

SUHYUN JUNG

Assistant Professor

Division of Resource Economics and Management

West Virginia University

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EDUCATION

- Ph.D.** in Applied Economics, University of Minnesota 2009 – 2015
Dissertation: “Toward Efficient Land-Use Decisions: Impact of Economic Incentives on Ecosystem Services”
Principal Advisor: Stephen Polasky
- M.S.** in Agricultural Economics, University of Tennessee 2007 – 2009
- B.S.** in Food and Resource Economics, Korea University 2001 – 2007
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ACADEMIC POSITIONS

Assistant Professor, West Virginia University 2019 – Current

- *Environment-development dynamics and underlying mechanisms*
 - Impact evaluation of conservation and development policies and analyses of microeconomic mechanisms for sustainable development in low-income countries and the U.S.
- *Natural, social, and human capital as drivers of resource management behaviors and coping strategies*
 - How existing or enhancing different types of capital assets affects how households use natural resources impacts the environment and local livelihoods.

Research Fellow, University of Michigan 2015 – 2019

- *Livelihood Implications of Conservation and Development Projects/Policies*
 - Environmental registry program in Brazil and forestry intervention programs in Ghana
 - Large-Scale Land Transactions as Drivers of Land-Cover and Livelihood Changes in Sub-Saharan Africa – Impacts of land transactions on land cover and livelihoods and mechanisms behind them in Ethiopia, Liberia, and Tanzania

Research Assistant, University of Minnesota 2009 – 2015

- *The Responsible Soy Project in Brazil* - Quantitative and qualitative analysis on the impact of the Responsible Soy project, a collaboration between Cargill and The Nature Conservancy in Brazil
- *Impact of Rapid Land-Use Change in the Northern Great Plains* - Develop a framework to predict land use change and conduct an analysis of ecosystem services resulting from various conservation policy changes
- *Natural Capital Project* - Create global agricultural production cost data to calculate the opportunity cost of land for conservation
- *Minnesota Extension Project* - Econometric analysis of employment, commuting, and labor force

changes in non-metropolitan Minnesota

Research Assistant, University of Tennessee

2007 – 2009

Evaluate environmental amenity values through a hedonic housing price model using spatial regressions, investigate interrelationship between urban sprawl and poverty and impact of government funding policies to mitigate poverty in the southern US

Summer Intern, I&S Business Consulting Group, Korea

Summer 2007

Develop agri-tourism and ways to improve marketing of agricultural products for Rural Community Development Project issued by the Korean Ministry of Agriculture

Peer-reviewed Journal Papers

1. Liao, C., **Jung, S.**, Agrawal, A., Brown, D. 2020. “Spatial Patterns of Large-Scale Land Transactions and Socio-Environmental Outcome Scenarios: Evidence from Cambodia, Ethiopia, Liberia and Peru” *Land Degradation & Development* 31(10): 1241-1251.
2. Rasmussen, L. V., Rhemtulla, J., Fagan, M. E., Ickowitz, A., Wood, S.L.R., Kennedy, G., Powell, B., Baudron, F., Gergel, S., Groot, J.C.J., **Jung, S.**, Smithwick, E.A.H., Sunderland, T., Wood, S. 2020. “Forest Pattern, not Just Amount, Influences Dietary Quality in Five African Countries” *Global Food Security* 25:100331.
3. **Jung, S.**, Liao, C., Agrawal, A., Brown, D. G. 2019. “Evidence on Wealth-Improving Effects of Forest Concessions in Liberia” *Journal of Association of Environmental and Resource Economists* 6(5): 961-1000.
4. **Jung, S.**, Polasky, S. 2018. “Partnerships to Prevent Deforestation in the Brazilian Amazon” *Journal of Environmental Economics and Management* 92: 498-516.
5. **Jung, S.** 2018. “Evidence on Land Deals’ Impacts on Local Livelihoods” *Current Opinion in Environmental Sustainability* 32: 90-95.
6. Rasmussen, L. V., **Jung, S.**, Brites, A. D., Watkins, C., Agrawal, A. 2017. “Understanding Smallholders’ Intended Deforestation Behavior Following Environmental Registry in Brazil” *Environmental Research Letters* 12: 094001.
7. **Jung, S.**, Rasmussen, L. V., Watkins, C., Newton, P., Agrawal, A. 2017. “Brazil’s National Environmental Registry of Rural Properties: Implications for Rural Livelihoods” *Ecological Economics* 136: 53-61.
8. Liao, C., **Jung, S.**, Brown, D. G., Agrawal, A. 2016. “Insufficient Research on Land Grabbing” *Science* 353(6295): 131.
9. Newton, P., Gomez, A., **Jung, S.**, Kelly, T., Mendes, T., Rasmussen, L. V., Reis, J., Rodrigues, R., Tipper, R., Horst, D., Watkins, C. 2016. Overcoming Barriers to Low Carbon Agriculture and Forest Restoration in Brazil: The Rural Sustentável project. *World Development Persp.* 4: 5-7.
10. **Jung, S.**, Cho, S., Roberts, R. K. 2014. “The Impact of Government Funding of Poverty Reduction Programs” *Papers in Regional Science* 94(3): 653-675.

11. Kovacs, K. F., Haight, R. G., **Jung, S.**, Locke, D. H. 2013. “The Marginal Cost of Carbon Abatement from Planting Trees in New York City” *Ecological Economics* 95:1-10.
12. Lambert, D.M., Cho, S., **Jung, S.** 2012. “Modification of the simultaneous least squares – Probit Nelson-Olson Covariance Estimator for Stratified Surveys” *Economics Letters* 116: 519-522.
13. Cho, S., **Jung, S.**, Roberts, R. K., Kim, S. 2012. “Interrelationship between Poverty and Urban Sprawl in the Southern United States” *Applied Economics* 44(11):1405-1416.
14. Cho, S., Kim, S., R., R. K., **Jung, S.** 2009. “Environmental Amenity Values over Space and Time in the Southern Appalachian Highlands” *Ecological Economics* 68:2646-2657.
15. Cho, S., **Jung, S.**, Kim, S. 2009. “Valuation of Forests: Spatial and Species Configurations in the Southern Appalachian Highlands” *Environmental Management* 43(4): 628-644.
16. Cho, S., Lambert, D. M., Kim, S., **Jung, S.** 2009. “Extreme Coefficients in Geographically Weighted Regression and Their Effects on Mapping” *GIScience & Remote Sensing* 46: 273-288.

Manuscripts under revision/review

17. **Jung, S.**, Dyngeland, C., Rausch, L., Laura V. R. “Brazilian Land Registry Impacts on Land Use Conversion” Revised and resubmitted, *American Journal of Agricultural Economics*.
18. **Jung, S.**, Rogers, M. “Call Me Maybe? The Impact of Mobile Phone Adoption on Jobs and Deforestation” Under review, *Journal of Development Economics*.
19. Liu, W., Agrawal, A, **Jung, S.**, Gerber, E. “The Role of Human and Social Capital in Earthquake Recovery in Nepal” Under review, *Nature Sustainability*.

Selected working papers

1. **Jung, S.**, Hajjar, R. “Improved Forest Management with Unintended Livelihood Impacts of Conservation Programs for Climate Change Mitigation: Evidence from Ghana”
2. **Jung, S.** “Increased Deforestation by Smallholders Following Land Registration in Brazil”
3. **Jung, S.**, Agrawal, A., Brown, D. “Environment and Development Tradeoffs from Agricultural Concessions in Liberia”
4. **Jung, S.** “How Much Did We Lose/Gain as a Result of New Soybean Export Outlet in the Northern Brazilian Amazon?”
5. **Jung, S.**, Polasky, S. “Construction of a Globally Consistent Agricultural Production Cost Data Set for the Calculation of Tradeoffs among Ecosystem Services”

Papers Presented at Professional Meetings (peer-reviewed only)

1. **Jung, S.**, Rogers, M. 2020. “Call Me Maybe? The Impact of Mobile Phone Use on Livelihoods through Land Cover Change” European Association of Environmental and Resource Economists. June 23 - July 3. Berlin_online, Germany.

2. **Jung, S.**, Hajjar, R. 2020. “Livelihood Impacts of Conservation Programs for Climate Change Mitigation by International Donors: Evidence from Ghana” Association of Environmental and Resource Economists. June 3 – June 5. Virtual Conference.
3. **Jung, S.**, Hajjar, R., Agrawal, A. 2018. “Evidence on Effectiveness of Conservation Initiatives on Improving Livelihoods” Sustainable Development Conference. November 9-11. Ann Arbor, Michigan.
4. **Jung, S.**, Polasky, S. 2018. “Private Initiatives’ Efforts to Prevent Deforestation in the Amazon” World Congress of Environmental and Resource Economists. June 25-29. Gothenburg, Sweden.
5. Rasmussen, L. V., **Jung, S.**, Brites, A. D., Watkins, C., Agrawal, A. 2017. “Understanding Smallholders’ Intended Deforestation Behavior Following Environmental Registry in Brazil” AAEA Annual Meeting. July 30 - August 1. Chicago, Illinois.
6. **Jung, S.**, Rasmussen, L. V., Rausch, L., Dyngeland, C. 2017. “An Environmental Registry as a Mechanism that Affects Land Cover and Livelihoods in Brazil” Association for Environmental and Resource Economists Annual Meeting. May 31-June 2, Pittsburgh, Pennsylvania.
7. **Jung, S.**, Liao, C., Agrawal, A., Brown, D. G. 2016. “Quantitative Impact Assessment of Forestry Concessions on Livelihoods in Liberia” FLARE meeting. December 2-4, Edinburgh, U.K., Land Transactions Workshop. April 20-21, Ann Arbor, Michigan.
8. **Jung, S.** 2015. “How Much Should We Compensate Farmers in Global South to Mitigate Climate Change while Meeting Increasing Food Demand?” Agricultural & Applied Economics Association Annual Meeting. July 26-28, San Francisco, California.
9. **Jung, S.** 2014. “Can Agricultural Multinationals Provide Ecosystem Services More Efficiently? PhD Workshop in Sustainable Development. Earth Institute, Columbia University. April 25-26. New York.
10. **Jung, S.**, Polasky, S. 2014. “The Effectiveness of Monitoring and Enforcement of Environmental Regulations by Agricultural Multinationals and NGOs in the Brazilian Amazon” Allied Social Science Associations – American Economic Association. January 3-5, Philadelphia, Pennsylvania.

GRANTS

Extensive experiences in writing grant proposals for grant opportunities such as Smart and Connected Communities (SCC) and Dynamics of Coupled Natural and Human Systems from the National Science Foundation (NSF), McIntire Stennis Research Program from United States Forestry Services (USFS), and other numerous international funding opportunities

- 2020: *VALUABLES*, National Aeronautics and Space Administration and Resources for the Future (co-PI with PI, Danielle Wood, MIT Media Lab) “Valuing the Use of Satellite Earth Observation for Informing Mangrove Management in Rio de Janeiro” – Research grant of \$75,000
- 2020: *Daniel C. & Elizabeth D. Brown Faculty Enhancement Grant*, Davis College of Agriculture, Natural Resource, and Design, West Virginia University “An Investigation of Sustainable

Development in West Virginia and Developing Countries that Fulfills the Research, Teaching, and Service Mission of the Davis College” – Research grant of \$8,000

- 2016 – 2018: *Dow Sustainability Postdoctoral fellowship, University of Michigan (PI)* – Research grant of \$15,000
- 2014 – 2015: *Interdisciplinary Center for the study of Global Change (ICGC) Global Food Security Fellowship, University of Minnesota (PI)* – Research grant of \$15,000;
- 2014: *Consortium Intramural Research Awards, University of Minnesota (PI)* – Research Grant of \$6,292 and Council of Graduate Students (COGS) Travel Grant of \$533
- 2013 – 2014: *Interdisciplinary Dissertation Grant (Fellowship), University of Minnesota (PI)* – hosted by the Institute on the Environment with full fellowship support including tuition, stipend (\$22,500), office space, plus a research grant of \$2,000
- 2011: *Center for International Food and Agricultural Policy Travel Grant, University of Minnesota (PI)* – travel grant of \$2,000 in support of dissertation research in Brazil

AWARDS/HONORS

- 2012: Graduate Program Fellowship - tuition and stipend benefits
- 2010: Litterman Fellowship - stipend benefit
- 2009: Outstanding MS Student Award - awarded to a student each year to recognize excellent academic achievement in the Agricultural and Resource Economics department

TEACHING

- **ARE 703** Advanced Natural Resource Economics for PhD students 2019 – 2021
ARE 410 Environmental and Resource Economics for Undergrads
(Instructor, West Virginia University)
- **Enumerator trainings/workshops** for survey data collection and experiments 2016 – 2019
(Instructor, Brazil, Ghana, and Liberia)
- **Econ 252: Principles of Microeconomics**
(Instructor, University of St. Thomas) 2014 – 2015
- **Numerical analysis software (MATLAB) course**
(Instructor, University of Minnesota) Summers 2010, 2011
- **ApEc5032: Economic Data Analysis for Managerial and Policy Decisions**
(Teaching Assistant, University of Minnesota) Spring 2010, 2013
- **ApEc1101: Principles of Microeconomics**
(Teaching Assistant, University of Minnesota) Spring 2010, 2013

SERVICE

Professional Affiliation

American Economic Association (AEA)

American Agricultural Economics Association (AAEA)

Association of Environmental and Resource Economists (AERE)

European Association of Environmental and Resource Economists (EAERE)

Research Fellow, International Center for Global Change (ICGC) 2014 – 2015

Interdisciplinary Doctoral Fellow, Institute on the Environment (IonE) 2013 – 2014

Contributions to Symposia, Workshops, and Annual Meetings

Topic leader, Resource Economics, AAEA 2020 – Current

Forest & Livelihoods: Assessments, Research, and Engagement (FLARE) 2015 – Current

Frontiers in the Environment seminar series, Institute on the Environment 2014 – 2015

Journal Reviewer

Journal of Environmental Economics and Management, World Development, Land Use Policy,
Papers in Regional Science, Sustainability, Journal of International Development, Biological
Invasions

Student Mentoring and Advising

Division of Resource Economics and Management, West Virginia University

Advising MS and Ph.D. students for research 2019 – Current

School for Environment and Sustainability, University of Michigan

Advising MS graduates for data management and research 2017 – 2019

Advising students in Doris Duke Conservation Scholars Program Summer, 2016

Department of Applied Economics, University of Minnesota

Mentor for incoming PhD students 2012 – 2015

International Student Representative 2010 – 2011