

ELINOR BENAMI

elinor@vt.edu

<https://elinorbenami.com>

APPOINTMENTS

- Assistant Professor, Virginia Tech** *Aug. 2020 - present*
Agricultural and Applied Economics Department
- Faculty Affiliate** *Summer 2020 - present*
Stanford Regulation, Evaluation, and Governance Lab
- Faculty Affiliate** *Spring 2021 - present*
VT Remote Sensing & Global Change Center Interdisciplinary Graduate Education Programs; Center for Advanced Innovation in Agriculture

EDUCATION & TRAINING

- Postdoctoral Scholar, University of California Davis** *Nov. 2018 - Aug. 2020*
Agricultural and Resource Economics Department
Mentor: Michael Carter
- Ph.D., Stanford University** *Fall 2018*
Emmett Interdisciplinary Program in Environment & Resources
Co-Advisors: Marshall Burke and Eric Lambin
Fields: Production Economics and Land System Science
- B.A., The University of North Carolina at Chapel Hill** *May 2010*
Economics, minor Environmental Studies & Sciences
Honors and Distinction, Phi Beta Kappa

PUBLICATIONS & PRESENTATIONS

Academic Manuscripts

- Benami, E., Anderson, B., La, V., Lin, H., D.E. Ho. *in prep.* “Drop a Line, Submit on Time? Evidence from a Randomized Control Trial on the Effect of Pre-Deadline Reminders on Pollution Discharge Reporting.”
- Benami, E., Zhenong J., Carter M.R., Hobbs, A.W. *in prep.* “Get in the Zone: The Risk-Adjusted Welfare Effects of Using Machine Learning vs. Administrative Borders to Define Agricultural Index Insurance Zones.”
- Benami, E., Carter, M. R. 2021. *Applied Economic Perspectives and Policy*. “Can Digital Technologies Reshape Rural Finance? Implications for Credit, Insurance, and Saving”
- Benami, E.*, Zhenong J.*, Carter M.R., Kenduiwo, B., Ghosh A., Hobbs, A.W., Hijmans R., and Lobell, D. 2021. *Nature Reviews Earth & Environment* “Uniting Advances in Remote Sensing, Crop Modeling, & Economics for Agricultural Risk Management.” *Joint first authors.
- Benami, E., Whitaker, R., Anderson, B., Ho D.E., La, V., Lin, H. *Peer-reviewed proceedings of the ACM Conference on Fairness, Accountability, and Transparency (FAccT)*. “The Distributive Effects of Risk Prediction in Environmental Compliance: Algorithmic Design, Environmental Justice, and Public Policy.”
- Hino, M.*, Benami, E.*, Brooks, N. October 2018. “Machine learning for environmental monitoring.” *Nature Sustainability*. *Joint first authors
- Benami, E., Curran, L.M., Cochrane, M., Venturieri, A., Swartos, A., Moraes Franco R., Kneipp, J.. March 2018. “Oil palm land conversion in Pará, Brazil, 2006-2014: Evaluating the 2010 Brazilian Sustainable Palm Oil Production Program.” *Environmental Research Letters*. 13(3): 1-12

Reports & Other Publications

- Benami, E., Ho, D.E., McDonough, A. Feb 2020. *Stanford Institute for Economic Policy Research: Policy Brief*. Innovations for environmental compliance: emerging evidence and opportunities.
- J. Zuckerman, J. Deason, E. Benami. 2013. "Targeting Proposition 39 to Help California's Schools Save Energy and Money" Climate Policy Initiative report
- E. Benami, J. Wilkinson. 2013. "Using Data Tools to Optimize Indonesia's Land Resources: An Overview of Natural Capital Assessment" Climate Policy Initiative report
- B. Pierpont, U. Varadarajan, A. Hobbs, E. Benami. 2013. "Improving Solar Policy: Lessons from the solar leasing boom in California" Climate Policy Initiative report

Selected Presentations

- "Sense and Sustainability: Applications of remote sensing for environmental risk management" for VT Remote Sensing Interdisciplinary Graduate Education Program *Feb '21*
- "AI for Clean Water: Modernizing Environmental Enforcement" ECOS Webinar For Practitioners *July '20*
- "Quality Standards & the Role of Earth Observation in Improving Index Insurance" at AGU *Dec '19*
- "Certifications, certainty, & satellites: evaluating programs to enhance farmer welfare & manage risk" at the University of Maryland, College Park *Dec '19*
- "Applications of Machine Learning to Public Problems: The Clean Water Act and beyond." Invited Talk at UC Berkeley Course on Data, Environment and Society *Nov '19*
- "Machine Learning for Environmental Monitoring - from Model to Field Trial" The Workshop on Environmental Economics and Data Science (*March 2019*) & CA Water Data Science Symposium *July '19*
- "Prospects for Oil Palm Expansion in Latin America" at the University of Leicester *July '18*
- "Recent Oil Palm Development in Brazil: Evaluating Expansion Dynamics and Constraints." Association of Tropical Biology and Conservation Annual Meeting in Kuching, Malaysia. *July '18*
- "Market Based Mechanisms for Environmental Governance: Opportunities & Limits." At Stanford. *May '18*
- "Towards Zero Deforestation Oil Palm? Evaluating the 2010 Sustainable Oil Palm Production Program & Brazilian Oil Palm Development (2006-2014)." *In Portuguese*. At EMBRAPA in Belém, Brazil. *Jan '18*
- "Studies in Supply Chain Governance in Tropical Agriculture: the Case of Oil Palm in Pará." *In Portuguese*. At the Brazilian National Institute for Space Research (INPE) in Belém do Pará, Brazil. *Dec '16*

SELECTED GRANTS, FELLOWSHIPS, & HONORS

AERE Scholar	<i>2022</i>
NASA Land-Cover and Land-Use Change (LCLUC) Early Career Scientist Grant, Co-Lead PI (\$449,560)	<i>2020 - 2023</i>
Stanford Impact Labs Grant for Modernizing Environmental Compliance, Co-PI (\$500,000)	<i>2020 - 2022</i>
Rising Environmental Leaders Program, Stanford University	<i>2018</i>
Preparing Future Professors Program, Stanford University & Foothill College	<i>2018</i>
NSF Dissertation Improvement Grant (\$15,945)	<i>2017</i>
E-IPER Summer Graduate Research Grant, Stanford University (total \$12,000)	<i>2014 - 2017</i>
McGee Levorsen Grant, Stanford School of Earth, Energy, & Environmental Sciences (\$6,000)	<i>2014 - 2015</i>
NSF Graduate Research Fellowship (\$96,000 + 3 years tuition)	<i>2013 - 2017</i>
Teresa Elms and Robert D. Lindsay IPER Fellowship (total \$64,000 + tuition)	<i>2013 - 2014</i>
UNC-Chapel Hill Order of the Golden Fleece	<i>2009</i>
Eve Marie Carson Scholar, UNC-Chapel Hill (One Year of Tuition and \$5,000 of Summer Funding Support)	<i>2009</i>
Morris K. and Stewart L. Udall Scholar (\$5,000)	<i>2008</i>

SELECTED PROFESSIONAL EXPERIENCE

Consultant, *Climate Policy Initiative* 06/2016 - 09/2016
Evaluated strategic opportunities for sustainable land use finance investments for philanthropic partners that have disbursed over \$200mil. to address social and environmental impacts of land uses.

Analyst, *Climate Policy Initiative* 12/2010 - 07/2013

- Conducted interviews and co-wrote report on ways that California public schools can target a newly authorized \$2.75bil. state fund for energy efficiency to save energy & money.
- Co-authored report on the role of the leasing model on California's solar deployment and costs.
- Contributed to development of organization's new tropical resource productivity program in Indonesia:
 - Wrote briefs on international tropical forest conservation programs, the eligibility of oil palm as a feedstock under the U.S. Renewable Fuel Standard, and ecosystem assessment processes.
 - Co-drafted \$2mil. grant on joint agricultural production and ecosystem protection project in Borneo.

SELECTED TEACHING

Remote Sensing in the Social Sciences Fall 2021 & 2022
Instructor of Record, Graduate Course, Virginia Tech

Environmental and Sustainable Development Economics Spring 2021 & 2022
Instructor of Record, Undergraduate Course, Virginia Tech

The Economics of Index Insurance Summer 2019
Co-Instructor of Short Course for Remote Sensing Specialists in Nairobi, Kenya

Environmental Governance Spring 2018
Teaching Assistant, Stanford University

ECON/ESS 106/206: World Food Economy Spring 2016
Teaching Assistant, Stanford University

SERVICE & COMMUNITY INVOLVEMENT

Reviewer: *Nature Communications*; *Journal of Environmental Economics and Management*; *Nature Communications Earth & Environment*; *Applied Economic Perspectives and Policy (AEPP)*; *Global Food Security*; *Public Administration*; *NeurIPS*, *Land Use Policy*; *Climatic Change*; *QOpen*; *Environmental Research Letters*; *Research Grant Reviews for Markets, Risk, & Resilience Innovation Lab*, *Submissions for Agricultural & Applied Economics Assoc. (AAEA)* & *European Assoc. of Agricultural Economists (EAAE)*

Co-convenor at AGU: *Bridging the Gap Between Science & Practice to Improve Understanding of Natural Peril Risk For Risk Transfer & Risk Finance* (2021); *Innovations in Risk Transfer Solutions using Earth Observations, Weather Data, Physical Models, and Short to Long Term Forecasts* (2020); *Advances in remote sensing, machine learning, and economics to improve risk management and evaluate impacts in socio-environmental systems* (2019)

Committees/University Service: *Departmental Diversity and Inclusion Committee* (2020-2021), *Seminar Speakers Committee* (2021-2023), *Computational Economics Search Committee* (2021-2022)

LANGUAGES*

English, native; **German**, advanced (C1 - C2), scored "very good/sehr gut" on Zertifikat Deutsch für den Beruf; **Brazilian Portuguese**, intermediate - advanced (B2 - C1); **Spanish & French**, basic - intermediate (A2 - B1); **Modern Hebrew & Indonesian**, basic (A1)

*Letter scale corresponds to Common European Framework of Reference for Languages

ADDITIONAL SKILLS

Proficient user of R, LaTeX, Google Earth Engine, GitHub, ArcGIS, ENVI, Stata

Last updated: June 2022