Colcombet, Santiago M. Lacorte, Mitch Renkow, Oscar Pérez, and Frederick W. Cabbage. 2012. “A Within-Farm Efficiency Comparison of Silvopasture Systems with Conventional Pasture and Forestry in Northeast Argentina.” *Land Economics* 88(4): 639-657.
5. Frey, Gregory E., Hugo E. Fassola, A. Nahuel Pachas, Luis Colcombet, Santiago M. Lacorte, Oscar Pérez, Mitch Renkow, Sarah T. Warren, and Frederick W. Cabbage. 2012. “Perceptions of Silvopasture Systems Among Adopters in Northeast Argentina.” *Agricultural Systems* 105(1): 21-32.
6. Renkow, Mitch. 2011. “Residential Broadband Availability: Evidence from Kentucky and North Carolina.” *Agricultural and Resource Economics Review* 40(2): 145-157.
7. Renkow, Mitch and Derek Byerlee. 2010. “The Impacts of CGIAR Research: A Review of

- Recent Evidence.” *Food Policy* 35(5): 391-402.
8. Kandilov, Ivan T. and Mitch Renkow. 2010. “Infrastructure Investment and Rural Economic Development: An Evaluation of USDA’s Broadband Loan Program.” *Growth and Change* 41(2): 165-191.
 9. Edmeades, Svetlana, Dan Phaneuf, Melinda Smale, and Mitch Renkow. 2008. “Modeling the Crop Variety Demand of Semi-Subsistence Households: Bananas in Uganda.” *Journal of Agricultural Economics* 59(2): 329-349.
 10. Renkow, Mitch. 2007. “Employment Growth and the Allocation of New Jobs: Spatial Spillovers of Economic and Fiscal Impacts.” *Review of Agricultural Economics* 29(3): 396-402.
 11. Renkow, Mitch. 2006. “Employment Growth and the Allocation of New Jobs: Evidence from the South.” *Review of Regional Studies* 36(1): 121-139.
 12. Renkow, Mitch, Daniel G. Hallstrom, and Daniel D. Karanja. 2004. “Rural Infrastructure, Transactions Costs and Market Participation in Kenya.” *Journal of Development Economics* 73(1): 349-367.
 13. L. Hernando Hintze, Mitch Renkow, and Gustavo Sain. 2003. “Variety Characteristics, Transactions Costs, and Maize Adoption in Honduras.” *Agricultural Economics* 29(3): 307-317.
 14. Karanja, Daniel D., Mitch Renkow, and Eric Crawford. 2003. “The Welfare Effects of Maize Technologies in Marginal and Favored Regions of Kenya.” *Agricultural Economics* 29(3): 331-341.
 15. Renkow, Mitch. 2003. “Employment Growth, Worker Mobility, and Rural Economic Development.” *American Journal of Agricultural Economics* 85(2): 504-514.
 16. Renkow, Mitch. 2000. “Poverty, Productivity, and Production Environment: A Review of the Evidence.” *Food Policy* 25: 463-478.
 17. Renkow, Mitch and Dale M. Hoover. 2000. “Commuting, Migration, and Rural-Urban Population Dynamics.” *Journal of Regional Science* 40(2): 261-287.
 18. Keeler, Andrew G. and Mitch Renkow. 1999. “Private Versus Public Garbage Disposal: The Economics Of Solid Waste Flow Controls.” *Growth and Change* 30(3): 430-444.
 19. Renkow, Mitch and A. Robert Rubin. 1998. “Does Municipal Solid Waste Composting Make Economic Sense?” *Journal of Environmental Management* 53(4): 339-347.
 20. Keeler, Andrew G. and Mitch Renkow. 1996. “Landfills: Why Are Local Governments Down in the Dumps?” *Choices* 11(2): 9-12.
 21. Renkow, Mitch. 1996. “Income Non-Convergence and Rural-Urban Earnings Differentials: Evidence from North Carolina,” *Southern Economic Journal* 63(4): 1017-1028.
 22. Renkow, Mitch and Andrew G. Keeler. 1996. “Determining the Optimal Landfill Size: Is Bigger Always Better?” *Journal of Environmental Management* 46(1): 67-75.

23. Keeler, Andrew G. and Mitch Renkow. 1994. "Haul Trash or Haul Ash: Energy Recovery as a Component of Local Solid Waste Management." *Journal of Environmental Economics and Management* 27(3): 205-217.
24. Renkow, Mitch. 1994. "Technology, Production Environment, and Household Income: Assessing the Regional Impacts of Technological Change." *Agricultural Economics* 10(3): 219-232.
25. Renkow, Mitch, Charles Safley, and Jeff Chaffin. 1994. "A Cost Analysis of Municipal Yard Trimmings Composting." *Compost Science and Utilization* 2(2): 22-34.
26. Renkow, Mitch. 1993. "Differential Technology Adoption and Income Distribution in Pakistan: Implications for Research Resource Allocation." *American Journal of Agricultural Economics* 75(1): 33-43.
27. Renkow, Mitch. 1993. "Land Prices, Land Rents, and Technological Change: Evidence from Pakistan." *World Development* 21(5): 791-804.
28. Traxler, Gregory J., Mitch Renkow, and Larry Harrington. 1991. "Assessing the Impact of New Technology: Three Levels of Analysis." *Journal of the Asian Farm Systems Association* 1(2): 227-244.
29. Renkow, Mitch. 1990. "Household Inventories and Marketed Surplus in Semisubsistence Agriculture." *American Journal of Agricultural Economics* 72(3): 664-675.

Book Chapters

1. Slade, Roger and Mitch Renkow. 2015. "Independence or Influence: Tradeoffs in Development Policy Research," in David Sahn (ed.), *The Fight Against Hunger and Malnutrition: The Role of Food, Agriculture, and Targeted Policies*. New York: Oxford University Press, pp. 393-416.
2. Renkow, Mitch. 2014. "Wal-Mart and the Local Economy," in L. Hoeffner and K. Hoeffner (eds.), *Commonplaces: Integrated Reading and Writing*. Philadelphia: McGraw-Hill Education.
3. Renkow, Mitch. 2011. "Assessing the Environmental Impacts of CGIAR Research: Toward an Analytical Framework," in CGIAR Independent Science and Partnership Council, *Measuring the Environmental Impacts of Agricultural Research: Theory and Applications to CGIAR Research*, Rome, Italy: Independent Science and Partnership Council Secretariat, pp. 1-33.
4. Renkow, Mitch. 2007. "Cities, Towns, and the Rural Nonfarm Economy," in Steve Haggblade, Peter Hazell, and Thomas Reardon (eds.), *Strategies For Stimulating Growth of the Rural Nonfarm Economy in Developing Countries*, Baltimore: Johns Hopkins University Press, pp.183-198.
5. Renkow, Mitch. 2007. "Infrastructure Investment and Rural Development," in Bruce L.

Gardner and Daniel A. Sumner (eds.), *The 2007 Farm Bill and Beyond: Summary for Policymakers*. Washington, DC: The AEI Press, pp. 135-139.

6. Renkow, Mitch. 2007. "Infrastructure Investment and Rural Development," in Bruce L. Gardner and Daniel A. Sumner (eds.), *Agricultural Policy for 2007 Farm Bill and Beyond*. Washington, DC: The AEI Press.
7. Renkow, Mitch. 2006. "The Wealth of Nations: Why Are Some Countries Rich While Others Are Poor?" in Michael Walden (ed.), *Battleground: Economics and Business*. Westport, CT: Praeger Publishers, pp. 443-451.
8. Heisey, Paul L. and Mitch Renkow. 2003. "Agricultural R&D, Resources, and Productivity," in K. Wiebe (ed.), *Land Quality, Agricultural Productivity and Food Security: Biophysical Processes and Economic Choices at Local, Regional and Global Levels*, Cheltenham, UK & Northampton MA, USA: Edward Elgar, pp. 405-430.
9. Renkow, Mitch and A. Robert Rubin. 2001. "Does Municipal Solid Waste Composting Make Economic Sense?" in R. Kerry Turner, Ian Bateman and Jane Powell (eds.), *Waste Management and Planning*, Cheltenham, UK: Edward Elgar Publishing Ltd., pp. 15-38.
10. Renkow, Mitch, Charles Safley, and Jeff Chaffin. 1994. "Cost Analysis of Yard Trimmings Composting," in BioCycle Staff (eds.), *Composting Source Separated Organics*, Emmaus, PA: JG Press, pp. 46-52..
11. Renkow, Mitch. 1993. "Technological Change in Wheat Production in Pakistan: Markets Behavior and Income Dynamics," in Karen Dvorak (ed.), *Social Science Research for Agricultural Technology Development: Spatial and Temporal Dimensions*, London: CAB International, pp. 65-87.

Monographs

1. Renkow, Mitch. 2018. *A Reflection on Impact and Influence of CGIAR Policy-Oriented Research*. Rome, Italy: Standing Panel on Impact Assessment (SPIA), CGIAR Independent Science and Partnership Council (ISPC). 34 pp.
2. Renkow, Mitch. 1991. *Modeling the Aggregate Effects of Technological Change on Income Distribution in Pakistan's Favored and Marginal Production Environments*. CIMMYT Economics Paper No. 4. Mexico, D.F.: CIMMYT.

Book Reviews

1. Renkow, Mitch. 2008. "Review of Clair Brown, John Haltiwanger, and Julia Lane, 2006, Economic Turbulence: Is a Volatile Economy Good for America? Chicago, IL: The University of Chicago Press." *Journal of Regional Science* 48(3): 673-675.
2. Renkow, Mitch. 2003. "Review of David Bigman, 2002, Globalization and the Developing Countries: Emerging Strategies for Rural Development and Poverty Alleviation, Wallingford, UK: CABI International." *Agricultural Economics* 30(3): 255-256.

Published Abstracts

1. Renkow, Mitch and Daniel G. Hallstrom. 2001. "Infrastructure Investment, Transactions Costs, and Rural Poverty Alleviation," in G.H. Peters and P. Pingali (eds.), *Tomorrow's Agriculture: Incentives, Institutions, Infrastructure and Innovations*, Proceedings of the 24th International Conference of Agricultural Economists, Aldershot, UK: Ashgate Publishing. pg. 798.
2. Rhoades, Douglas and Mitch Renkow. 1998. "Explaining Rural-Urban Earnings Differentials in the U.S." Presented at the 1998 AAEA meeting. Abstract in *American Journal of Agricultural Economics* 80(5): 1172.
3. Keeler, Andrew and Mitch Renkow. 1997. "Private Versus Public Garbage Disposal and Solid Waste Flow Controls." Presented at the 1997 AAEA meeting. Abstract in *American Journal of Agricultural Economics* 79(5): 1697.
4. Renkow, Mitch, Dale M. Hoover, and Jon Yoder. 1996. "Commuting, Migration, and Labor Market Adjustment in North Carolina: Does Suburbanization Explain the Trends?" Presented at the 1996 AAEA meeting. Abstract in *American Journal of Agricultural Economics* 78(5): 1406.
5. Renkow, Mitch and Andrew G. Keeler. 1996. "Cherry Pickers and Sore Losers: The Economics of Solid Waste Flow Control." Presented at the 1996 AAEA meeting. Abstract in *American Journal of Agricultural Economics* 78(5): 1386.
6. Feitshans, Ted and Mitch Renkow. 1996. "Flow Control and the Political Economy of Solid Waste Management." Organized Symposium at the 1996 SAEA meeting. Abstract in *Journal of Agricultural and Applied Economics* 28(1): 233.
7. Renkow, Mitch and Andrew G. Keeler. 1995. "Determining the Optimal Landfill Size: Is Bigger Always Better?" Presented at the 1995 SAEA meeting. Abstract in *Journal of Agricultural and Applied Economics* 27(1): 334.
8. Renkow, Mitch. 1994. "Explaining Income Convergence: The Determinants of Earnings in Rural and Urban Areas." Presented at the 1994 AAEA meeting. Abstract in *American Journal of Agricultural Economics* 76(5): 1268.
9. Renkow, Mitch and Gregory J. Traxler. 1994. "Grain-Fodder Tradeoffs and Varietal Adoption in Mixed Farming Systems." Presented at the 1994 AAEA meeting. Abstract in *American Journal of Agricultural Economics* 76(5): 1264
10. Keeler, Andrew G. and Mitch Renkow. 1992. "Haul Trash or Haul Ash: Local Government Decision-Making for Solid Waste Disposal." Presented at the 1992 AAEA meeting. Abstract in *American Journal of Agricultural Economics* 74(5): 1296.
11. Renkow, Mitch. 1989. "Differential Welfare Effects of Technical Change in Developing Countries: A Simulation Analysis." Presented at the 1989 AAEA meeting. Abstract in

American Journal of Agricultural Economics 71(5): 1344.

12. Renkow, Mitch. 1988 “Household Inventories and Marketed Surplus in Semisubsistence Agriculture.” Presented at the 1988 AAEA meeting. Abstract in *American Journal of Agricultural Economics* 70(5): 1204-1205.
13. Renkow, Mitch, Dana L. Hoag and Raymond Daniels. 1986. “What Really is Soil? Policy Implications for the South.” Presented at the 1986 SAEA meeting. Abstract in *Southern Journal of Agricultural Economics* 18(1): 177.

Extension Publications

1. Renkow, Mitch. 2019. “The Cost of Community Services in Moore County.” Report to the Forsyth County Commissioners.
2. Renkow, Mitch. 2018. “The Cost of Community Services in Forsyth County.” Report to the Forsyth County Commissioners.
3. Kandilov, Ivan and Mitch Renkow. 2018. “The Impacts of the USDA Broadband Loan and Grant Programs: Moving Towards Estimating a Rate of Return.” *NC State Economist* (Fall).
4. Renkow, Mitch. 2015. “The Cost of Community Services in Iredell County.” Report to the Iredell County Commissioners.
5. Renkow, Mitch. 2014. “The Cost of Community Services in Davie County.” Report to the Davie County Voluntary Agricultural District Board.
6. Renkow, Mitch. 2013. “The Cost of Community Services in Catawba County.” Report to the Catawba County Commissioners.
7. Renkow, Mitch. 2013. “The Cost of Community Services in Pitt County.” Report to the Pitt County Voluntary Agricultural District.
8. Renkow, Mitch. 2012. “The Cost of Community Services in Chapel Hill.” Report to the Town of Chapel Hill Commissioners.
9. Renkow, Mitch and Nick Georgiade. 2011. “Farmers’ Markets in Central North Carolina: Who’s Buying and Who’s Selling??” *NC State Economist* (November).
10. Renkow, Mitch. 2011. “The Cost of Community Services in Yadkin County.” Report to the Yadkin County Commissioners.
11. Renkow, Mitch. 2010. “The Cost of Community Services in Durham County.” Report to the Durham County Commissioners.
12. Renkow, Mitch. 2010. “The Benefits to Local Economies of Buying Local.” *CRD Newsletter* (Winter). North Carolina Cooperative Extension Service, Raleigh, NC.
13. Renkow, Mitch. 2010. “The Cost of Community Services in Guilford County.” Report to Piedmont Conservation Council.

14. Atkinson, Adrian and Mitch Renkow. 2009. "Soil Amendment Cost and Return Report: Super Soils Compost Mixing and Bagging Facility and Natureworks Organics Vermicomposting Facility." Technical report for NC DENR Pilot Project for Value-Added Product Development from Solid Waste Generated on Swine Farms.
15. Renkow, Mitch. 2009. "The Cost of Community Services in Franklin County." Report to Franklin County Planning Department.
16. Renkow, Mitch. 2008. "The Cost of Community Services in Gaston County." Report to Gaston County Quality of Natural Resources Commission.
17. Renkow, Mitch. 2008. "Local Incentive Packages for Economic Development." *NC State Economist* (March).
18. Renkow, Mitch. 2008. "The Cost of Community Services in Henderson County." Report to Henderson County Planning Department.
19. Renkow, Mitch. 2007. "Federal Rural Infrastructure Investment: Is It Worthwhile?" *NC State Economist* (July).
20. Renkow, Mitch. 2007. "The Cost of Community Services in Chatham County." Report to Chatham Agricultural Advisory Committee.
21. Walden, M.L. and Mitch Renkow. 2006. "Residential Impact Fees: What Are the Impacts?" *NC State Economist* (May).
22. Renkow, Mitch. 2006. "The Cost of Community Services in Alamance County." Report to Alamance County Agricultural Advisory Committee.
23. Renkow, Mitch. 2006. "The Cost of Community Services in Orange County." Report to Orange County Commissioners.
24. Renkow, Mitch. 2005. "Wal-Mart and the Local Economy." *NC State Economist* (November).
25. Renkow, Mitch. 2004. "Economic Impacts of Residential Development: Lessons from Chatham County." *NC State Economist* (November).
26. Renkow, Mitch. 2004. "Population, Employment, and Mobility In The Rural South." SRDC Policy Series Paper No. 3, Southern Rural Development Center, Mississippi State, MS.
27. Renkow, Mitch. 2004. "Population Growth in the Worker Mobility in the South: Implications for Smart Growth." *Southern Perspectives* 7(4): 4-5.
28. Renkow, Mitch. 2003. "Population Deconcentration and the Rural South." *Southern Perspectives* 7(4): 1-3.
29. Renkow, Mitch. 2003. "Population Deconcentration in the South." *NC State Economist* (November).
30. Renkow, Mitch. 2002. "Rural Employment Growth: Who Gets the Jobs?" *NC State*

Economist (July).

31. Feitshans, Ted and Mitch Renkow. 2002. "Farmland Preservation: Law and Economics." *NC State Economist* (March).
32. Renkow, Mitch. 2001. "Non-metropolitan Population Trends in North Carolina: Rural Renaissance or Urban Sprawl?" *Southern Perspectives* 5(3).
33. Renkow, Mitch. 2001. "The Rural-Urban Digital Divide." *NC State Economist* (August).
34. Renkow, Mitch. 2001. "The Cost of Community Services in Wake County." Report to Wake County and the Triangle J Council of Governments.
35. Overcash, Michael, Mitch Renkow, and Kelly Zering. 2001. "Technical and Economic Evaluation of Alternatives for Animal Waste Management in North Carolina." Report to the Water Resources Research Institute.
36. Renkow, Mitch. 2000. "Explaining Rural Population Trends." *NC State Economist* (June).
37. Renkow, Mitch, Tom Vukina, and Jong-Hwa Lee. 1999. "Economic Analysis of Alternative Waste Management Technologies," in G. Havenstein (ed.), *Proceedings of the 1999 Animal Waste Management Symposium*, North Carolina State University, Raleigh, NC, pp. 350-353.
38. Renkow, Mitch. 1998. "The Cost of Community Services in Chatham County." Report to Chatham County Commissioners.
39. Renkow, Mitch. 1998. "Economic Trends Affecting Small and Home-Based Businesses." Report No. CD-44. North Carolina Cooperative Extension Service.
40. Fogarty, David and Mitch Renkow. 1997. "Agritourism Opportunities for North Carolina." AREP Factsheet No. 97-3, Applied Resource Economics and Policy Group, Department of Agricultural and Resource Economics, North Carolina State University.
41. Renkow, Mitch and Michael T. Hoover. (forthcoming). *Costs of On-Site Management Options: Software for Evaluating Wastewater Treatment Alternatives*. North Carolina Cooperative Extension Service, North Carolina State University.
42. Danielson, Leon, Billy Dunham, Simon Garber, Frank Humenik, Catherine McCracken, Mitch Renkow, and A. Robert Rubin. 1996. *A Wastewater Management Plan for Craven County: Report to the Craven County Commissioners*. North Carolina Cooperative Extension Service, North Carolina State University.
43. Renkow, Mitch and A. Robert Rubin. 1996. "Municipal Solid Waste Composting: Does It Make Economic Sense?" Factsheet No. AREP-96-3. Applied Resource Economics and Policy Group, Department of Agricultural and Resource Economics, NC State University.
44. Renkow, Mitch. 1995. "Rural vs. Urban Economic Growth: Why Do Rural Counties Lag Behind?" *Community and Rural Development News Capsules*, College of Agriculture and Life Sciences, North Carolina State University.

45. Doeksen, Gerald, Barry Jones, William Park, Mitch Renkow, Joseph Schmidt, and Richard Warner. 1995. *Decision Aids for Municipal Solid Waste Management in Rural Areas: An Annotated Bibliography*. Report of the Southern Rural Development Center Solid Waste Management Task Force, SRDC, Mississippi State University.
46. Renkow, Mitch. 1994. "The Economics of Solid Waste Management." *NC State Economist* (August).
47. Renkow, Mitch. 1994. "The Cost of County Recycling Programs in North Carolina." Factsheet No. AREP-94-8. Applied Resource Economics and Policy Group, Department of Agricultural and Resource Economics, North Carolina State University.
48. Renkow, Mitch, Leon Danielson, and L. Steven Smutko. 1994. "The Role of Strategic Planning in Community Decision-Making on Environmental Issues." Factsheet No. AREP-94-4. Applied Resource Economics and Policy Group, Department of Agricultural and Resource Economics, North Carolina State University.
49. Renkow, Mitch and S. Garber. 1993. "Strategic Planning for Rural Community Economic Development." Report No. CD-44. North Carolina Cooperative Extension Service.
50. Renkow, Mitch 1992. "North Carolina Income Variation by Counties." *NC State Economist* (October).

Other Publications and Presented Papers:

1. Renkow, Mitch. 2019. "Employment Growth and the Allocation of New Jobs in North Carolina, 2010-2015." Commissioned paper by the Institute for Emerging Issues, NC State University, Raleigh, NC.
2. Renkow, Mitch. 2019. "National Food Security Act Supports Climate-Smart Agriculture in India by Stimulating the Sourcing of Small Millets: An Evaluation of Bioversity's Efforts to Promote Small Millets in India." Bioversity Impact Assessment paper. Rome: Bioversity International.
3. Slade, Roger, Mitch Renkow, Frank Place, and Peter Hazell. 2018. "Evaluating the Impact of Policy Research.: Lessons from the Evaluation of Rural Policy Research in Developing Countries." IFPRI Discussion Paper No. 01779. Washington, DC: International Food Policy Research Institute.
4. Kandilov, Ivan and Mitch Renkow. 2018. "Impacts of the USDA Broadband Loan and Grant Programs: Moving Towards Estimating a Rate of Return." Issue Report, Farm Foundation.
5. Renkow, Mitch. 2018. "A Reflection on Impact and Influence of CGIAR Policy-Oriented Research." Blog post for the Standing Panel on Impact Assessment, Independent Science and Partnership Council of the CGIAR. <https://ispc.cgiar.org/blog/%E2%80%98policy-pathway%E2%80%99-matters-assessing-impact-policy-oriented-research-essential-show-cgiar%E2%80%99s>
6. Kandilov, Ivan and Mitch Renkow. 2018. "The Impacts of the USDA Broadband Loan and Grant Programs: Moving Towards Estimating a Rate of Return." Paper presented at the Farm

- Foundation/Economic Research Service Workshop on The Economic Returns to Rural Infrastructure Investment, National Press Club, Washington, DC, April 10-11, 2018.
7. Renkow, Mitch. 2018. "Outcomes of Policy-Oriented Research in the CGIAR." Technical Note No. 4. Rome, Italy, Independent Science and Partnership Council.
 8. Renkow, Mitch. 2016. "Assessing the Impact of Policy-Oriented Research in the CGIAR: Methodological Challenges and Reasonable Expectations," submitted to *Research Evaluation*. (May 24, 2016)
 9. Dinterman, Robert, and Mitch Renkow. 2014. "Broadband, Local Employment, and Population Growth." Selected paper presented at the North American Meetings of the Regional Science Association International, Washington, DC, November 15, 2014.
 10. Renkow, Mitch and Derek Byerlee. 2014. "Assessing the Impact of Policy-Oriented Research: A Stocktaking." Paper presented at a workshop on Assessing the Impact of Policy-Oriented Research, Washington D.C. November 11-12, 2014.
 11. Dinterman, Robert, and Mitch Renkow. 2014. "Broadband and Local Employment Growth." Selected paper presented at the Annual Meeting of the Southern Regional Science Association, San Antonio, TX March 27 – 29, 2014.
 12. Slade, Roger and Mitch Renkow. 2013. "Independence or Influence: Tradeoffs in Development Policy Research." Paper presented at a Conference on New Directions in the Fight Against Hunger and Malnutrition: A Festschrift in Honor of Per Pinstrup-Andersen, Cornell University, Ithaca, NY.
 13. Renkow, Mitch and Roger Slade. 2013. "An Assessment of IFPRI's Work in Ethiopia 1995-2010: Ideology, Influence and Idiosyncrasy." IFPRI Impact Assessment Discussion Paper No. 35. Washington, DC: International Food Policy Research Institute.
 14. Kandilov, Ivan and Mitch Renkow. 2013. "The Impact of the USDA Broadband Loan Program on U.S. Agriculture." NARDEP Policy Brief. Washington, DC: National Agricultural & Rural Development Policy Centers.
 15. Kandilov, Ivan and Mitch Renkow. 2013. "The Impact of the USDA Broadband Loan Program on U.S. Agriculture: Reference Document." Supporting document for NARDEP Policy Brief. Washington, DC: National Agricultural & Rural Development Policy Centers.
 16. Renkow, Mitch. 2012. "Assessing the Impacts of CGIAR Research." Keynote lecture presented to the INRA-ASIRPA International Conference on "Evaluating the Impacts of a Public Research Organization," Paris, November 27-28, 2012.
 17. Dinterman, Robert, Ivan T. Kandilov, Mitch Renkow, and Peter Stenberg. 2012. "The Benefits of Broadband: Farm-Level Analysis." Contributed paper presented at the Southern Regional Science Association meetings, Charlotte, NC, March 22-24, 2012.
 18. Renkow, Mitch. 2012. "Environmental Impacts of CGIAR Research: A Framework for Assessment." SPIA Impact Brief. Independent Science and Partnership Council Secretariat,

Rome, Italy.

19. Renkow, Mitch and Nick Georgiade. 2011. "Farmers' Markets in Central North Carolina: Who Buys, Who Sells, and Why?" Report submitted to the Gillings School of Public Health, University of North Carolina, Chapel Hill, North Carolina.
20. Renkow, Mitch. 2011. "An Adoption-Based Royalty System for Funding Private-Sector Plant Breeding in Africa." Commissioned paper, Bill and Melinda Gates Foundation, Seattle, WA.
21. Renkow, Mitch. 2011. "Priorities for Public Investment in Agriculture and Rural Areas (GRP-3)." IFPRI Impact Assessment Brief. Washington, DC: International Food Policy Research Institute.
22. Kandilov, Amy M.G., Ivan T. Kandilov, Xiangping Liu, and Mitch Renkow. 2011. "The Impact of Broadband on U.S. Agriculture: An Evaluation of the USDA Broadband Loan Program." Paper presented at the 2011 Souther Regional Science Association meeting, New Orleans, LA.
23. Kandilov, Amy M.G., Ivan T. Kandilov, Xiangping Liu, and Mitch Renkow. 2011. "The Impact of Broadband on U.S. Agriculture: An Evaluation of the USDA Broadband Loan Program." Paper presented at the 2011 Agricultural and Applied Economics Association meeting, Pittsburgh, PA.
24. Renkow, Mitch. 2010. "Assessing the Environmental Impacts of CGIAR Research: Toward an Analytical Framework." SPIA Working paper, Standing Panel on Impact Assessment of the CGIAR, Rome.
25. Renkow, Mitch. 2010. "Impacts Of IFPRI's 'Priorities for Pro-Poor Public Investment' Global Research Program." IFPRI Impact Assessment Discussion Paper No. 31. Washington, DC: International Food Policy Research Institute.
26. Renkow, Mitch. 2010. "The Impacts of IFPRI's Priorities for Pro-Poor Public Investment Program." Invited seminar, International Food Policy Research Institute, November 4, 2010.
27. Renkow, Mitch. 2010. "Assessing the Environmental Impacts of CGIAR Research: Toward an Analytical Framework." Paper presented at the Assessment of Environmental Impact of CGIAR Research: Case Studies' Results and Synthesis Workshop, Istanbul, Turkey, June 1-3, 2010.
28. Kandilov, Ivan T. and Mitch Renkow. 2009. Infrastructure Investment and Rural Economic Development: An Evaluation of USDA's Broadband Loan Program." Paper presented at the NCSU Agricultural Economcs Workshop, November 10, 2009.
29. Renkow, Mitch and Ivan T. Kandilov. 2009. "Infrastructure Investment Programs and Rural Economic Development in the U.S." Paper presented at the Conference on Aiding the Process of Agricultural Policy Reform: Evaluation of Public Policies for Rural Development, OECD, Paris, France, June 15-16, 2009.
30. Renkow, Mitch. 2009. "Residential Broadband Availability: Evidence from Kentucky and

- North Carolina.” Contributed paper, 2009 Western Regional Science Association meetings, Napa, CA.
31. Renkow, Mitch. 2008. “Projected Airport's Economic Impact Highly Suspect.” Guest column, Chapel Hill News, November 19, 2008.
 32. Renkow, Mitch. 2008. “The Impacts of CGIAR Research: A Review of Recent Evidence.” Background paper for Independent Review of the Consultative Group on International Agricultural Research, Science Council, The World Bank.
 33. Renkow, Mitch. 2008. “Residential Broadband Availability and Adoption: Recent Evidence from Kentucky and North Carolina.” Paper presented at the conference on Broadband in the Post-Modern Economy, USDA, Washington, DC, September 29-30, 2008.
 34. Renkow, Mitch. 2008. “Infrastructure Investment and Rural Development.” Presented to CENREP Lunch Colloquium.
 35. English, John and Mitch Renkow. 2007. “The Impacts of IFPRI’s Global Research Program on the Sustainable Development of Less-Favored Areas.” Impact Assessment Brief. Washington, DC: International Food Policy Research Institute.
 36. English, John and Mitch Renkow. 2007. “The Impact of IFPRI’s Global Research Program on the Sustainable Development of Less-Favored Areas.” Impact Assessment Discussion Paper No. 26. Washington, DC: International Food Policy Research Institute.
 37. English, John and Mitch Renkow. 2007. “The Impact of IFPRI’s Global Research Program on the Sustainable Development of Less-Favored Areas.” Invited Seminar, International Food Policy Research Institute, Washington, DC, December 6, 2007.
 38. Renkow, Mitch. 2007. “Infrastructure Investment and Rural Development.” Presentation at Organized Symposium on Exploring the Efficacy of Infrastructure Investments and Partnerships for Rural Development, 2007 American Agricultural Economics Association meetings, Portland, OR.
 39. Renkow, Mitch. 2007. “Infrastructure Investment and Rural Development.” Presentation to Authors’ Workshop for *Agricultural Policy for 2007 Farm Bill and Beyond*, American Enterprise Institute, Washington, DC, May 17, 2006.
 40. Renkow, Mitch. 2007. “Employment Growth and the Allocation of New Jobs: Spatial Spillovers of Economic and Fiscal Impacts.” Contributed paper, 2007 American Economics Association meetings, Chicago, IL.
 41. Renkow, Mitch. 2006. “Employment Growth and the Allocation of New Jobs: Evidence from the South.” Invited Seminar, Ohio State University School of Public Policy, April 14, 2006.
 42. Renkow, Mitch and Frank Scrimgeour. 2005. “Maori/Non-Maori Income Gaps: Do Differences in Worker Mobility Play a Role?” Selected paper, 2005 American Agricultural Economics Association meetings, Providence, RI.

43. Renkow, Mitch. 2005. "Employment Growth and the Allocation of New Jobs: Evidence from the South." Contributed paper, 2005 Western Regional Science Association meetings, San Diego, CA.
44. Renkow, Mitch and Frank Scrimgeour. 2004. "Maori/Non-Maori Income Gaps: Do Differences in Worker Mobility Play a Role?" Contributed paper, 2004 New Zealand Association of Economists meetings, Wellington, New Zealand.
45. Renkow, Mitch and Bram Tucker. 2004. "Economic Behavior of Hunter-Gatherers: Evidence from the Mikea Forest of Madagascar." Contributed paper, 2004 Australian Agricultural and Resource Economics Society meetings, Melbourne, Australia.
46. Edmeades, Svetlana, Mitch Renkow, Melinda Smale and Dan Phaneuf. 2004. "Variety Demand in Integrated Agricultural Household Model with Attributes: Implications for Emerging Crop Biotechnologies." Selected paper, 2004 American Agricultural Economics Association meetings, Denver, CO.
47. Edmeades, Svetlana, Melinda Smale, Mitch Renkow, and Dan Phaneuf. 2004. "Variety Demand within the Framework of an Agricultural Household Model with Attributes: The Case of Bananas in Uganda." EPTD Discussion Paper No. 125, Washington, DC: International Food Policy Research Institute.
48. Wohlgenant, Michael K., Kelly D. Zering, Tom Vukina, Jan Chvosta, Michele Marra, Mitch Renkow, Ada Wossink, Mary K. Muth, and Brian C. Murray. 2003. "Economic Feasibility Assessment of the Smithfield Foods Agreement: Costing of Alternative Waste Management Technologies and Modeling Effects on North Carolina Pork Industry Components." Paper presented at the North Carolina State University Animal Waste Workshop, Raleigh, NC, October 17, 2003
49. Renkow, Mitch. 2003. "Employment Growth and the Allocation of New Jobs: Evidence from the South." Selected paper, 2003 American Agricultural Economics Association meetings, Montreal, Canada.
50. Edmeades, Svetlana, Melinda Smale, and Mitch Renkow. 2002. "Variety Choice and Attribute Trade-Offs in Household Production Models: The Case of Bananas in Uganda." Contributed paper presented at the Planning Workshop on Designing Social and Economic Research to Enhance the Success of Banana Improvement and Dissemination in East Africa. Kampala, Uganda, November 7-11, 2002.
51. Karanja, Daniel D., Mitch Renkow, and Eric V. Crawford. 2002. "The Welfare Effects of Maize Technologies in Marginal and Favored Regions of Kenya." Contributed paper presented at the International Conference on Impacts of Agricultural Research and Development, San Jose, Costa Rica, February 4-7, 2002.
52. L. Hernando Hintze, Mitch Renkow, and Gustavo Sain. 2002. "Variety Characteristics, Transactions Costs, and Maize Adoption in Honduras." Contributed paper presented at the International Conference on Impacts of Agricultural Research and Development, San Jose, Costa Rica, February 4-7, 2002.

53. Karanja, Daniel D., Mitch Renkow, and Eric V. Crawford. 2002. "The Welfare Effects of Maize Technologies in Marginal and Favored Regions of Kenya." Selected paper presented at the 2001 American Agricultural Economics Association meeting, Long Beach, CA.
54. L. Hernando Hintze, Mitch Renkow, and Gustavo Sain. 2002. "Variety Characteristics, Transactions Costs, and Maize Adoption in Honduras." Selected paper presented at the 2001 American Agricultural Economics Association meeting, Long Beach, CA.
55. Renkow, Mitch, Daniel G. Hallstrom, and Daniel D. Karanja. 2002. "Rural Infrastructure, Transactions Costs and Market Participation in Kenya." Invited seminar presented at the International Food Policy Research Institute, Washington, DC, May 20, 2002.
56. Renkow, Mitch, Daniel G. Hallstrom, and Daniel D. Karanja. 2001. "Rural Infrastructure, Transactions Costs, and Marketed Surplus in Kenya." Selected paper presented at the 2001 American Agricultural Economics Association meeting, Chicago, IL.
57. Renkow, Mitch. 2001. "Worker Mobility, Residential Choice, and the Allocation of New Jobs." Selected paper presented at the 2001 American Agricultural Economics Association meeting, Chicago, IL.
58. Renkow, Mitch and Daniel G. Hallstrom. 2000. "Infrastructure Investment, Transactions Costs, and Rural Poverty Alleviation." Poster presented at the 24th International Association of Agricultural Economists meeting, Berlin, Germany, August 13-18, 2000.
59. Tokgoz, Simla, Mitch Renkow, and Leon Danielson. 2000. "Incorporating Commuting into a Fiscal Impact Model." Selected paper to be presented at the 2000 Southern Regional Science Association meeting, Miami, FL.
60. Renkow, Mitch. 1999. "Poverty, Productivity, and Production Environment: A Review of the Evidence." Invited plenary paper presented at the CIAT International Workshop, "Assessing the Impact of Research on Poverty Alleviation", Sept. 14-16, 1999, San Jose, Costa Rica.
61. Renkow, Mitch. "Commuting, Migration, and the Nonmetropolitan Turnaround." Invited seminar presented at Michigan State University, September 24, 1998.
62. Renkow, Mitch, Tom Vukina, and Jong-Hwa Lee. 1998. "Economic Analysis of Alternative Waste Management Technologies." Poster presented at the Animal Waste Symposium, North Carolina State University, Raleigh, NC.
63. Renkow, Mitch, Tom Vukina, and Hallie Northrop. 1998. "Economic Analysis of Alternative Waste Management Technologies." *Proceedings of the International Conference on Animal Production Systems and the Environment*, Des Moines, Iowa.
64. Renkow, Mitch. 1997. "Economic Aspects of Waste Reuse." *Proceedings of The Business of Beneficial Waste: Value-Added Waste Products Conference*, Animal and Poultry Waste Management Facility, NC State University.
65. Hoover, Michael and Mitch Renkow. 1997 (forthcoming). "Technical Specifications for the COSMO On-Site System Cost Estimation Tool." Technical Bulletin. College of Agricultural

and Life Sciences. North Carolina State University.

66. Renkow, Mitch, Dale M. Hoover, and Jon Yoder. 1997. "Commuting and Migration in Regional Labor Markets: Evidence from North Carolina." ARE Report No. 13. Department of Agricultural and Resource Economics, North Carolina State University.
67. Renkow, Mitch and A. Robert Rubin. 1996. "Municipal Solid Waste Composting: Does It Make Economic Sense?" Paper presented at the Composting in the Carolinas conference, Myrtle Beach, SC, October 1996.
68. Renkow, Mitch and Dale M. Hoover. 1996. "Assessing the Sources of Variation in Labor Force Participation in North Carolina." Paper presented at the Southern Regional Science Association meeting, Baltimore, MD, April 1996 .
69. Renkow, Mitch and Andrew G. Keeler. "Flow Control and the Political Economy of Solid Waste Management." Paper presented at an Organized Symposium at the 1996 SAEA meeting, Greensboro, NC.
70. Renkow, Mitch and Dale M. Hoover. "Commuting and Migration in Regional Labor Markets: Evidence from North Carolina." Paper presented at the Southern Regional Science Association meeting, San Antonio, TX, April 1995.
71. Renkow, Mitch, Charles Safley, and Jeff Chaffin. "A Cost Analysis of Municipal Yardwaste Composting." Paper presented at the Composting in the Carolinas conference, Charlotte, NC, January 1995.
72. Renkow, Mitch and Stephen Vosti. "Joint Production, Output Supply and Product Markets: Research and Policy Implications for Non-Timber Tree Products," paper presented at the International Food Policy Research Institute Conference on Policy Research Issues for Non-Timber Tree Product Markets, Washington, DC, December 1994.
73. Renkow, Mitch. "Explaining Income Non-Convergence: The Determinants of Earnings in Rural and Urban Areas." Paper presented at the Western Regional Science Association meeting, Tucson, AZ, February 1994.
74. Renkow, Mitch. "Explaining Income Non-Convergence: The Determinants of Earnings in Rural and Urban Areas." Invited paper presented to the Department of Agricultural Economics, Auburn University, January 1994.
75. Keeler, Andrew G. and Mitch Renkow. "Haul Trash or Haul Ash: Local Government Decision-Making for Solid Waste Disposal." Invited paper presented to the Department of Agricultural Economics, The University of Tennessee, March 1993.
76. Renkow, Mitch. "Technology, Environment, and Household Income: Assessing the Regional Impacts of Technological Change." Invited paper presented at the Rockefeller Foundation Social Science Fellows conference, El Batan, Mexico, November 1992.
77. Renkow, Mitch. "Explaining Income Convergence: The Determinants of Earnings in Rural and Urban Areas." Invited paper presented to the Department of Agricultural and Applied

Economics, The University of Georgia, January 1992.

78. Renkow, Mitch. 1991. "Land Prices, Land Rents, and Technological Change: Evidence from Pakistan." CIMMYT Economics Working Paper 91/01. Mexico, D.F.: CIMMYT
79. Traxler, Gregory J., Mitch Renkow, and Larry Harrington. 1990. "Assessing the Impact of New Technologies: Three Levels of Analysis." Paper presented at the Asian Farming Systems Research and Extension Symposium on Sustainable Farming Systems in 21st Century Asia, Bangkok, Thailand.
80. Hoag, Dana L., Raymond Daniels, Wendell Gilliam, and Mitch Renkow. 1986. "The Impact of Soil Erosion on Productivity: A TVA Assessment." Economics Special Report No. 93. Department of Economics and Business, North Carolina State University.
81. Renkow, Mitch, Jerry Leonard, and David L. Franklin. 1983. "The Potential Impacts of Alternative Structures and Pricing Policies in the Markets for Maize in Tanzania." Sigma One Corporation, Raleigh, North Carolina.
82. Keeler, Andrew G., Grant M. Scobie, Mitch Renkow, and David L. Franklin. 1982. "The Consumption Effects of Agricultural Policies in Tanzania." Sigma One Corporation, Raleigh, North Carolina.

GRANTS

1. Yadkin County, "The Cost of Community Services in Yadkin County," 2010, \$390.00.
2. Durham County, "The Cost of Community Services in Durham County," 2010, \$250.00.
3. Piedmont Conservation Council, "The Cost of Community Services in Guilford County," 2009, \$250.00.
4. Franklin County Planning Department, "The Cost of Community Services in Franklin County," 2009, \$469.00.
5. US Department of Agriculture, "Broadband Deployment and Economic Development in Kentucky and North Carolina," 2008, \$15,030.
6. UNC School of Public Health, "Public Health Impact of Moving Toward a Sustainable Food System in North Carolina: Informing Policy," (with Nancy Creamer), 2008-2010, \$40,261.
7. Gaston County, "The Cost of Community Services in Henderson County," 2008, \$637.50.
8. Henderson County Planning Department, "The Cost of Community Services in Henderson County," 2007, \$637.50.
9. NC DENR Division of Soil & Water Conservation, "Pilot Project for Value-Added Product Development from Solid Waste Generated on Swine Farms," 2006, \$31,529.
10. Chatham County Agricultural Advisory Committee, "The Cost of Community Services in Chatham County," 2006, \$637.50.

11. Alamance Voluntary Agricultural District Committee, "The Cost of Community Services in Alamance County," 2006, \$637.50.
12. Orange County Board of Commissioners, "The Cost of Community Services in Orange County," 2005, \$637.50.
13. Southern Rural Development Center, "Assessing the Impacts of Urban Expansion into the Rural South" Senior Research Fellowship for 2002, \$5,800.
14. NCSU Animal and Poultry Waste Management Center, "Full Economic Feasibility Assessment of the Smithfield Foods Agreement," (with RTI, many ARE faculty), 2001, \$800,000.
15. Triangle J Council of Governments, "The Cost of Community Services in Wake County," 2001, \$1,849.
16. UNC Office of Economic Development, "Measuring and Mitigating the Impact of the Decline of Tobacco in North Carolina: Farm and Rural Policy," (with Blake Brown and Geoff Benson), 2000, \$10,000
17. North Carolina Water Resources Research Institute, "Technical and Economic Evaluation of Alternatives for Animal Waste Management," (with Michael Overcash, Kelly Zering), 2000, \$40,000.
18. North Carolina Cooperative Extension Service, "Extension Program Support for Small Business," (with Carol Schwab, Mary Buck and others), 1999, \$19,000.
19. Chatham County Commissioners, "Cost of Community Services in Chatham County," 1998, \$1,774.
20. North Carolina Cooperative Extension Service, "Increasing Impact and Reducing Reprinting Costs by Making High Demand Extension Educational Materials Available on the World Wide Web." Program Enhancement Grant, (with Tim McBride, Tom Knecht and others), 1998, \$49,460.
21. North Carolina Cooperative Extension Service, "An Introduction to Community Economic Development for County Directors," (with John O'Sullivan), 1998, \$7,000.
22. North Carolina Cooperative Extension Service, "Enhancing Farm Incomes Through Agri-Tourism," (with David Fogarty), \$2,000.
23. North Carolina Cooperative Extension Service, "Strategic Planning for Decentralized Wastewater Management in Rural Communities," (with Mike Hoover, Craven Hudson), \$13,350.
24. NCSU-ISU Animal Waste Management Consortium, "Cost Effectiveness of Alternative Swine Waste Management Technologies," (with Tom Vukina), 1996, \$13,000.
25. Travel Grant from the Western Regional Development Center to participate in the "New Growth Theory and New Institutional Economics" workshop, 1996, \$500.
26. North Carolina Cooperative Extension Service, "Extension Program Support for Small

- Business,” (with Carol Schwab, Ellen Miller, and others), 1996, \$12,022.
27. North Carolina Cooperative Extension Service, “Costs of On-Site Wastewater Treatment Alternatives for Difficult Sites,” (with Michael Hoover), 1996, \$7,840.
 28. North Carolina Cooperative Extension Service, “Farm Tourism in the Roanoke Valley,” (with David Fogarty and Gene Brothers), 1996, \$8,500.
 29. Craven County Board of Commissioners, “Development of a Craven County Wastewater Management Plan,” (with Leon Danielson, Catherine McCracken, Simon Garber, Bob Rubin, and Frank Humenik), 1995, \$90,000.
 30. North Carolina Cooperative Extension Service, “Cost Analysis of Wastewater Treatment Technologies,” (with Michael Hoover and Catherine McCracken), 1994, \$6,000.
 31. Rowan County Board of Commissioners, “Municipal Solid Waste Management for Rowan County,” (with Bob Rubin and Rhonda Sherman), 1994, \$48,641.
 32. Edenton Economic Development Corporation, “Strategic Plan for Developing Existing and Attracting Additional Wood Using Industries to Edenton and Chowan County,” (with Earl Deal), 1994, \$16,000.
 33. Applied Resource Economics Policy Group, “The Cost of County Recycling Programs in North Carolina,” 1993, \$6,500.
 34. NCSU College of Agricultural and Life Sciences Faculty Research and Professional Development Grant, “The Determinants of Income Growth in North Carolina,” 1992, \$3,500.

COURSES TAUGHT

- Spring 1997: ECG 540 (Economic Development, Master’s level), 9 students
 Overall Course Rating: 4.2/5.0
 Teaching Effectiveness: 4.4/5.0
- Spring 1998: ECG 540 (Economic Development, Master’s level), 17 students
 Overall Course Rating: 4.5/5.0
 Teaching Effectiveness: 4.7/5.0
- Spring 1999: ECG 540 (Economic Development, Master’s level), 10 students
 Overall Course Rating: 4.5/5.0
 Teaching Effectiveness: 4.6/5.0
- Spring 2000: ECG 790A (Economic Development, Ph.D level), 5 students
 Overall Course Rating: 5.0/5.0
 Teaching Effectiveness: 5.0/5.0
- Fall 2000: ECG 540 (Economic Development, Master’s level), 11 students
 Overall Course Rating: 4.57/5.0
 Teaching Effectiveness: 4.63/5.0
- Fall 2001: ECG 540 (Economic Development, Master’s level), 11 students
 Overall Course Rating: 4.64/5.0
 Teaching Effectiveness: 4.91/5.0

Spring 2002: ECG 740 (Economic Development, Ph.D level), 7 students
Overall Course Rating: 4.71/5.0
Teaching Effectiveness: 4.86/5.0

Fall 2002: ECG 540 (Economic Development, Master's level), 19 students
Overall Course Rating: 4.69/5.0
Teaching Effectiveness: 4.67/5.0

Fall 2003: ECG 740 (Economic Development, Ph. D level), 6 students
Overall Course Rating: 4.50/5.0
Teaching Effectiveness: 4.42/5.0

Fall 2004: ECG 540 (Economic Development, Master's level), 11 students
Overall Course Rating: 4.44/5.0
Teaching Effectiveness: 4.56/5.0

Spring 2005: ECG 740 (Economic Development, Ph. D level), 6 students
Overall Course Rating: 4.67/5.0
Teaching Effectiveness: 4.50/5.0

Fall 2005: ECG 740 (Economic Development, Ph. D level), 6 students
Overall Course Rating: 3.83/5.0
Teaching Effectiveness: 4.33/5.0

Spring 2006: ECG 540 (Economic Development, Master's level), 9 students
Overall Course Rating: 4.33/5.0
Teaching Effectiveness: 4.33/5.0

Fall 2006: ECG 740 (Economic Development, Ph. D level), 5 students
Overall Course Rating: 4.40/5.0
Teaching Effectiveness: 4.60/5.0

Spring 2007: ECG 540 (Economic Development, Master's level), 19 students
Overall Course Rating: 4.13/5.0
Teaching Effectiveness: 4.50/5.0

Fall 2007: ECG 540 (Economic Development, Master's level), 16 students
Overall Course Rating: 4.73/5.0
Teaching Effectiveness: 4.91/5.0

Fall 2008: ECG 540 (Economic Development, Master's level), 17 students
Overall Course Rating: 4.64/5.0
Teaching Effectiveness: 4.73/5.0

Spring 2009: ECG 740 (Economic Development, Ph. D level), 4 students
Overall Course Rating: not rated (too few students)
Teaching Effectiveness: not rated (too few students)

Fall 2009: ECG 540 (Economic Development, Master's level), 24 students
Overall Course Rating: 4.30/5.0
Teaching Effectiveness: 4.50/5.0

Fall 2010: ECG 540 (Economic Development, Master's level), 18 students
Overall Course Rating: 4.83/5.0
Teaching Effectiveness: 4.91/5.0

Spring 2011: ECG 740 (Economic Development, Ph. D level), 5 students
Overall Course Rating: 5.0/5.0

Teaching Effectiveness: 5.0/5.0

Fall 2011: ECG 540 (Economic Development, Master's level), 23 students
 Overall Course Rating: 4.5/5.0
 Teaching Effectiveness: 4.7/5.0

Spring 2012: ECG 740 (Economic Development, Ph. D level), 9 students
 Overall Course Rating: 4.0/5.0
 Teaching Effectiveness: 4.2/5.0

Fall 2012: ECG 540 (Economic Development, Master's level), 23 students
 Overall Course Rating: 4.3/5.0
 Teaching Effectiveness: 4.3/5.0

Spring 2013: ECG 740 (Economic Development, Ph. D level), 5 students
 Overall Course Rating: 4.6/5.0
 Teaching Effectiveness: 4.6/5.0

Fall 2013: ECG 540 (Economic Development, Master's level), 20 students
 Overall Course Rating: 4.1/5.0
 Teaching Effectiveness: 4.4/5.0

Spring 2014: ECG 740 (Economic Development, Ph. D level), 5 students
 Overall Course Rating: 4.6/5.0
 Teaching Effectiveness: 4.8/5.0

Fall 2014: ECG 540 (Economic Development, Master's level), 20 students
 Overall Course Rating: 4.7/5.0
 Teaching Effectiveness: 4.8/5.0

Spring 2015: ECG 740 (Economic Development, Ph. D level), 4 students
 Overall Course Rating: not rated (too few students)
 Teaching Effectiveness: not rated (too few students)

Fall 2015: ECG 540 (Economic Development, Master's level), 16 students
 Overall Course Rating: 4.5/5.0
 Teaching Effectiveness: 4.7/5.0

Spring 2016: ECG 740 (Economic Development, Ph. D level), 4 students
 Overall Course Rating: not rated (too few students)
 Teaching Effectiveness: not rated (too few students)

Fall 2016: ECG 540 (Economic Development, Master's level), 16 students
 Overall Course Rating: 4.9/5.0
 Teaching Effectiveness: 4.7/5.0

Fall 2017: ECG 740 (Economic Development, Ph.D level), 4 students
 Overall Course Rating: not rated (too few students)
 Teaching Effectiveness: not rated (too few students)

Spring 2018: ECG 540 (Economic Development, Master's level), 13 students
 Overall Course Rating: 4.5/5.0
 Teaching Effectiveness: 5.0/5.0

Fall 2018: ECG 740 (Economic Development, Ph.D level), 4 students
 Overall Course Rating: not rated (too few students)
 Teaching Effectiveness: not rated (too few students)

Spring 2019: ECG 540 (Economic Development, Master's level), 27 students

Overall Course Rating: 4.8/5.0

Teaching Effectiveness: 4.8/5.0

STUDENT COMMITTEES

Ph.D: Robert Dinterman (co-chair), Maliha Cheema (chair), Rotua Lumbantobing (chair), Svetlana Edmeades (chair), Hernando Hintze (co-chair), Simla Tokgoz (co-chair), Shweta Gimonkar, Jiaqi Qi, Kelsey Hample, Lawson Connor, Chotima Pornsawang, Amanda Clayton, Junwen Wang, Anh Nam Tran, Julia Burton, Tsung-Yu Yang, Rashida Mohdrowther, Julianne Treme, Bhaswati Sengupta, Jonathan Yoder, Mauricio Cuesta, David Solis (Forestry), Yu Wu (Forestry), An Lu (ECE), Drew Marticorena (Horticulture, NCSU), James Jeuck (Forestry, NCSU), Craig Clark (Civil Engineering, NCSU), Greg Frey (Forestry, NCSU), Rodrigo Arriagada (Forestry, NCSU), Shubhayu Saha (Forestry, NCSU), Stibniati Atmadja (Forestry, NCSU), Bram Tucker (Anthropology, UNC), Daniel Karanja (Agricultural Economics, Michigan State University).

Master's: Eric Harmeling (chair), Carlo Zanelli (chair), Annita Wilborn (chair), Tom Sabel (chair), Kristen Maines (chair), Mattvey Yegorov (chair), Jason Lemmond (chair), Richard Sawyer (chair), Brooks Depro (co-chair), Vipavee Tedumrongvanich (chair), Greg Andronoy, Rodrigo Arriagada, Aydin Kocabeyoglu, Stibniati Atmadja, Sandy Bumgarner, Richard Lee, Dwight Wilder, Alexandra Verhotseva, Andrei Medvedev, Richard Sawyer, Jason Kendall, Jon Erickson, Douglas Rhoades, Hargo Koesbandana, Akiko Kobayakawa, Inna Alexeyeva, Geua Boe (University of Waikato), Diego Andres Moreno (University of Waikato), Jeff Chaffin.

UNIVERSITY COMMITTEES

Editor, NC State Economist, 1999-present

Genetic Engineering and Society Cluster Hire Search Committee, 2012-2013.

Steering Committee, Eloise Cofer Forum, 2001.

Departmental Faculty Search Committee, 1992-1995, 1997-1999

Departmental Outstanding Dissertation Nominating Committee, 1991, 1995, 2013, 2014.

NC CES Rural Revitalization Task Force, 1991-1993

NC CES Communities in Economics Transition Task Force, 1994-1996

NC CES Waste Management Task Force Public Policy Action Team , 1992-1994

NC CES Waste Management Task Force Compost Subcommittee, 1992-present

CALS Community/Rural Development Task Force, 1992-present

CALS Expansion Budget Committee, 1994

NCSU Entrepreneurial Education Project Steering Committee, 1994-present.

NCSU Rural Revitalization Council, 1992-1994

OTHER PROFESSIONAL ACTIVITIES

Professional Society Memberships:

American Agricultural Economics Association

International Association of Agricultural Economists
Southern Regional Science Association

Other:

Referee for *Agricultural Economics*, *Agricultural and Resource Economics Review*, *Agronomy Journal*, *American Journal of Agricultural Economics*, *Annals of Regional Science*, *Applied Economic Perspectives and Policy*, *Australian Journal of Agricultural and Resource Economics*, *Economic Inquiry*, *Environment and Development Economics*, *Environmental Management*, *Food Security*, *Forest Science*, *Growth and Change*, *International Journal of Technology Management*, *Journal of Agricultural and Applied Economics*, *Journal of Development Economics*, *Journal of Environmental Economics and Management*, *Journal of Regional Analysis and Policy*, *Journal of Regional Science*, *Land Economics*, *Natural Resources Forum*, *PLOS One*, *Resource and Energy Economics*, *Social Science Research*, *Urban Planning and Transportation Research*, and *World Development*.

Member, American Agricultural Economics Association Outstanding Dissertation Award committee, 1993-1995.

Member, NE-1011 Regional Committee (Rural Development), 1992 - present.