

# PAMELA JAGGER

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## EDUCATION

- 2009 Ph.D. Public Policy, Indiana University  
Dissertation: *Can Forest Sector Devolution Improve Rural Livelihoods? An Analysis of Forest Income and Institutions in Western Uganda*  
(Chair: Elinor Ostrom)
- 1998 M.Sc. Forest Economics, University of Alberta
- 1994 B.A. Economics, University of Alberta

## ACADEMIC APPOINTMENTS

- 2015 – Associate Professor, Public Policy, University of North Carolina at Chapel Hill
- 2010 – 2015 Assistant Professor, Public Policy, University of North Carolina at Chapel Hill
- 2010 – Faculty, Curriculum for the Environment and Ecology, University of North Carolina at Chapel Hill
- 2009 Postdoctoral Research Fellow, Department of Agricultural Economics, Purdue University

## OTHER APPOINTMENTS

- 2010 – Faculty Fellow, Carolina Population Center, University of North Carolina at Chapel Hill
- 2010 – Faculty Fellow, Center for Galapagos Studies, University of North Carolina at Chapel Hill
- 2010 – Faculty Fellow, Center for Urban and Regional Studies, University of North Carolina at Chapel Hill
- 2009 – 2015 Senior Associate, Center for International Forestry Research, Bogor, Indonesia

## ADDITIONAL PROFESSIONAL EXPERIENCE

- 2008 Pre-doctoral Research Associate, Department of Agricultural Economics, Purdue University, West Lafayette, IN, USA
- 2006-07 Visiting Researcher, Makerere University, Kampala, Uganda
- 2003-06 Research Assistant, Workshop in Political Theory and Policy Analysis, Indiana University, Bloomington, IN, USA

- 2004 Visiting Researcher, International Food Policy Research Institute (IFPRI), Environment and Production Technology Division, Washington, DC, USA
- 1999-03 Research Analyst, International Food Policy Research Institute (IFPRI), Environment and Production Technology Division, Washington, DC, USA
- 1998-99 Research Assistant, Resources for the Future (RFF), Energy and Natural Resources Division, Washington, DC, USA
- 1998 Consultant, World Bank, Development Working Group, Washington, DC, USA
- 1998 Research Assistant, Department of Rural Economy, University of Alberta, Edmonton, AB, Canada
- 1997 Research Associate, Institute for Environmental Studies (IES), University of Zimbabwe, Harare, Zimbabwe
- 1996-98 Economic Research Technician, Canadian Forest Service, Social Science Research Group, Edmonton, AB, Canada

## HONORS, FELLOWSHIPS, AWARDS

- 2016 Jimmy and Judy Cox Asia Initiative Travel Award, Carolina Asia Center (\$6,000 USD)
- 2016 Humphrey Award, Carolina Population Center (\$15,000)
- 2013 UJMT Fogarty Global Health Fellowship, Fogarty International Center, National Institutes of Health, *Tuberculosis and household air pollution from woody biomass use in Malawi: A Case-Control Study* (\$39,000 USD)
- 2012 National Science Foundation, Political Science Young Scholar's Award (\$25,000 USD)
- 2012 PI, UNC-CH, Carolina Population Center, CPC Seed Grant (\$11,645 USD)
- 2012 PI, UNC-CH, Gillings School of Global Public Health, Explorations in Global Health Grant, (\$8,000 USD)
- 2010 Co-PI, Odum Social Science Seed Grant for Multidisciplinary Research, Odum Institute, University of North Carolina at Chapel Hill (\$12,500 USD)
- 2011 UNC-CH, Carolina Population Center, Summer in Residence Fellowship (\$15,000 USD)
- 2008 Indiana University, College of Arts and Sciences, J. Stewart and Dagmar K. Riley Dissertation Year Fellowship (\$15,000 USD)
- 2008 Indiana University, Workshop in Political Theory and Policy Analysis, Dissertation Writing Fellowship (\$7,500 USD)

- 2006 Consultative Group for International Agricultural Research (CGIAR), System-wide Program on Collective Action and Property Rights (CAPRI), Ph.D. Field Research Fellowship (\$29,000 USD)
- 2006 National Science Foundation (NSF), Doctoral Dissertation Enhancement Award (\$12,000 USD)
- 2006 Social Science Research Council (SSRC), International Dissertation Field Research Fellowship (IDRF) (\$10,000 USD)
- 2005 United States Department of Education, Foreign Language and Area Studies (FLAS) Fellowship (Swahili) (\$14,500 USD)
- 2004 Social Science and Humanities Research Council of Canada (SSHRC), Doctoral Fellowship (\$65,000 CDN)
- 2004 Indiana University, School of Public and Environmental Affairs (SPEA), Award for Excellence in Doctoral Research (\$500 USD)
- 2001 Consultative Group for International Agricultural Research (CGIAR) Secretariat, Neville Clarke Award for Outstanding Teamwork, for collaboration on the International Livestock Research Institute (ILRI) – International Food Policy Research Institute (IFPRI)

## PUBLICATIONS

(‡ DENOTES STUDENT OR POST-DOC; § DENOTES DEVELOPING COUNTRY COLLABORATOR)

### REFEREED BOOKS CHAPTERS (6)

**Jagger, P.**, K Lawlor<sup>‡</sup>, M. Brockhaus, M.F. Gebara<sup>§</sup>, D. Sonwa<sup>§</sup> and I.A.P. Resosudarmo<sup>§</sup>. 2012. [REDD+ Safeguards in National Policy Discourse and Pilot Projects](#). In *Analyzing REDD+: Challenges and Choices*, A. Angelsen, M. Brockhaus, W.D. Sunderlin and L. Verchot (eds). Bogor, Indonesia: Center for International Forestry Research. Pp. 301-317

**Jagger, P.** 2010. [Forest Sector Reform, Livelihoods and Sustainability in Western Uganda](#). In *Governing Africa's Forests in a Globalized World*, L. German, A. Karsenty and A.M. Tiani (eds). London, UK: Earthscan Publications Ltd. and Center for International Forestry Research. Pp. 103-125.

**Jagger, P.**, S. Atmadja<sup>§</sup>, S.K. Pattanayak, E. Sills and W.D. Sunderlin. 2009. [Learning by Doing: Evaluating Impacts of REDD](#). In *Realizing REDD: National Strategy and Policy Options*, A. Angelsen (ed). Bogor, Indonesia: Center for International Forestry Research. Pp. 281-292.

**Jagger, P.** and J. Pender. 2006. [Influence of Programs and Organizations on the Adoption of Sustainable Land Management Technologies in Uganda](#). In *Strategies for Sustainable Land Management in the East African Highlands*, J. Pender, S. Ehui and F. Place (eds). Washington, DC: International Food Policy Research Institute and World Bank. Pp. 277-308.

Sedjo, R., B. Sohngen and **P. Jagger**. Carbon Sinks in the Post Kyoto World. 2001. In *Climate Change Economics and Policy*, M. Toman (ed). Washington, DC: Resources for the Future Press. Pp. 134-142.

Simpson, R.D. and **P. Jagger**. 2000. Market Economy and Biodiversity. In *Encyclopedia of Biodiversity*, S. Levin (ed). London, UK: Academic Press. Pp. 85-95.

### **NON-REFEREED BOOK CHAPTERS (3)**

**Jagger, P.** and A. Angelsen. 2011. [The Division of Labor between Village, Household and Other Surveys](#). In *Measuring Livelihoods and Environmental Dependence: Methods for Research and Fieldwork* A. Angelsen, C.S. Olsen, H.O. Larsen, J.F. Lund and S.Wunder (eds). London, UK: Earthscan Publishers. Pp. 89-106.

**Jagger, P.**, A. Duchelle, H.O. Larsen and O.J. Nielsen. 2011. [Hiring, Training and Managing a Field Team](#). In *Measuring Livelihoods and Environmental Dependence: Methods for Research and Fieldwork* A. Angelsen, C.S. Olsen, H.O. Larsen, J.F. Lund and S.Wunder (eds). London, UK: Earthscan Publishers. Pp. 163-174.

**Jagger, P.**, A. Duchelle, S. Dutt<sup>s</sup> and M. Wyman. 2011. [Preparing for the Field: Managing and Enjoying Fieldwork](#). In *Measuring Livelihoods and Environmental Dependence: Methods for Research and Fieldwork* A. Angelsen, C.S. Olsen, H.O. Larsen, J.F. Lund and S. Wunder (eds). London, UK: Earthscan Publishers. Pp. 147-162.

### **PEER REVIEWED ARTICLES (27)**

Das, I.<sup>‡</sup>, **Jagger, P.**, and K. Yeatts. Biomass Cooking Fuels and Health Outcomes for Women in Malawi. *EcoHealth*. Forthcoming.

**Jagger, P.** and C. Jumbe<sup>s</sup>. 2016. Stoves or Sugar? Willingness to Adopt Improved Cookstoves in Malawi. *Energy Policy* 92:409-419.

Galik, C.<sup>‡</sup> and **P. Jagger**. 2015. [Bundles, Duties and Rights: A Revised Framework for Analysis of Natural Resource Property Rights Regimes](#). *Land Economics* 91(1):76-90.

**Jagger, P.** and G. Shively. 2015. [Taxes and Bribes in Uganda](#). *Journal of Development Studies* 51(1): 66-79.

Angelsen, A., **Jagger, P.**, Babigumira, R., Belcher, B., Hogarth, N., Bauch, S., Borner, J., Smith-Olsen, C. and S. Wunder. 2014. [Environmental Income and Rural Livelihoods: A Global Comparative Analysis](#). *World Development* 64(Supplement 1): S12-S28.

Chaifetz, A.<sup>‡</sup> and **P. Jagger**. 2014. [40 Years of Dialogue on Food Sovereignty: A Review and a Look Ahead](#). *Global Food Security* 3: 95-81.

**Jagger, P.** 2014. [Clarity vs. Confusion: Property Rights and Forest Use in Uganda](#). *Forest Policy and Economics* 45:32-41.

- Jagger, P.**, M. Brockhaus, A. Duchelle, M.F. Gebera<sup>§</sup>, K. Lawlor, I.A.P. Resosudarmo<sup>§</sup>, and W.D. Sunderlin. 2014. [Multi-level Policy Dialogues and Actions: Challenges and Opportunities for National REDD+ Safeguards Monitoring, Reporting and Verification \(MRV\)](#). *Forests* 5(9):2136-2162.
- Jagger, P.**, M.K. Luckert, A. Duchelle, J.F. Lund and W.D. Sunderlin. 2014. [Tenure and Forest Income: Observations from a Global Study on Forests and Poverty](#). *World Development* 64(Supplement 1): S43-S55.
- Jagger, P.** and G. Shively. 2014. [Land Use Change, Fuel Use and Respiratory Health in Uganda](#). *Energy Policy* 67: 713-726.
- Song, C., Y. Zhang, Y. Mei, Z. Zhang, Q. Zhang<sup>†</sup>, T. Zha, K. Zhang, C. Huang, X. Xu, **P. Jagger**, X. Chen, and R. Bilsborrow. 2014. [Forest Sustainability and China's Sloping Land Conversion Program \(SLCP\): A Comparison among Three Sites in Anhui, Hubei and Shanxi](#). *Forest Policy and Economics* 38: 161-167.
- Jagger, P.** 2012. [Environmental Income, Rural Livelihoods and Income Inequality in Western Uganda](#). *Forests, Trees and Livelihoods* 21(2): 1-15.
- Jagger, P.**, M.K. Luckert, A. Banana<sup>§</sup> and J. Bahati<sup>§</sup>. 2012. [Asking Questions to Understand Rural Livelihoods: Comparing Disaggregated vs. Aggregated Approaches to Household Livelihood Questionnaires](#). *World Development* 40(9):1810-1823.
- Jagger, P.**, G. Shively and A. Arinaitwe<sup>§</sup>. 2012. [Circular Migration, Small-scale Logging and Livelihoods in Uganda](#). *Population and Environment* 34:217-234.
- Caplow, S.<sup>†</sup>, **P. Jagger**, K. Lawlor<sup>†</sup> and E. Sills. 2011. [Evaluating the Land Use and Livelihood Outcomes of Early Forest Carbon Projects: Lessons for REDD+](#). *Environmental Science and Policy* 14(2): 152-167.
- Khundi,F.<sup>§</sup>, **P. Jagger**, D. Sserunkuuma<sup>§</sup> and G. Shively. 2011. [Income and Poverty Effects of Charcoal Production in Western Uganda](#). *Forest Policy and Economics* 13: 199-205
- Reyes-Garcia, V., V. Vadez, J. Aragón, T. Huanca and **P. Jagger**. 2010. [The Uneven Reach of Decentralization: A Case Study among Indigenous Peoples in the Bolivian Amazon](#). *International Political Science Review* March: 229-243.
- Shively, G., **P. Jagger**, D. Sserunkuuma<sup>§</sup>, A. Arinaitwe<sup>§</sup>, and C. Chibwana<sup>§</sup>. 2010. [Profits and Margins Along Uganda's Charcoal Value Chain](#). *International Forestry Review*. 12(3): 270-283.
- Bartley, T., K. Andersson, **P. Jagger** and F. van Laerhoven. 2008. [The Contribution of Institutional Theories to Explaining Decentralization of Natural Resource Governance](#). *Society and Natural Resources* 21(2): 160-174.
- Jagger, P.** and M.K. Luckert. 2008. [Investments and Returns from Cooperative and Household Managed Woodlots in Zimbabwe: Implications for Rural Afforestation Policy](#). *Land Use Policy* 25(1): 139-152.

**Jagger, P.**, J. Pender and B. Gebremedhin<sup>§</sup>. 2005. [Trading-off Environmental Sustainability for Empowerment and Income: Woodlot Devolution in Northern Ethiopia](#). *World Development* 33(9): 1491-1510.

Pender, J., **P. Jagger**, E. Nkonya and D. Sserunkuuma<sup>§</sup>. 2004. [Development Pathways and Land Management in Uganda](#). *World Development* 32(5): 767-792.

Pender, J., E. Nkonya, **P. Jagger**, D. Sserunkuuma<sup>§</sup> and H. Ssali<sup>§</sup>. 2004. [Strategies to Increase Agricultural Productivity and Reduce Land Degradation: Evidence from Uganda](#). *Agricultural Economics* 31(2/3): 181-195.

**Jagger, P.** and J. Pender. 2003. [The Role of Trees for Sustainable Management of Less Favored Lands: The Case of Eucalyptus in Ethiopia](#). *Forest Policy and Economics* 3(1): 83-95.

**Jagger, P.** and J. Pender. 2001. [Markets, Marketing, and Production Issues for Aquaculture in East Africa: The Case of Uganda](#). *Naga - The ICLARM (International Center for Living Aquatic Resources Management) Quarterly* 24(1&2): 42-51.

Grundy, I., J. Turpie, **P. Jagger**, E. Witkowski, I. Guambe, D. Semwayo and A. Solomon. 2000. [Implications of Co-Management for Benefits from Natural Resources for Rural Households in Northeastern Zimbabwe](#). *Ecological Economics* 33(3): 369-381.

Alavalapati, J., W. White, **P. Jagger** and A. Wellstead. 1996. [Effect of Land Use Restrictions on the Economy of Alberta: A Computable General Equilibrium Analysis](#). *Canadian Journal of Regional Science* 19(3): 349-365.

#### **OTHER PEER REVIEWED PUBLICATIONS (10)**

**Jagger, P.**, E.O. Sills, K. Lawlor<sup>†</sup>, and W.D. Sunderlin. 2010. [A Guide to Learning about Livelihood Impacts of REDD+ Projects](#). Bogor, Indonesia: Center for International Forestry Research.

**Jagger, P.** 2008. [Forest Incomes after Uganda's Forest Sector Reform: Are the Poor Gaining?](#) CAPRI (CGIAR System Wide Program on Collective Action and Property Rights) Working Paper Series No 92. Washington, DC: International Food Policy Research Institute.

Nkonya, E., J. Pender, **P. Jagger**, D. Sserunkuuma<sup>§</sup>, C. K. Kaizzi<sup>§</sup> and H. Ssali<sup>§</sup>. 2004. [Strategies for Sustainable Land Management and Poverty Reduction in Uganda](#). IFPRI Research Report No. 133. Washington, DC: International Food Policy Research Institute.

**Jagger, P.** and J. Pender. 2003. [Impacts of Programs and Organizations on the Adoption of Sustainable Land Management Technologies in Uganda](#). Environment and Production Technology Division Discussion Paper No. 101. Washington, DC: International Food Policy Research Institute.

**Jagger, P.**, J. Pender and B. Gebremedhin<sup>§</sup>. 2003. [Woodlot Devolution in Northern Ethiopia: Opportunities for Empowerment, Smallholder Income Diversification, and Sustainable Land Management](#). Environment and Production Technology Division Discussion Paper No. 107. Washington, DC: International Food Policy Research Institute.

Babu, S., P.B.R. Hazell, **P. Jagger** and A. Knox. 2002. [\*Future Opportunities for Rural Africa\*](#). Environment and Production Technology Division Workshop Summary Paper No. 11. Washington, DC: International Food Policy Research Institute.

**Jagger, P.** and J. Pender. 2001. [\*Policies for Improved Land Management in Uganda\*](#). Environment and Production Technology Division Workshop Summary Paper No. 10. Washington, DC: International Food Policy Research Institute.

Pender, J., **P. Jagger**, E. Nkonya and D. Sserunkuuma<sup>§</sup>. 2001. [\*Development Pathways and Land Management in Uganda: Causes and Implications\*](#). Environment and Production Technology Division Discussion Paper No. 85. Washington, DC: International Food Policy Research Institute.

**Jagger, P.** and J. Pender. 2000. [\*The Role of Trees for Sustainable Management of Less Favored Lands: The Case of Eucalyptus in Ethiopia\*](#). Environment and Production Technology Division Discussion Paper No. 65. Washington, DC: International Food Policy Research Institute.

**Jagger, P.**, W. White, and R. Sedjo. 1999. [\*El Niño, Ice Storms and the Market for Residential Fuelwood in Eastern Canada and the Northeastern US\*](#). RFF Discussion Paper No. 44. Washington, DC: Resources for the Future.

#### **OTHER PUBLICATIONS (5)**

Sunderlin, W.D., A.M. Larson, A.E. Duchelle, E.O. Sills, C. Luttrell, **P. Jagger**, S.K. Pattanayak, P. Cronkleton, A.D. Ekaputri, C. de Sassi, R. Aryani, G. Simonet. 2016. Technical Guidelines for Research on REDD+ Subnational Initiatives. Bogor, Indonesia: Center for International Forestry Research.

**Jagger, P.** 2004. [\*Artisans of Political Theory and Empirical Inquiry: 30 Years of Scholarship at the Workshop in Political Theory and Policy Analysis\*](#). Bloomington, IN: Workshop in Political Theory and Policy Analysis.

Pender, J., E. Nkonya, **P. Jagger**, D. Sserunkuuma<sup>§</sup>. 2003. [\*An Econometric Approach to NRM Impact Assessment: An Example from Uganda\*](#). In *Methods for Assessing the Impacts of Natural Resource Management Research*, B. Shiferaw and H.A. Freeman (eds.). A summary of the proceedings of an International Workshop, 6-7 Dec 2002, International Crops Research Institute for the Semi-Arid Tropics (ICRISAT), Patancheru, India.

Hazell, P.B.R., **P. Jagger** and A. Knox. 2000. *Technology, Natural Resource Management and the Rural Poor*. IFAD Working Paper. Rome, Italy: International Fund for Agricultural Development.

**Jagger, P.**, A. Wellstead, and W. White. 1998. *An Expenditure Based Analysis of Community Dependence: A Case Study of the Foothills Model Forest*. CFS and Foothills Model Forest Socioeconomic Publications. Edmonton, AB: Canadian Forest Service.

#### **UNDER REVIEW (7)**

Call, M.<sup>‡</sup> and **P. Jagger**. Social Capital, Collective Action and Communal Grazing Lands in Uganda. Under review at *International Journal of the Commons*.

Duchelle, A.E., de Sassi, C., **Jagger, P.**, Cromberg, M., Larson, A.M., Sunderlin, W.D., Resosudarmo, I.A.P., Pratama, C.D. Carrots and sticks in REDD+ implementation: Implications for social safeguards. Submitted to *Ecology and Society*.

**Jagger, P.** and N. Kittner<sup>†</sup>. Deforestation and Biomass Fuel Dynamics in Uganda. Revised and resubmitted at *Biomass and Bioenergy*.

**Jagger, P.** and C. Perez-Hydrich. Land Use and Biomass Fuel Dynamics in Malawi. Under review at *Environmental Research Letters*.

**Jagger, P.** and P. Rana<sup>†</sup>. Using Publically Available Social and Spatial Data to Quantitatively Assess Social Impacts of Early REDD+ Activities in Kalimantan, Indonesia. Submitted to *Global Environmental Change*.

Mason Meier, B., Das, I.<sup>‡</sup>, and **Jagger, P.** A Burning Opportunity: Using Human Rights as a Catalyst for Policies to Mitigate the Health Risks of Household Air Pollution. Submitted to *PLOS ONE*.

Sills, E.O., de Sassi, C., Sunderlin, W.D., **Jagger, P.**, Lawlor, K.<sup>‡</sup>, Miteva, D., and Pattanayak, S.K. Building the Evidence Base for REDD+: Evaluating the Impacts of Conservation Interventions on Human Welfare. Under review at *Global Environmental Change*.

#### **SELECTED WORKING PAPERS (5)**

Giezendanner, E.<sup>‡</sup>, **P. Jagger**, C. Jumble<sup>§</sup> and V. Flax. Exploring the Household Air Pollution and Nutrition Nexus in Malawi.

**Jagger, P.**, and M.K. Luckert. How Forest Tenure Mediates Household Welfare.

**Jagger, P.**, L. Hamrick<sup>‡</sup>, T. Phwandaphwanda<sup>§</sup> and J. Pedit. Relative Fuel Efficiency, CO and PM2.5 Emissions from Wood-Burning Cook Stoves in Malawi: Implications for Climate, Health, and Environment.

**Jagger, P.**, S. Sellers<sup>‡</sup>, N. Kittner<sup>‡</sup>, and I. Das<sup>‡</sup>. Medium-Term Impacts of Community Management Agreements in Uganda's Rwenzori Mountains National Park.

Wiener, S.<sup>‡</sup>, E.O. Sills, W. Twine and **P. Jagger**. Inter-generational Dimensions of Household Energy in Rural South Africa.

#### **INVITED TALKS, CONFERENCE AND WORKSHOP PAPERS**

*Can Inyenyeri Deliver a Cleaner Energy Solution to Rwanda?* Sustainable Energy Transitions Workshop, Duke University, Durham, NC 2016

*Explorations in Mitigating Household Air Pollution Exposure in Sub-Saharan Africa* United States Environmental Protection Agency, Durham, NC 2016

*Using Publically Available Social and Spatial Data to Quantitatively Assess Social Impacts of REDD+ in Kalimantan* International Society of Forest Resource Economics, Raleigh, NC, 2016



*Land Use and Biomass Fuel Dynamics in Malawi*

Population Association of America Annual Conference, Washington, DC, 2016

*Enhancing Adoption and Sustained Use of Improved Cookstoves in Malawi and Rwanda*

Global Alliance for Clean Cookstoves Biannual Forum, Accra, Ghana, 2015

*The Challenge of Household Air Pollution in Sub-Saharan Africa*, Demography Daze, Chapel Hill, NC, USA, 2015; Baraza Lecture Series, University of Florida, Gainesville, FL, USA, 2015

*New Insights into Biomass Reliance and Human Welfare*, Environment for Development (EfD) Workshop on Energy Gaps and Transitions, Debre Zeit, Ethiopia, 2015

*What Does Cooking have to do with Climate?* UNC Climate Symposium, Chapel Hill, NC, USA, 2015

*Stoves vs. Sugar: Willingness to Adopt Improved Cookstoves in Malawi*, Engineers in Technical and Humanitarian Opportunities of Service (ETHOS) Conference, Kirkland, WA, USA, 2015

*Does Tenure Mediate Forest Income? Findings from a Global Study on Forests and Livelihoods* International Union of Forestry Research Organizations (IUFRO) International Conference, Salt Lake City, UT, USA, 2014

*Evaluating the Impacts of REDD+ Pilots and Preparation in Sub-Saharan Africa*, Making Impact Evaluation Matter: Better Evidence for Policies and Programs (ADB and 3IE), Manila, Philippines, 2014

*The Health and Welfare Impact of Biomass Burning in Malawi*, NIEHS Symposium on Assessing Exposures and Health Effects Related to Indoor Biomass Fuel Burning, Research Triangle Park, NC, USA, 2014

*Environmental Income and Rural Livelihoods: Findings from a Global Comparative Study on Forests and Livelihoods*, Tropical Agricultural Research and Higher Education Center (CATIE), Turrialba, Costa Rica, 2015; International Symposium on the Dynamics of Coupled Natural-Human Systems, Wuhan, China, 2014

*Forest Use, Energy and Livelihoods: Emerging Questions for East and Southern Africa* Center for International Forestry Research, Lusaka, Zambia, 2014; FAO Sub-regional Office for Southern Africa, Harare, Zimbabwe, 2014

*Willingness to Adopt Improved Cookstoves in Malawi* Energy for Development (EnDev) Regional Meeting (Keynote), Mulanji, Malawi, 2014

*Sustainability and Welfare Impacts 10 Years After Uganda's Forest Governance Reform* Central African Forests and Institutions Workshop, UNESCO, Paris, France, 2013

*Land Use Change, Fuel Use and Health Outcomes in Western Uganda* Population Association of America Annual Meeting, New Orleans, LA, USA, 2013

*Environmental Income and Rural Livelihoods: A Global Comparative Analysis* North Carolina State University, Raleigh, NC, USA, 2013

*Population, Land Use and Health Dynamics of Biomass Fuel Use in Sub-Saharan Africa*  
UNC Flash Seminar, University of North Carolina, NC, USA 2013; Carolina Population Center, University of North Carolina, NC, USA 2012

*Taxes and Bribes in Uganda* Midwestern African Political Economy Group, Duke University, NC, USA, 2012

*Does Tenure Mediate Forest Reliance? Observations from a Global Study on Forests and Poverty* International Association for Agricultural Economists Triennial Conference, Foz do Iguacu, Brazil, 2012

*Land Use Change, Biomass Consumption and Health Outcomes in Western Uganda*  
Population Association of America Annual Meeting, San Francisco, CA, USA, 2012  
*Knowing Your (Forest) Rights: Clarity and How It Relates to Harvesting Behavior*  
Midwestern African Political Economy Group, Northwestern University, IL, USA, 2011;  
Workshop on Land Tenure and Forest Carbon Management, Land Tenure Center, University of Wisconsin Madison, USA, 2011

*Forest and Environmental Income: Testing Conventional Wisdoms of Poverty, Tenure, and Access* Counting on the Environment: The Contribution of Forests to Rural Livelihoods, Royal Society, London, UK, 2011; Exploring the Forest-Poverty Link, New Research Findings, University of East Anglia, Norwich, UK, 2011

*Household Income, Inequality and Poverty Outcomes for Migrant Pit-saw Loggers*  
Department of Geography, University of North Carolina at Chapel Hill, Chapel Hill, North Carolina, USA, 2011; Population Association of America Annual Meeting, Washington, DC, USA, 2011; AMA BASIS CRSP Workshop on Policy Oriented Research for Improved Policy Making, 2010; Makerere, University, Kampala, Uganda, 2010; Center for International Forestry Research, Bogor Indonesia, 2010

*A Guide to Learning about Livelihood Impacts of REDD+ Projects* Assessing Social Impacts in National REDD Programs: Exploring Options, CARE Workshop, London, UK, 2011; CIFOR Seminar, UNFCCC Conference of the Parties (COP) 16, Cancun, Mexico, 2010

*Forest Incomes after Uganda's Forest Sector Reform: Are the Poor Gaining?* American Association for Agricultural Economics, Pittsburgh, PA, USA, 2011; Curriculum on the Environment and Ecology Seminar Series, University of North Carolina at Chapel Hill, Chapel Hill, North Carolina, USA, 2010; Conference on Institutions, Behavior and the Escape from Persistent Poverty, Cornell University, Ithaca, New York, USA, 2009

*What Scope for Collaborative Management Agreements to Improve Environmental Income? The Case of Rwenzori Mountains National Park, Uganda* Department of Public Policy, University of North Carolina at Chapel Hill, Chapel Hill, North Carolina, USA, 2010; Workshop on the Workshop (WOW4), Indiana University, Bloomington, Indiana, USA, 2009

*Renegotiated Property Rights and Livelihood Outcomes after Uganda's Forest Sector Reform*  
12<sup>th</sup> Biennial Conference of the International Association for the Study of the Commons, Cheltenham, England, 2008

*What Should We Really be Asking? A Comparison of Methods for Understanding Rural Livelihoods* Carolina Population Center, University of North Carolina at Chapel Hill, Chapel Hill, North Carolina, USA, 2010; 12<sup>th</sup> Biennial Conference of the International Association for the Study of the Commons, Cheltenham, England, 2008; Center for International Forestry Research, Poverty Environment Network Workshop, Barcelona, Spain, 2008

*Forest Sector Reform and Rural Livelihood Outcomes in Western Uganda* Michigan State University, East Lansing, Michigan, USA, 2009; University of North Carolina, Chapel Hill, North Carolina, USA, 2008; Queen's University, Kingston, Ontario, Canada, 2008; 12<sup>th</sup> Biennial Conference of the International Association for the Study of the Commons, Cheltenham, England, 2008; Faculty of Forestry and Nature Conservation, Makerere University, Kampala, Uganda, 2008; Center for International Forestry Research, Bogor, Indonesia, 2008

*Livelihoods and Sustainability after Uganda's Forest Sector Reform* Colloquium, Workshop in Political Theory and Policy Analysis, Bloomington, IN, USA 2008; Workshop on Forest Governance and Decentralization in Africa, Durban, South Africa, 2008; Rights and Resources Group, Washington, DC, USA, 2008; Department of Agricultural Economics, Purdue University, West Lafayette, IN, USA, 2008

*Negotiating Rights after Uganda's Forest Sector Governance Reform* 11<sup>th</sup> Biennial Conference of the International Association for the Study of Common Property, Bali, Indonesia, 2006

*Bureaucratic Incentives and Decentralizing Forest Management: A Preliminary Test of Hypotheses* Annual Meeting of the Midwest Political Science Association, Chicago, IL, USA, 2006; Annual Meeting of the African Studies Association, Washington, DC, USA, 2005

*Decentralization Reforms and Forests in Sub-Saharan Africa: Implications for Equity* Annual Meeting of the African Studies Association, New Orleans, LA, USA, 2004

*Equity and Accessibility of Rural Public Services: A Comparative Institutional Analysis of Local Governance in Brazil and Uganda* Annual Meeting of the American Political Science Association, Chicago, IL, USA, 2004

*Woodlot Devolution in Northern Ethiopia: Opportunities for Empowerment, Smallholder Income Diversification and Sustainable Land Management* International Conference on Rural Livelihoods, Forests and Biodiversity, Bonn, Germany 2003

*Motivating Smallholder Investment in Sustainable Land Management: Emerging Roles for NGOs and CBOs in Uganda* International Symposium on Society and Natural Resources, Bloomington, IN, USA, 2002; Regional Conference for Policies for Sustainable Land Management in the East African Highlands, United Nations Economic Commission for Africa, Ethiopia, 2002; Workshop on Improved Policies for Sustainable Land Management in Uganda, Uganda, 2002

*Community and Private Tree Planting for Sustainable Land Management and Improving Rural Livelihoods in Tigray, Ethiopia – Understanding the Trade-offs* Regional Workshop on Sustainable Land Management Policies in the Highlands of Tigray, Ethiopia, 2002

*Evolving Roles for Programs and Organizations: Promoting Sustainable Land Management in Rural Uganda* Policies for Improved Land Management in Uganda Policy Workshop, Uganda, 2001

*The Role of Trees for Sustainable Management of Less Favored Lands: The Case of Eucalyptus in Ethiopia* International Conference on Land Management, Danbury Park, Essex, UK, 2001; Seminar on Policies for Sustainable Land Management in the Ethiopian Highlands, International Livestock Research Institute, Ethiopia, 2000

*Markets, Marketing and Production – Issues for Aquaculture in Sub-Saharan Africa: The Case of Uganda* Annual Meeting of the International Institute of Fisheries Economics and Trade, Corvallis, OR, USA, 2000

*El Niño, Ice Storms and the Market for Residential Fuel Wood in Eastern Canada and the Northeastern US* Resources for the Future, Forest Policy and Economics Annual Advisory Board Meeting, Washington, DC, USA, 1999

## TEACHING ACTIVITIES AND ADVISING

### GRADUATE COURSES

PLCY 717 – Political Institutions: Macro-Level Processes, Nesting, and Institutional Dynamics; Spring 2015 (19 students); Spring 2013 (11 students); Spring 2012 (13 students)

### UNDERGRADUATE COURSES

PLCY/ENST 520 – Environment and Development; Spring 2012 (34 students); Spring 2010 (32 students)

PLCY 474/ENST 490 – Political Economy of Food; Spring 2016 (45 students); Spring 2015 (28 students); Fall 2011 (45 students); Fall 2010 (32 students)

PLCY 691/691H – Research Design for Public Policy (16 students, 4 Honors)

### POSTDOCTORAL ADVISING

Dr. Pushpendra Rana (2013-2014)

*Exploring Methods for Integration of Social and Spatial Data to Evaluate REDD+ Social Safeguards*

### GRADUATE ADVISING

#### Completed

Ashley Chaifetz – Ph.D. Public Policy, **Advisor** (2015)

*The Food Safety Policy Gap: Essays on Emergency Food in North Carolina*

Kim Engie – Ph.D. Geography, Committee (2015)

*Adaptation and Shifting Livelihoods in the Small-Scale Fisheries of the Galapagos Marine Reserve, Ecuador*

Susan Caplow – Ph.D. Curriculum for the Environment and Ecology, **Advisor** (2014)

*The Communication of Values, Beliefs, and Norms in Live Animal Interpretive Experiences: A Comparative Case Study*

Christopher Galik – Ph.D. Forestry and Environmental Resources (NCSU), Committee (2014)

*Institutional Design and Decision-Maker Response: An Investigation of Environmental Policy and Research*

Esther Giezendanner – M.P.H. Nutrition, Committee (2014)

*Exploring the Nutrition-Household Air Pollution Nexus in Rural Malawi*

Hiwot Menker Girma – Ph.D. Environmental Economics (University of Pretoria), Committee (2014)

*Drivers of Land Use Change and Forest Conservation under Uncertain Markets for Forest Ecosystem Services in Ethiopia*

Timothy Smith – M.Sc. Agricultural Economics (Purdue University), Committee (2014)

*Understanding Childhood Nutrition in Nepal: A Hierarchical Regression Approach*

Sarah Wiener – M.Sc. Forestry and Environmental Resources (NCSU), Committee (2014)

*Traditional Natural Resource Use and Modern Lifestyles in the Post-Apartheid Era: Age and Attitudinal Changes in Bushbuckridge, South Africa*

Jason Bremner – Ph.D. City and Regional Planning, Committee (2013)

*Population Mobility and Livelihood Diversification among Indigenous Peoples of the Ecuadorian Amazon*

Brian Miller – Ph.D. Curriculum for Environment and Ecology, Committee (2013)

*Linking conservation goals and outcomes: The social-ecological dynamics of drought resource management in East Africa*

Braden Ramage – M.Sc. Forestry and Environmental Resources (NCSU), Committee (2013)

*The Livelihood Impacts of Plantation Forestry in Mozambique*

### **In Process**

Maia Call – Ph.D. Geography, Committee

Averi Chakrabarti – Ph.D. Public Policy, **Advisor**

Ipsita Das – Ph.D. Public Policy, **Advisor**

Carolyn Huang – Ph.D. Public Policy, Committee

Natasha James – Ph.D. Forestry and Environmental Resources (NCSU), Committee

Sam Sellers – Ph.D. Curriculum for Environment and Ecology, **Advisor**

Sierra Woodruff – Ph.D. City and Regional Planning, Committee

George Omiat – Ph.D. Agricultural Economics (Purdue University), Committee

### **UNDERGRADUATE HONORS THESES (ADVISOR)**

Sangeetha Kumar – Honors Environmental Science (2015)

*Determinants of Exposure to Household Air Pollution in Rural Malawi*

Morgan Abbott – Honors Public Policy (2012)  
*The Impact of the Hague Convention on Protection of Children and Co-Operation in Respect of Inter-country Adoption as a Policy Intervention on Legal Adoption in Sub-Saharan Africa*

Eva Archer – Honors Global Studies (2012)  
*A Comparison of Multi-lateral and Local NGO Approaches to Agricultural Development in Cambodia*

Anna Gage – Honors Public Policy (2012)  
*Kids for Kids: HIV/AIDS and Microfinance Initiatives in Northern Uganda*

Justin Loiseau – Highest Honors Environmental Studies, Best Thesis Award (2012)  
*Effect of Development Classifications on Environmental Aid*

Vanessa Fixmer Oraiz – Honors Environmental Studies (2011)  
*Bamboo in the Philippines: A Study of the Cultural Implications of Climate Change Mitigation and Adaptation Strategies*

Samantha Surles – Highest Honors Public Policy, Best Thesis Award (2011)  
*A Comparison of County-level Allocations of Emergency Management Performance Grants (EPMGs) in North Carolina and Virginia*

Elinor Benami – Honors Economics (2010)  
*An Empirical Analysis of Sustainable Energy Portfolio Standard Effectiveness*

## GRANTS

- 2016 PI, National Science Foundation (NSF), Dynamics of Coupled Natural Human Systems Program, *CNH-L: Energy Transitions and Environmental Change in East and Southern Africa's Coupled Human, Terrestrial, and Atmospheric Systems* (\$1,599,883 USD)
- 2015 PI, United Nations Foundation/Global Alliance for Clean Cookstoves (GACC) *Evaluating Sustained Adoption of Inyenyeri's Improved Stove and Fuel Initiative in Rwanda* (\$255,000 USD)
- 2014 PI, International Social Science Council (ISSC) Transformative Knowledge Network (TKN) Seed Grant, *Forest Use, Energy and Livelihoods Transformative Knowledge Network (FUEL-TKN)* (\$39,000 USD)
- 2014 Co-Investigator, National Institutes of Health (NIH), National Institute of Environmental Health Sciences (NIEHS), *The Health and Poverty Effects of a Large-scale Cookstove Initiative in Rwanda* (\$2,640,607 USD)
- 2014 PI, International Initiative for Impact Evaluation (3IE) Climate Change and Disaster Risk Reduction Thematic Window, Proposal Preparation Grants *Evaluating Uganda's REDD+ Program* (\$20,000 USD)

- 2013 Co-PI, National Science Foundation (NSF), Dynamics of Coupled Human and Natural Systems, *The Effects of China's Grain-for-Green Program on the Dynamics of Coupled Natural-Human System in Rural China* (\$1,165,000 USD)
- 2012 PI, National Institutes of Health (NIH), National Institute of Child Health and Human Development (NICHD), K01 Mentored Research Scientist Development Award *Population, Environment and Health Dynamics of Biomass Fuel Use in Sub-Saharan Africa* (\$644,986 USD)
- 2012 PI, National Institutes of Health (NIH), National Institute of Child Health and Human Development (NICHD), Administrative Supplement for *Health Impacts of Household Air Pollution on Women's Health and Child Survival* (\$185,289 USD)
- 2010 Co-PI, Research Triangle Institute - University Collaboration Fund (\$14,200 USD)
- 2010 PI, Core Support to FUEL Lab, Center for International Forestry Research (CIFOR) (~\$80,000 USD – over 5 years)
- 2006 PI, Center for International Forestry Research (CIFOR), Poverty Environment Network (PEN) Grant (\$25,000 USD)
- 1996 International Development Research Council of Canada (IDRC), Value of Trees Project Award (\$12,000 CDN)

## PROFESSIONAL SERVICE

- 2014 – Elected Member, ISO Technical Working Group 4 on Social Impacts of Clean Cookstoves
- 2014 – Editorial Advisory Board, *World Development*
- 2011 – 2013 Section Leader, International Development, Agriculture and Applied Economics Association

### JOURNAL REVIEWER

*Africa Today; Agricultural Economics; Agriculture, Ecosystems and Environment; Agroforestry Systems; Climate Policy; Conservation Letters; Forests; Ecological Economics; Energy Policy; Environment and Development Economics; Geoforum; International Forestry Review; International Journal of the Commons; Journal of Applied Geography; Journal of Development Studies; Journal of Forest Economics; Journal of Policy Analysis and Management; Land Use Policy; PLOS One; Population and Environment; Regulation and Governance; Society and Natural Resources; World Development*

### GRANT REVIEWER

APPEAR (Austrian Partnership Programme in Higher Education & Research for Development); Royal Netherlands Academy of Arts and Sciences – Challenges Exploration Grant; United Kingdom, Natural Environmental Research Council, Ecosystems for Poverty

Alleviation (ESPA) Grant; International Food Policy Research Institute (IFPRI) – 2020  
Vision Network for East Africa; International Tropical Timber Organization (ITTO) – Pre-  
project Proposal Review for 33rd Session

**PROFESSIONAL ASSOCIATIONS**

Agriculture and Applied Economics Association  
International Association for the Study of the Commons  
Population Association of America