

Public Health and Environment Division, RTI International
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Research Triangle Park, NC 27709-2194, U.S.A.
Phone 919-541-7355; Fax 919-541-6683; Email subhrendu@rti.org

Current and Previous Principal Positions

Fellow and Senior Economist, Environment Health and Development, RTI International, 2005 –
Research Associate Professor, College of Natural Resources, North Carolina State University, 2005 –
Senior Economist, Health Social and Economics Research, RTI International, 1998 - 2004
Research Assistant Professor, College of Natural Resources, North Carolina State University, 1998 -2004
Visiting Assistant Professor, Nicholas School of the Environment, Duke University, 1997 – 1998

Other Positions

Visiting Scholar, Agriculture and Resource Economics, University of California, Berkeley, 2006 - 2007
Fellow, Center for Applied Biodiversity Sciences, Conservation International, 2005 –
Research Advisor, South Asian Network of Development and Environment Economics, 2004 –
Adjunct Associate Professor, Nicholas School of the Environment, Duke University, 2004 –

Education

Summer Institute in Public Health, Harvard University, Boston, Massachusetts, 2004
Ph.D., Environmental Economics, Duke University, Durham, North Carolina, 1997
M.S., Economics, Purdue University, West Lafayette, Indiana, 1992
B.A., Economics, St. Stephen's College, University of Delhi, India, 1990

Honors and Awards

RTI International Highly Published Author Award, 2004, 2005 and 2006
RTI International Annual Award, 2004
Nicholas School of the Environment, Graduate Student of the Year, 1994
St. Stephen's College, David Ram Award - Academic and Sports Performance and College Service, 1990

Professional Associations

American Economic Association
Association of Environmental and Resource Economists

Referee

Forest Science, Associate Editor, 2004 – 2005
Agriculture, Ecosystems and Environment; Agroforestry Systems; American Journal of Agricultural Economics; Biological Conservation; Ecological Economics; Environment and Development Economics; Forest Policy and Economics; Forest Science; Southern Economics Journal; World Development
National Science Foundation (Economics); United States Department of Agriculture (Forest Service)

Peer-Reviewed Publications

Van Houtven, G., J. Power and S.K. Pattanayak. Forthcoming. Valuing water quality improvements in the United States using meta-analysis: Is the glass half-full or half-empty for national policy analysis?" *Resource and Energy Economics*.
Beach, R.H., E.O. Sills, T. Liu, and S.K. Pattanayak. Forthcoming. "The Influence of Forest Management on Vulnerability to Severe Weather." In C. Luce (ed.), *Encyclopedia of Forest Environmental Threats*. USDA Forest Service, Pacific Northwest and Southern Research Stations.

- Pattanayak, S.K., V. K. Smith and G. Van Houtven. 2007. "Improving the Practice of Benefits Transfers: A Preference Calibration Approach." Chapter 14 in S. Navrud and R. Ready (eds.), *Environmental Value Transfers: Issues and Methods*. Economics of Non-markets Goods and Resources Series, Volume 9. Springer Science.
- Mansfield, C., and S.K. Pattanayak. 2007. "Getting Started." Chapter 1 in B. Kanninen (ed.), *Valuing Environmental Amenities using Choice Experiments: A Common Sense Guide to Theory and Practice*. Economics of Non-markets Goods and Resources Series, Volume 8. Springer Science. Pages 1-20.
- Poulos, C., S. K. Pattanayak, and K. Jones. 2006. "Guidelines for Impact Evaluations in the Water and Sanitation Sector." *Doing Impact Evaluations*. No. 4. World Bank, Washington D.C.
- Sills, E., S. K. Pattanayak, P. Ferraro, and K. Alger. 2006. "Abordagens Analíticas na Avaliação de Impactos Reais de Programas de Conservação (Evaluating Conservation Programs)". *Megadiversidade 2* (1-2): 39-49.
- Smith, V.K., S.K. Pattanayak, and G. Van Houtven. 2006. "Structural Benefits Transfer: An Example Using VSL Estimation." *Ecological Economics* 60 (2): 361-371.
- Pattanayak, S.K., K. Dickinson, C. Corey, E.O. Sills, B.C. Murray, and R. Kramer. 2006. "Deforestation, Malaria, and Poverty: A Call for Transdisciplinary Research to Design Cross-Sectoral Policies". *Sustainability: Science, Practice and Policy*. 2(2): 1-12.
- Ferraro, P.J., and S. K. Pattanayak. 2006. "Money for Nothing? A Call for Empirical Evaluation of Biodiversity Conservation Investments". *PLOS Biology* 4(4): e105 (0482-0488).
- Sills, E. O., and S. K. Pattanayak. 2006. "Tropical Tradeoffs: An Economics Perspective on Tropical Deforestation". In S. Spray and M. Moran (eds.), *Tropical Deforestation*. Series on Exploring Environmental Challenges: A Multidisciplinary Approach. Rowman and Littlefield Publishers Inc. Pages 104-128.
- Mansfield, C., S.K. Pattanayak, W. McDow, R. MacDonald, and P. Halpin. 2005. "Shades of Green: Measuring the Value of Urban Forests in the Housing Market". *Journal of Forest Economics*. 11 (3):177-199.
- Pattanayak, S.K., and D.T. Butry. 2005. "Spatial Complementarity of Forests and Farms: Accounting for ecosystem services." *American Journal of Agricultural Economics*. 87(4): 995-1008.
- Pattanayak, S.K., B. McCarl, A.J. Sommer, B.C. Murray, T. Bondelid, D. Gillig, and B. DeAngelo. 2005. "Water Quality Co-Effects of Greenhouse Gas Mitigation in U.S. Agriculture." *Climate Change*, 71 (3):341-372.
- Pattanayak, S.K., J.C. Yang, D. Whittington, and Bal Kumar K.C, 2005. "Coping with Unreliable Public Water Supplies: Averting Expenditures by Households in Kathmandu, Nepal." *Water Resources Research*. 41(2):
- Beach, R. H., S. K. Pattanayak, J. C. Yang, B. C. Murray, and R. C. Abt, 2005. "Empirical Studies of Non-Industrial Private Forest Management: A Review and Synthesis." *Forest Policy and Economics*. 7 (3) 261-281.
- Pattanayak, S. K., 2004. "Valuing Watershed Services: Concepts and Empirics from Southeast Asia." *Agriculture, Ecosystem and Environment* 104(1): 171-184.
- Pattanayak, S.K., and B. M. Depro. 2004. "Environmental Services from Agroforestry: Economics of Soil and Water Conservation in Manggarai, Indonesia." In *Valuing Agroforestry Systems: Methods and Applications*, J. Alavalapati and E. Mercer (eds.) p 165-182. Kluwer Academic Publishers.
- Pattanayak, S.K., R.C. Abt, A.J. Sommer, F. Cabbage, B.C. Murray, J.C. Yang, D. Wear, and S. Ahn 2004. Forest forecasts: Does individual heterogeneity matter for market and landscape outcomes? *Forest Policy and Economics* 6: 243-260.
- Pattanayak, S.K., E. Sills, and R. Kramer. 2004. "Seeing the Forests for the Fuel". *Environment and Development Economics* 9(2): 155-179.
- Smith, V. K., S. K. Pattanayak and G. Van Houtven. 2003. "VSL Reconsidered: What do Labor Supply Estimates tell us about Risk Preferences?" *Economics Letters* 80(2): 147-153.
- Pattanayak, S.K., A.D. Mehta, E. O. Sills, and R.A. Kramer. 2003. "Local Uses of Parks: Uncovering Patterns of Household Production from the Forests of Siberut, Indonesia." *Conservation and Society* 1(2): 209-222.

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- Snider, A., S.K. Pattanayak, E. Sills, and J. Schuler. 2003. "Policy Innovations for Private Forest Management and Conservation in Costa Rica." *Journal of Forestry* 101(4): 18-23.
- Pattanayak, S.K., D.E. Mercer, E. Sills, and J. C. Yang. 2003. "Taking Stock of the Agroforestry Adoption Studies." *Agroforestry Systems* 57 (3): 173-186.
- Wear, D., and S.K. Pattanayak. 2003. "Aggregate Timber Supply: From the Forests to the Market." In *Forests in a Market Economy*, E. Sills and K. Abt (eds.), p. 117-132, Forestry Sciences Series, Volume 72, Dordrecht: Kluwer Academic Publishers.
- Pattanayak, S., K. Abt, and T. Holmes. 2003. "Timber and Amenities on Non-Industrial Private Lands." In *Forests in a Market Economy*, E. Sills and K. Abt (eds.), p. 243-258, Forestry Sciences Series, Volume 72, Dordrecht: Kluwer Academic Publishers.
- Sills, E., S. Lele, T. Holmes, and S. K. Pattanayak. 2003. "Non-timber Forest Products in the Rural Household Economy." In *Forests in a Market Economy*, E. Sills and K. Abt (eds.), p. 259-282, Forestry Sciences Series, Volume 72, Dordrecht: Kluwer Academic Publishers.
- Mercer, E., and S.K. Pattanayak. 2003. "Agroforestry Adoption by Smallholders." In *Forests in a Market Economy*, E. Sills and K. Abt (eds.), p. 283-299, Forestry Sciences Series, Volume 72, Dordrecht: Kluwer Academic Publishers.
- Pattanayak, S., and D. Butry. 2003. "Forest Ecosystem Services as Production Inputs." In *Forests in a Market Economy*, E. Sills and K. Abt (eds.), p. 361-379, Forestry Sciences Series, Volume 72, Dordrecht: Kluwer Academic Publishers.
- Whittington, D., S.K. Pattanayak, J.C. Yang, and B. Kumar K.C. 2002. "Do Households Want Improved Piped Water Services? Evidence from Nepal." *Water Policy* 4(6): 531-556.
- Pattanayak, S.K., and E. Mercer. 2002. "Indexing Soil Conservation: Farmer Perceptions of Agroforestry Benefits." *Journal of Sustainable Forestry* 15(2):63-85.
- Cassingham, K., E. Sills, S.K. Pattanayak, and C. Mansfield. 2002. "North Carolina's Natural Heritage: A Case for Public-Private Cooperation." *Journal of Forestry* 100(4):16-23.
- Whittington, D., O. Matsui, J. Freiburger, G. Van Houtven, and S. K. Pattanayak. 2002. "Private Demand for HIV/AIDS Vaccine: Evidence from Guadalajara, Mexico?" *Vaccine* 20(19-20):2585-2591.
- Pattanayak, S.K., B.C. Murray, and R. Abt. 2002. "How Joint in Joint Forest Production: An Econometric Analysis of Timber Supply Conditional on Endogenous Amenity Values." *Forest Science* 47(3):479-491.
- Smith, V. K., and S. K. Pattanayak. 2002. "Is Meta-Analysis the Noah's Ark for Non Market Valuation?" *Environmental and Resource Economics* 22(1-2):271-296.
- Smith, V.K., G.L. Van Houtven, and S.K. Pattanayak. 2002. "Benefit Transfer via Preference Calibration: Prudential Algebra for Policy." *Land Economics* 78(1):132-152.
- Cassingham, K., E. Sills, S. K. Pattanayak, and C. Mansfield. 2002. "Spatial Assessment of a Voluntary Forest Conservation Program in North Carolina." In *Forest Policy for Private Forestry: Global and Regional Challenges*, L. Teeter, B. Cashore, and D. Zhang, (eds.), p. 129-141. Wallingford, UK: CABI Publishing.
- Pattanayak, S.K., and E. Sills. 2001. "Do Tropical Forests Provide Natural Insurance? The Microeconomics of Non-Timber Forest Products Collection in the Brazilian Amazon." *Land Economics* 77(4):595-612.
- Pattanayak, S.K., and R. Kramer. 2001. "Pricing Ecological Services: Willingness to Pay for Drought Control Services in Indonesia." *Water Resources Research* 37(3):771-778.
- Pattanayak, S.K., and R. Kramer. 2001. "Worth of Watersheds: A Producer Surplus Approach for Valuing Drought Control in Eastern Indonesia." *Environment and Development Economics* 6(1):123-45.
- Pattanayak, S.K., and E. Mercer. 1998. "Valuing Soil Conservation Benefits of Agroforestry Practices: Contour Hedgerows in the Eastern Visayas, Philippines." *Agricultural Economics* 18:31-46.
- Kramer, R., D. Richter, S.K. Pattanayak, and N. Sharma. 1997. "Economic and Ecological Analysis of Watershed Protection in Eastern Madagascar." *Journal of Environmental Management* 49:277-295.
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Working Papers

- Pattanayak, S.K., J.L. Blitstein, J.-C. Yang, S.R. Patil, K.M. Jones, C. Poulos, and K. Dickinson. 2006. [Evaluating information and communication strategies to promote latrine use and improve child health: Design and baseline findings from a community randomised trial in Bhadrak, Orissa](#). *Journal of Epidemiology and Community Health* (submitted).
- Pattanayak, S.K., and J. Yasuoka. 2006. [Ecosystem Change and Malaria: Revisiting the Human Ecology Perspective](#). In C. Colfer (ed.), *Forest and Human Health*. Earthscan Publishers.
- Jha, N., and S. K. Pattanayak. [Hydraulic Self-Rule: A Process Evaluation of a Community Driven Water and Sanitation Program in Maharashtra](#). Presented at the International Association for the Study of Common Property annual meeting, *Survival of the Commons: Mounting Challenges and New Realities*. Bali, Indonesia, June 2006.
- Pattanayak, S.K., and K. Jones. 2006. [Ecosystem Valuation: Linking Biodiversity Conservation to Human Welfare](#). *Biodiversity and Conservation* (in review).
- Jones, K.M., S. K. Pattanayak, and E. O. Sills. 2006. [Democracy and Dictatorship: Comparing household innovation across the border of Benin and Togo](#) *World Development* (in review)
- Pattanayak, S.K., C.G. Corey, Y.F. Lau, and R. Kramer. 2005. [Conservation and Health: A microeconomic study of forest protection and child malaria in Flores, Indonesia](#). *Social Science and Medicine* (in revision).
- Beach, R.H., C. Poulos, and S.K. Pattanayak. 2006. [Prevention and Control of Avian Influenza: A View from the Farm Household](#).
- Pattanayak, S.K., C. Poulos, J-C. Yang, G.L. Van Houtven, and K. Jones. 2006. [Economics of Environmental Epidemiology: Estimates of "Prevalence Elasticity" for Malaria](#).
- Pant, K.P., and S. K. Pattanayak. 2006. [Demand for Environmental Quality: A Case of Indoor Air Quality Demand in Rural Nepal](#). Presented at the 3rd World Congress of Environmental Economics, Kyoto, Japan.
- Ross, M., Depro, B., and S. K. Pattanayak. 2006. [Payments, Promises and Protection: A General Equilibrium Evaluation of Market Incentives for Conservation in Costa Rica](#). In *Ecomarket: Costa Rica's Experience with Payments for Environmental Services*. G. Platais and S. Pagiola (eds.). World Bank, Washington D.C.
- Butry, D.T., S. K. Pattanayak, D.E. Mercer, and E. Sills. 2005. [Applying Program Evaluation Methods to Natural Resource Policy: Are Wildfire Suppression Expenditures Worth It?](#)
- Pattanayak, S.K., C. van den Berg, G. Van Houtven and J-C Yang. 2005. [Uses and abuses of WTP Experiments: Estimating Demand for Piped Water Connections](#). World Bank Policy Research Working Paper 3817.
- Yang, J-C, S.K. Pattanayak, F. R. Johnson, C. Mansfield, K. M. Jones, and C. van den Berg. 2005. [Unpackaging Demand for Urban Water Supply: Evidence from Conjoint Surveys in Sri Lanka](#). World Bank Policy Research Working Paper 3817.
- Pattanayak, S.K., J.C. Yang, K. Jones, H. Gunatilake, C. van den Berg, C. Agarwal, H. Bandara, and T. Ranasinghe. 2005. [Poverty Dimensions of Water, Sanitation and Hygiene in Southwest Sri Lanka](#). RTI Working Paper. Water Supply and Sanitation Working Note 8. World Bank, Washington D.C.
- Whitehead, J., S. K. Pattanayak, G. L. Van Houtven, and B. Gelso. 2005. [Combining Revealed and Stated Preference Data to Estimate the Nonmarket Value of Ecological Services: An Assessment of the State of the Science](#). *Journal of Economic Surveys* (in revision).
- Pattanayak, S. K., J-C. Yang, B. C. Murray, R. C. Abt, B. M. Depro, and B. Sohngen. 2004. [Climate impacts on forest land values: A Ricardian Analysis](#). Working paper. RTI International.
- Van Houtven, G., S.K. Pattanayak, and V. Kerry Smith. 2004. [Benefit Transfer Functions for Avoided Morbidity: A Preference Calibration Approach](#). National Center for Environmental Economics Working Paper 04_04. Washington, DC. 24 pages
- Pattanayak, S.K., E. O. Sills, and D. Whittington. 2004. [Water supply coverage and cost recovery in Kathmandu: Understanding the role of time preferences and credit constraints](#). Presented at the NEUDC annual meetings, Montreal, Canada.

- Sills, E.O., and S. K. Pattanayak. 2003. "[Markets, modernization and the Mentawai: Explaining differences in forest dependence](#)". Presented at the NEUDC annual meetings, Yale University, New Haven, Connecticut.
- Pattanayak, S.K. 2004. "[Forest amenities and aesthetics: An econometric evaluation using North Carolina FIA data](#)".
- Pattanayak, S.K., V.K. Smith, and G. Van Houtven. 2003. "[Valuing Environmental Health Risks: From Preference Calibration to Estimation](#)." RTI Working Paper 03_04. Research Triangle Park, North Carolina.
- Kramer, R., E.O. Sills, and S.K. Pattanayak. 2002. "National Parks as Development and Conservation Projects: Gauging Local Support." *Society and Natural Resources* (in revision).

Work in Progress

- Sills, E., R. Arriagada, S. K. Pattanayak, P. Ferraro, L. Carrasco and S. Cordero. 2006. "Private Provision of Public Goods: Applying Program Evaluation to Evaluate 'Payments for Ecosystem Services' in Costa Rica". In *Ecomarket: Costa Rica's Experience with Payments for Environmental Services*. G. Platais and S. Pagiola (eds.). World Bank, Washington D.C.
- Patil, S. R., and S. K. Pattanayak. "Behavioral Index for Microbial Exposure: A Household Production Approach".
- Atmadja, S., E. Sills, S. K. Pattanayak, S. Patil, and J. C. Yang. "Discount Rates of Farm Households: Evidence from Field Experiments in Rural India"
- Patil, S. R., S. K. Pattanayak, S. Vinerkar, and J. C. Yang. "Gauging Adequacy of Community Water Supply and Sanitation Projects in Maharashtra: Methodological Triangulation"
- Corey, C.G., S.K. Pattanayak, R. Kwok, J-C. Yang and S. R. Patil. "Evaluating Associations between Individual, Household, and Environmental Factors on Diarrhea: A Case Study from Rural Maharashtra, India"
- Pattanayak, S.K., C. Poulos, S. R. Patil, J-C. Yang, R. Kwok, K M. Jones and C. G. Corey. "Environmental Health Impacts of Water, Sanitation and Hygiene Interventions in Maharashtra, India: Applying Propensity Scores to Find Control Communities"
- Pattanayak, S.K., M. T. Ross, B. M. Depro, and C. Timmins. "Biodiversity Conservation, Climate Change and Infectious Diseases: Econometric Modeling and CGE Simulation with Brazilian Data".
- Pattanayak, S.K., and S.C.Bauch. "Effectiveness of Protected Areas in Brazil"
- Pattanayak, S.K., K. Jones, E. Sills, F. Cubbage, and B. Depro. "Evaluating Forest Policies: Categorizing Policy Options and Characterizing Implementation in North Carolina."
- Alger, K., K. Cassingham, K. Jones, J. Munoz, S. K. Pattanayak, and E. Sills. "Watershed protection by forests: Vital ecosystem service or smoke and mirrors?"
- Depro, B.M., S. K. Pattanayak and M. Renkow. 2005. "Environmental Service Payment Programs: Reassessing Promises Made by Economic Theory"
- Whitehead, J. and S. K. Pattanayak. "Joint Estimation of Averting Expenditures and Willingness to Pay for Improved Water Services in Kathmandu".
- Pattanayak, S.K., E. Sills, J. Caviglia-Harris, D. Harris, and S. Saha. From Forests to Pasture: Evidence on the co-evolution of deforestation and development from a spatial panel survey of farm households in Rondônia, Brazil.
- Pattanayak, S.K., G. Van Houtven, V.K. Smith, and N. Kuminoff. "Data Combination for Calibration, Estimation, and Benefit Transfer"
- Beach, R.H., S. K. Pattanayak, K. Jones, J-C. Yang, B. C. Murray, and R. C. Abt. "Determinants of Forest Management: An Econometric Analysis of Private Landowner Behavior in the Southern U.S."
- Arriagada, R, E. Sills, S. K. Pattanayak, F. Cubbage, and E. Gonzalez. 2004. "Negative Externalities of Irrigation Infrastructure: Forests, Farms, and Fertilizers in Palo Verde, Costa Rica".
- Depro, B., S. K. Pattanayak, and G. L. Van Houtven. 2005. "Benefits Transfer of the Third Kind: Why Bother with Structural Benefits Transfer!"
- Jones, K.M., E. O. Sills, S. K. Pattanayak, and S. Atmadja. 2005. "Using Rapid Rural Appraisal as an Inquiry-Guided Learning Instrument: Forest Dependency in Ghana."

- Ginwalla, Z., R. Kramer, D. Amor Conde, and S.K. Pattanayak. 2005. "Forest Cover and Malaria on Siberut Island, Indonesia". Working paper.
- Pattanayak, S.K., L. E. Carrasco, E. O. Sills, J.C. Yang, C. van den Berg, C. Agarwal, and H. Gunatilake. 2005. "Geography and Urban Water Supply: Evidence from Southwest Sri Lanka." RTI Working Paper.
- Pattanayak, S.K. 2003. "Rough guide to econometrics of binary choice models". Submitted to the USDA Forest Service, Southeastern Research Station. November 2003.
- Pattanayak, S. 2001. "How Green are these Valleys?" RTI Working Paper 01_02. Research Triangle Park, North Carolina.
- Butry, D., and S. K. Pattanayak. 2001. "Economic Welfare Impacts of Tropical Forest Conservation: The Case of Ruteng Park and Logger Households." RTI Working Paper 01_01. Research Triangle Park, North Carolina.
- Pattanayak, S. K., and G. Van Houtven, 1999. "Measuring Benefits of the Safe Drinking Water Act: A Framework for Combining Contingent Valuation and Averting Behavior Data."
- Pattanayak, S.K., and D. Richter. "Evaluating the Myth: Forests Can be Sponges and not Merely Pumps." Durham: Nicholas School of the Environment, Duke University. May 1996.

Other Publications

- Sills, E., and S.K. Pattanayak. 2004. "Reflections on West Africa." *Sylvanet* 17(1):19.
- Foster, V., S.K. Pattanayak, and L.S. Prokopy. 2003. "Do Current Subsidies Reach the Poor?" In *Water Subsidies and Tariffs in South Asia (Paper 4)*, C. Brocklehurst (ed.), Washington DC: The Public Private Infrastructure Advisory Facility, The World Bank.
- Foster, V., S.K. Pattanayak, and L.S. Prokopy. 2003. "Can Subsidies be Better Targeted?" In *Water Subsidies and Tariffs in South Asia (Paper 5)*, C. Brocklehurst (ed.), Washington DC: The Public Private Infrastructure Advisory Facility, The World Bank.
- Schuler, J. and S.K. Pattanayak. 2002. "Costa Rica's Innovative Conservation Initiatives: A View from a Bus." *Sylvanet* 15(2):10-13.
- Pattanayak, S.K. 2001. "Forest Dependence: Orissa, India as a Natural Laboratory." *Sylvanet* 14(1):3-5.
- Kramer, R., D. Richter, and S. K. Pattanayak. 1995. "Spatial Dimensions of Environmental Impacts." In *Valuing Tropical Forests—Methodology and Case Study of Madagascar*, R. Kramer, N. Sharma, and M. Munasinghe (eds.), p. 42-50. World Bank Environment Paper 13. Washington, DC: World Bank.

Conferences and Presentations

2007

Allied Social Sciences Annual meetings, Chicago, Illinois

2006

9th Biennial Conference of the International Society for Ecological Economics, Delhi, India.
Emerging Population Issues in the Asia Pacific, Indian Institute for Population Sciences, Mumbai, India
Ecosystem Services in the NeoTropics International Congress, Valdivia, Chile.
Third Chilean Congress of Forest Sciences organized by the Faculty of Forestry, Concepcion, Chile.
 Southern Economics Association Meetings, Charleston, South Carolina, November 2006.
 Energy and Resources Group, University of California, Berkeley, CA
 Crises in Agriculture and Resource Sectors; Analysis of Policy Responses, Calgary, Canada
 Ecohealth One, University of Wisconsin, Madison, Wisconsin
 EcoMarkets Workshop (FONAFIFO and the World Bank) San Jose, Costa Rica.
 Biodiversity and Human Health Workshop. U.S.E.P.A and Yale University. Washington, DC
 Nicholas Institute, Duke University, Durham, N.C
 Indian Statistical Institute, New Delhi, India.
 Camp Resources XIV, Wilmington, NC
 Advances in Threat Assessment, Boulder, CO
 Center for Applied Biodiversity Sciences, Conservation International, Washington DC

Society of Conservation Biology, San Jose, California
Center for International Forestry Research, Belem, Para, Brazil
Resources for the Future, Washington, DC
Department of Applied Economics, University of Minnesota, St. Paul, MN
Exploring the Frontiers of Science, RTI Fellows Symposium, Chapel Hill, NC
Action Planning Workshop on Growth and Environment in Orissa, Bhubaneswar, India
INDO-US Joint Workshop on Water, Sanitation, and Environmental Health; US Centers for Disease
Control and Indian Council of Medical Research, Kolkata, India
3rd World Congress of Environmental and Resource Economists, Kyoto, Japan
Allied Social Sciences Annual meetings, Boston, MA

2005

Northeast University Development Conference, Providence, RI
Camp Resources XIII, Wilmington, NC
National Bureau of Economics Research, Public Economics and the Environment, Cambridge, MA
Ecosystem Services and Biodiversity in Developing Countries, Research Network for Environment and
Development (ReNED), Copenhagen, Denmark
South Asia Network of Environment and Development Economics (SANDEE), Bangalore, India
Economy and Environment Program for Southeast Asia (EEPSEA), Singapore
National Science Foundation's Biocomplexity Initiative, Santa Fe, New Mexico
Benefits Transfer and Valuation Databases, EVRI & USEPA, Washington, DC
Water Week, World Bank, Washington, DC

2004

Refining Biodiversity Conservation Corridors workshop in Alter do Chão, Para, Brazil
The World Bank, New Delhi, India
Conservation International's Board of Directors, Seattle, WA
Northeast University Development Conference, Montreal, Canada
Conservation International, Washington, DC
Public Health and Rural Water Supply and Sanitation, World Bank, Washington, DC
Duke University's Center for Environmental Solutions, Durham, NC

2003

Northeast University Development Conference, New Haven, CT
Allied Social Sciences Annual meetings, Washington, DC

2002

Forestry and Agriculture Greenhouse Gas Modeling Forum, USEPA, Shepherdstown, WV
Camp Resources IX, Wilmington, NC
2nd World Congress of Environmental and Resource Economists, Monterrey, CA
North Carolina Water Resources Conference, Raleigh, NC
Southern Forest Economics Workshop, Virginia Beach, VA
Allied Social Sciences Annual meetings, Atlanta, GA

2001

College of Natural Resources, North Carolina State University, Raleigh, NC
Camp Resources VIII, Wilmington, NC
Southern Forest Economics Workshop, Atlanta, GA
New Developments in Benefits Transfer Workshop, Research Triangle Park, NC
Allied Social Sciences Annual meetings, New Orleans, LA

2000

Institute of Life Sciences, Utkal University, Bhubaneswar, India
XIII International AIDS Conference, Durban, South Africa

Western Economics Association meetings, Vancouver, Canada
 Southern Forest Economics Workshop, Lexington, VA
 Allied Social Sciences Annual meetings, Boston, MA

1999

Office of Policy, US EPA, Washington, DC
 College of Forest Resources, North Carolina State University, Raleigh, NC
 American Agricultural Economics Association, Nashville, TN
 Camp Resources VII, Wilmington, NC
 International Center for Research on Agroforestry, Chiang Mai, Thailand
 Allied Social Science Association, New York, NY

1998

Southern Economics Association Meetings, Baltimore, MD, November 1998.
 U.S. EPA, Office of Water, Washington, DC
 American Agricultural Economics Association, Salt Lake City, UT
 1st World Congress of Environmental and Resource Economists, Venice, Italy
 Southern Forest Economics Workshop, Williamsburg, VA
 Allied Social Sciences Association Annual Meetings, Chicago, IL

1997

Agricultural Economics Association, Summer Meetings, Toronto, Canada
 Association of Environmental and Resource Economists Workshop, Annapolis, MD
 Camp Resources V, Wilmington, NC

1996

Tata Energy Research Institute, India, New Delhi, India, March 1996.
 Camp Resources IV, Wilmington, NC

Research Grants as Principal Investigator

- “Guidelines for Implementation of Stated Preferences Studies for Water Supply and Sanitation Projects” (Asian Development Bank, Economics and Research Department) 2006-07
- “Monitoring and Evaluation of Health and Socio-Economic Impacts of Water and Sanitation Initiatives” (Acumen Fund, Water Innovations Portfolio) 2006-08
- “Ecosystem Valuation in Conservation Hotspots” (Conservation International, Center for Applied Biodiversity Sciences) 2006-07
- “Guidelines for Monitoring and Evaluation of the Water and Sanitation Sectors” (The World Bank, Development Impact Evaluation Initiative) 2005-06
- “Economics of Environmental Epidemiology” (RTI International, Internal Research and Development Grant) 2005-06
- “Randomized community trial of intensive hygiene information, education and communication campaigns in Orissa, India” (The World Bank, South Asia Environment and Social Development Unit) 2004-07
- “Environmental health outcomes of improving rural water supply, sanitation, and hygiene in Maharashtra, India” (The World Bank, South Asia Environment and Social Development Unit) 2004-07
- “Mining, Biodiversity, and Forest Dependence in Orissa, India: Inputs to Benefits Sharing Agreements” (The World Bank, South Asia Environment and Social Development Unit) 2005-06
- “Private Provision of Public Goods: Applying Matching Estimators to Evaluate 'Direct Payments' for Tropical Forest Conservation” (National Science Foundation, USA) 2005-06
- “Rural livelihoods, environmental health, and ecosystem services” (Conservation International, Center for Applied Biodiversity Sciences) 2004-05
- “Poverty mapping for geographic targeting in Sri Lanka” (The World Bank, Energy and Water

Department) 2004-05

- “Structural benefits transfer – tying utility theory to ecosystem valuation” (U.S. Environmental Protection Agency, National Center for Environmental Research, Science to Achieve Results Grants Program) 2003-06
 - “Evaluating US forest policies: New econometric tools from “program evaluation” (U.S. Department of Agriculture, Forest Service, Economics Research Unit) 2003-05
 - “Poverty, water and sanitation in southwest Sri Lanka” (The World Bank, Energy and Water Department) 2003-04
 - “Timber market modeling: Harvesting, management, investment, and land use” (U.S. Department of Agriculture, Forest Service, Economics Research Unit) 2001-06
 - “Regional vulnerability of forest resources to environmental stresses” (U.S. Environmental Protection Agency, National Center for Environmental Research, Science to Achieve Results Grants Program) 2000-04
 - “Econometric models of forest amenities and aesthetics” (U.S. Department of Agriculture, Forest Service, Economics Research Unit) 2002-04
 - “Econometric models of tree planting” (U.S. Department of Agriculture, Forest Service, Economics Research Unit) 2002-04
 - “Distributional incidence of water sector subsidies in south Asia” (The World Bank, South Asia Energy and Infrastructure Department) 2002
 - “Assessing water quality implications of terrestrial carbon sequestration strategies” (U.S. Environmental Protection Agency, Office of Air and Radiation) 2001-02
 - “Forests in a Market Economy” (RTI International, Profession Development Award) 2001-02
 - “Benefits transfer for mortality risk reduction using preference calibration” (U.S. Environmental Protection Agency, Office of Air Quality Planning and Standards, and Health Canada, Economic Analysis and Evaluation Division) 2001-02
 - “International health benefits transfer” (Health Canada, Environment and Safety Branch, Economic Analysis and Evaluation Division) 2001
 - “Contingent valuation of improved water supply in Kathmandu” (The World Bank, Water and Sanitation Program) 2001-02
 - “Economic analysis of air pollution regulations: Paper and other web coatings” (U.S. Environmental Protection Agency, Office of Air Quality Planning and Standards) 1999 - 2001
 - “Economic analysis of air pollution regulations: Rubber tire manufacturing” (U.S. Environmental Protection Agency, Office of Air Quality Planning and Standards) 1999 - 2000
 - “Benefits of agroforestry” (U.S. Department of Agriculture, Forest Service, Economics Research Unit) 1999 - 2001
 - “Improving the practice of benefits transfers for analysis of water pollution regulations” (U.S. Environmental Protection Agency, National Center for Environmental Economics) 1998 - 2001.
 - “Willingness to pay for anti-retroviral therapies for HIV/AIDS in Mexico” (GlaxoWellcome) 1999-2000
 - “Urban landscape change” (National Science Foundation) 1999-2002
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