# 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**

- Pre-doctoral Research Associate, Department of Agricultural Economics, Purdue University, West Lafayette, IN, USA
  Visiting Researcher, Makerere University, Kampala, Uganda
  Research Assistant, Workshop in Political Theory and Policy Analysis, Indiana University, Bloomington, IN, USA
  Visiting Researcher, International Food Policy Research Institute (IFPRI), Environment and Production Technology Division, Washington, DC, USA
  Research Analyst, International Food Policy Research Institute (IFPRI), Environment and Production Technology Division, Washington, DC, USA
  Research Assistant, Resources for the Future (RFF), Energy and Natural Resources Division, Washington, DC, USA
  Gensultant World Bank, Development Working Crown, 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
- 1997Research Associate, Institute for Environmental Studies (IES), University of<br/>Zimbabwe, Harare, Zimbabwe
- 1996 1998 Economic Research Technician, Canadian Forest Service, Social Science Research Group, Edmonton, AB, Canada

PUBLICATIONS (# DENOTES STUDENT OR POST-DOC; § DENOTES DEVELOPING COUNTRY COLLABORATOR) PEER REVIEWED ARTICLES (35)

Call, M.<sup>†</sup> and **P. Jagger.** 2017. Social Capital, Collective Action and Communal Grazing Lands in Uganda. *International Journal of the Commons.* Forthcoming.

Duchelle, A.E., C. de Sassi, **P. Jagger**, M. Cromberg, A.M. Larson, W.D. Sunderlin, I.A.P. Resosudarmo<sup>§</sup> and C.D. Pratama<sup>§</sup>. 2017. <u>Balancing carrots and sticks in REDD+ implementation:</u> <u>Implications for social safeguards</u>. *Ecology and Society*. 23(3):2.

**Jagger, P**. and N. Kittner<sup>+</sup>. 2017. <u>Deforestation and Biomass Fuel Dynamics in Uganda</u>. *Biomass and Bioenergy*. 105: 1-9.

**Jagger, P**., J. Pedit, A. Bittner, L. Hamrick<sup>†</sup>, T. Phwandaphwanda<sup>§</sup>, and Charles Jumbe. 2017. Fuel Efficiency and Emissions of Wood-Burning Improved Cookstoves in Malawi: Implications for Scaling-up Cookstove Programs. *Energy for Sustainable Development.* Forthcoming.

**Jagger, P.** and P. Rana<sup>†</sup>. 2017. <u>Using Publicly Available Social and Spatial Data to Quantitatively</u> <u>Assess Social Impacts of Early REDD+ Activities in Kalimantan, Indonesia</u>. *Environmental Science and Policy*. 76: 59-69.

Mason Meier, B., I. Das<sup>†</sup> and **P. Jagger.** 2017. A Burning Opportunity: Using Human Rights as a Catalyst for Policies to Mitigate the Health Risks of Household Air Pollution. *Journal of Human Rights and Environment.* Forthcoming.

Sills, E.O., C. de Sassi, **P.Jagger**, K. Lawlor, D. Miteva, S.K. Pattanayak and W.D. Sunderlin. 2017. <u>Building the Evidence Base for REDD+: Evaluating the Impacts of Conservation Interventions on</u> <u>Human Welfare</u>. *Global Environmental Change*. 43:148-160.

Das, I.<sup>+</sup>, **P. Jagger** and K. Yeatts. 2016. <u>Biomass Cooking Fuels and Health Outcomes for Women in</u> <u>Malawi</u>. *EcoHealth*. October: 1-13.

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

**Jagger, P.** and C. Perez-Heydrich. 2016. <u>Land Use and Biomass Fuel Dynamics in Malawi</u>. *Environmental Research Letters.* 11: 1-14.

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

**Jagger, P.** and G. Shively. 2015. <u>Taxes and Bribes in Uganda</u>. *Journal of Development Studies* 51(1): 66-79.

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

Chaifetz, A.<sup>+</sup> and **P. Jagger**. 2014. <u>40 Years of Dialogue on Food Sovereignty: A Review and a Look</u> <u>Ahead.</u> *Global Food Security* 3: 95-81.

**Jagger, P**. 2014. <u>Clarity vs. Confusion: Property Rights and Forest Use in Uganda</u>. *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. <u>Multi-level Policy Dialogues and Actions: Challenges and Opportunities for</u> <u>National REDD+ Safeguards Monitoring, Reporting and Verification (MRV)</u>. *Forests* 5(9):2136-2162.

**Jagger, P.**, M.K. Luckert, A. Duchelle, J.F. Lund and W.D. Sunderlin. 2014. <u>Tenure and Forest</u> <u>Income: Observations from a Global Study on Forests and Poverty</u>. *World Development* 64(Supplement 1): S43-S55.

**Jagger, P.** and G. Shively. 2014. <u>Land Use Change, Fuel Use and Respiratory Health in Uganda</u>. *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. <u>Forest Sustainability and China's Sloping Land Conversion Program</u> (SLCP): A Comparison among Three Sites in Anhui, Hubei and Shanxi. *Forest Policy and Economics* 38: 161-167.

**Jagger, P**. 2012. <u>Environmental Income, Rural Livelihoods and Income Inequality in Western</u> <u>Uganda</u>. *Forests, Trees and Livelihoods* 21(2): 1-15.

**Jagger, P**., M.K. Luckert, A. Banana<sup>§</sup> and J. Bahati<sup>§</sup>. 2012. <u>Asking Questions to Understand Rural</u> <u>Livelihoods: Comparing Disaggregated vs. Aggregated Approaches to Household Livelihood</u> <u>Questionnaires</u>. *World Development* 40(9):1810-1823.

**Jagger, P**., G. Shively and A. Arinaitwe<sup>§</sup>. 2012. <u>Circular Migration, Small-scale Logging and</u> <u>Livelihoods in Uganda</u>. *Population and Environment* 34:217-234.

Caplow, S.<sup>+</sup>, **P. Jagger**, K. Lawlor<sup>+</sup> and E. Sills. 2011. <u>Evaluating the Land Use and Livelihood</u> <u>Outcomes of Early Forest Carbon Projects: Lessons for REDD+</u>. *Environmental Science and Policy* 14(2): 152-167.

Khundi,F.<sup>§</sup>, **P. Jagger**, D. Sserunkuuma<sup>§</sup> and G. Shively. 2011. <u>Income and Poverty Effects of</u> <u>Charcoal Production in Western Uganda</u>. *Forest Policy and Economics* 13: 199-205

Reyes-Garcia, V., V. Vadez, J. Aragón, T. Huanca and **P. Jagger**. 2010. <u>The Uneven Reach of</u> <u>Decentralization: A Case Study among Indigenous Peoples in the Bolivian Amazon</u>. *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. <u>Profits and Margins</u> <u>Along Uganda's Charcoal Value Chain</u>. *International Forestry Review.* 12(3): 270-283.

Bartley, T., K. Andersson, **P. Jagger** and F. van Laerhoven. 2008. <u>The Contribution of Institutional</u> <u>Theories to Explaining Decentralization of Natural Resource Governance</u>. *Society and Natural Resources* 21(2): 160-174.

**Jagger, P**. and M.K. Luckert. 2008. <u>Investments and Returns from Cooperative and Household</u> <u>Managed Woodlots in Zimbabwe: Implications for Rural Afforestation Policy</u>. *Land Use Policy* 25(1): 139-152.

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

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

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

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

**Jagger, P**. and J. Pender. 2001. <u>Markets, Marketing, and Production Issues for Aquaculture in East</u> <u>Africa: The Case of Uganda</u>. *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. <u>Implications of Co-Management for Benefits from Natural Resources for Rural Households in</u> <u>Northeastern Zimbabwe</u>. *Ecological Economics* 33(3): 369-381.

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

### **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. <u>REDD+ Safeguards in National Policy Discourse and Pilot Projects</u>. 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. <u>Forest Sector Reform, Livelihoods and Sustainability in Western Uganda</u>. 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. <u>Learning by Doing:</u> <u>Evaluating Impacts of REDD</u>. 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. <u>Influence of Programs and Organizations on the Adoption of</u> <u>Sustainable Land Management Technologies in Uganda</u>. 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. <u>The Division of Labor between Village, Household and Other</u> <u>Surveys</u>. 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. <u>Hiring, Training and Managing a Field</u> <u>Team</u>. 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>§</sup> and M. Wyman. 2011. Preparing for the

<u>Field: Managing and Enjoying Fieldwork</u>. 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.

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

**Jagger, P**., E.O. Sills, K. Lawlor<sup>†</sup>, and W.D. Sunderlin. 2010. <u>*A Guide to Learning about Livelihood Impacts of REDD+ Projects.*</u> 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. <u>Strategies for</u> <u>Sustainable Land Management and Poverty Reduction in Uganda</u>. IFPRI Research Report No. 133. Washington, DC: International Food Policy Research Institute.

**Jagger, P**. and J. Pender. 2003. <u>Impacts of Programs and Organizations on the Adoption of</u> <u>Sustainable Land Management Technologies in Uganda</u>. 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. <u>Woodlot Devolution in Northern Ethiopia:</u> <u>Opportunities for Empowerment, Smallholder Income Diversification, and Sustainable Land</u> <u>Management</u>. 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. <u>*Policies for Improved Land Management in Uganda.*</u> 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. <u>*Development Pathways and Land Management in Uganda: Causes and Implications.*</u> Environment and Production Technology Division Discussion Paper No. 85. Washington, DC: International Food Policy Research Institute.

**Jagger, P**. and J. Pender. 2000. <u>*The Role of Trees for Sustainable Management of Less Favored Lands:</u></u> <u><i>The Case of Eucalyptus in Ethiopia.*</u> Environment and Production Technology Division Discussion Paper No. 65. Washington, DC: International Food Policy Research Institute.</u>

**Jagger, P**., W. White, and R. Sedjo. 1999. <u>*El Niño, Ice Storms and the Market for Residential</u></u> <u><i>Fuelwood in Eastern Canada and the Northeastern US.*</u> RFF Discussion Paper No. 44. Washington, DC: Resources for the Future.</u>

### **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. <u>Technical Guidelines for</u> <u>Research on REDD+ Subnational Initiatives</u>. Bogor, Indonesia: Center for International Forestry Research.

**Jagger, P**. 2004. <u>Artisans of Political Theory and Empirical Inquiry: 30 Years of Scholarship at the</u> <u>Workshop in Political Theory and Policy Analysis</u>. Bloomington, IN: Workshop in Political Theory and Policy Analysis.

Pender, J., E. Nkonya, **P. Jagger**, D. Sserunkuuma<sup>§</sup>. 2003. <u>An Econometric Approach to NRM Impact</u> <u>Assessment: An Example from Uganda</u>. 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 (4)

**Jagger, P.,** I. Das.<sup>‡</sup>, S. Handa, L. Nylander-French, and K. Yeatts. Early Adoption of an Improved Household Energy System in Urban Rwanda. Under review at *EcoHealth*.

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

Song, C., R. Bilsborrow, **P. Jagger**, Q. Zhang<sup>†</sup>, X. Chen and Q. Haung. Fuelwood Use in Rural China: Do Forest Restoration and Conservation Programs Matter? Revised and resubmitted to *Ecological Economics*.

Treacy, P.<sup>+</sup>, **P. Jagger**, C. Song, Q. Zhang<sup>+</sup>, and R.E. Bilsborrow. Impacts of China's Conversion of Cropland to Forest Program on Migration and Household Income. Revised and resubmitted to *Environmental Management.* 

### SELECTED WORKING PAPERS (3)

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

J.Pedit, A. Bittner, I. Das, Z. Frolking, S. Handa, L. Nylander-French, K. Yeatts, and **P. Jagger.** Personal and Area Concentrations of CO and PM<sub>2.5</sub> in Charcoal-burning Households in Peri-urban Rwanda

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

# GRANTS

2017	PI and PIRE Director, National Science Foundation (NSF), Partnerships in International Research and Education (PIRE), <i>PIRE: Confronting Energy Poverty:</i>
	Building an Interdisciplinary Evidence Base, Network, and Capacity for
	Transformative Change (\$4,790,000 USD)
2017	PI, National Instituted of Health (NIH), Clean Cooking Implementation Science
	Network, Fogarty International Center (FIC), Inyenyeri Rwanda Household Energy
	System Case Study (\$20,000 USD)
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
	<i>REDD+ Program</i> (\$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)

# HONORS, FELLOWSHIPS, AWARDS

#### External

2013	UJMT Fogarty Global Health Fellowship, Fogarty International Center, National Institutes of Health, <i>Tuberculosis and household air pollution from woody biomass use</i> <i>in Malawi: A Case-Control Study</i> (\$39,000 USD)
2012	National Science Foundation, Political Science Young Scholar's Award (\$25,000 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)
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)
1996	International Development Research Council of Canada (IDRC), Value of Trees Project Award (\$12,000 CDN)

#### University of North Carolina at Chapel Hill

- 2016Jimmy and Judy Cox Asia Initiative Travel Award, Carolina Asia Center (\$6,000 USD)
- Humphrey Award, Carolina Population Center (\$15,000)
  Seed Grant, Carolina Population Center (\$11,645 USD)
- 2012 Gillings School of Global Public Health, Explorations in Global Health Grant, (\$8,000
- USD)
- 2010 Social Science Seed Grant for Multidisciplinary Research, Odum Institute (\$12,500 USD)
- 2011 Carolina Population Center, Summer in Residence Fellowship (\$15,000 USD)

### Indiana University

- J. Stewart and Dagmar K. Riley Dissertation Year Fellowship (\$15,000 USD)
   Workshop in Political Theory and Policy Analysis, Dissertation Fellowship (\$7,500 USD)
- 2004 School of Public and Environmental Affairs (SPEA), Award for Excellence in Doctoral Research (\$500 USD)

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

*Reflections from the Field: Forests, Fuel, Poverty and Policy* Center of Research on Environmental Geography, Universidad Nacional Autonoma de Mexico, 2017 Women's Health and the Environment: Going Up in Smoke, 2017 Provost's Global Forum, University of Iowa, 2017 Transforming Household Energy Systems in Rwanda: Early Adopters and Impacts Forests and Livelihoods: Assessment, Research and Engagement (FLARE) 2<sup>nd</sup> Annual Conference, Edinburgh, Scotland, 2016 *Can Invenyeri 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 African Studies Center JAMA, Chapel Hill, NC, 2016 United States Environmental Protection Agency, Durham, NC, 2016 Using Publicly 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 Environment for Development (EfD) Annual Meeting, Pucon, Chile, 2016 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 Impacts 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 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

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, Washington, DC, USA, 1999

# **TEACHING AND ADVISING**

### GRADUATE COURSES

PLCY 717 – Institutional Analysis for Public Policy 2017 (14 students); 2015 (19 students); 2013 (11 students); 2012 (13 students)

### UNDERGRADUATE COURSES

PLCY/ENEC 520 – Environment and Development

- 2012 (34 students); 2010 (32 students)
- PLCY/ENEC 475 Political Economy of Food
- 2016 (45 students); 2015 (28 students); 2011 (45 students); 2010 (32 students)
- PLCY 691/691H Research Design for Public Policy
  - (16 students, 4 Honors)

#### **POSTDOCTORAL ADVISING**

- Dr. Ther Aung, UNC-CH (2017 Present) Energy Transitions and Environmental Change in East and Southern Africa's Coupled Human, Terrestrial, and Atmospheric Systems
- Dr. Pushpendra Rana, UNC-CH (2013-2014) *Exploring Methods for Integration of Social and Spatial* Data to Evaluate REDD+ Social Safeguards

### **GRADUATE ADVISING**

### Completed

- Maia Call Ph.D. Geography, Committee (2017) *Rural Livelihoods and Environmental Change in Uganda*
- Sam Sellers Ph.D. Curriculum for Environment and Ecology, **Advisor** (2017) *Three Essays on Population, Health and Environmental Linkages: Evidence from South America, Sub-Saharan Africa, and Southeast Asia*
- Qi Zhang Ph.D. Geography, Committee (2017) Social-ecological Impacts of China's Payments for Ecosystem Services Program on Land Use, Migration, and Livelihoods
- Sierra Woodruff Ph.D. Environment and Ecology (UNC-CH), Committee (2017) *Local Climate Adaptation in the United States*
- Mutekwa Vurayai Ph.D. Faculty of Science (Rhodes University), External (2017) Forest Governance, Conservation and Livelihoods: The Case of Protected Forests and Forest-Adjacent Communities in North-Western Zimbabwe
- George Omiat Ph.D. Agricultural Economics (Purdue University), Committee (2016) *Economic* Development and Child Nutrition in Uganda
- Carolyn Huang Ph.D. Public Policy (UNC-CH), Committee (2015) Sub-Saharan African Social and Health Policies of the Poor: Essays Examining Impacts of Public Program on Mental Health Utilization, Children's Health, and Household Consumption
- Ashley Chaifetz Ph.D. Public Policy (UNC-CH), **Advisor** (2015) *The Food Safety Policy Gap: Essays* on Emergency Food in North Carolina
- Kim Engie Ph.D. Geography (UNC-CH), 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 (UNC-CH), 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 (UNC-CH), Committee (2014) *Exploring the Nutrition-Household Air Pollution Nexus in Rural Malawi*
- Hiwot Menker Girma Ph.D. Environmental Economics (University of Pretoria), External (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 (UNC-CH), Committee (2013) Population Mobility and Livelihood Diversification among Indigenous Peoples of the Ecuadorian Amazon

- Brian Miller Ph.D. Curriculum for Environment and Ecology (UNC-CH), 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**

Ipsita Das - Ph.D. Public Policy, Advisor

Natasha James – Ph.D. Forestry and Environmental Resources (NCSU), Committee Sandeep Kandikuppa – Ph.D. Curriculum for Environment and Ecology, **Advisor** 

#### **UNC-CH UNDERGRADUATE HONORS THESES (ADVISOR)**

Alexandra Huber – Honors Public Policy (2017) – Assessing the Financial Sustainability of Small-Scale Farms in North Carolina

- Samantha Night Honors Public Policy (2016) *Measuring the Right to Food: A U.S. Policy Perspective*
- 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

# **PROFESSIONAL SERVICE (EXTERNAL)**

- 2014 Editorial Advisory Board, World Development
- 2017 Clean Cooking Implementation Science Network (NIH, USAID, CDC and Global Alliance for Clean Cookstoves)
- 2014 Elected Member, ISO Technical Working Group 4 on Social Impacts of Clean Cookstoves
- 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**

National Science Foundation, Dynamics of Coupled Natural Human Systems Program, USA Austrian Partnership Programme in Higher Education and Research for Development (APPEAR) Royal Netherlands Academy of Arts and Sciences – Challenges Exploration Grant Natural Environmental Research Council, Ecosystems for Poverty Alleviation (ESPA) Grant, UK International Food Policy Research Institute (IFPRI), Strategic Innovation Fund International Food Policy Research Institute (IFPRI), 2020 Vision Network for East Africa International Tropical Timber Organization (ITTO)

#### **PROFESSIONAL ASSOCIATIONS**

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

# UNIVERSITY SERVICE (UNC-CH)

2017 - 2022	Carolina Population Center (CPC) Advisory Council
2015 - 2020	Advisory Board, African Studies Center
2012 -	Convener Carolina Climate Change Scientists
2017 - 2019	Faculty Grievance Committee (Elected)
2016 -	Advisory Committee, International Student and Scholar Experience
2015 -	Advisory Committee, Graduate Certificate in Natural Hazards Resilience
2014 - 2017	Director of Graduate Admissions, Department of Public Policy
2014 - 2016	Faculty Grievance Committee (Elected)
2015 - 2017	Campus Wide Environmental Task Force
2016	Search Committee Chief International Officer
2016	Interim Director of Graduate Studies, Department of Public Policy
2016	Selection Committee, African Studies Center FLAS
2015 - 2017	Carolina Population Center Training Committee
2015	Campus Wide Environmental Task Force, Research Subcommittee Chair
2014 - 2017	Faculty Advisory Committee – Institute for the Environment