

MEHA JAIN

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EMPLOYMENT

- **University of Michigan, Assistant Professor**
School of Natural Resources and Environment. Starting Fall of 2016

EDUCATION

- **Stanford University, NSF-SEES Postdoctoral Fellow**
Department of Earth System Science. August 2014 to 2016.
Advisor: David Lobell
- **Columbia University, NSF-GRF Ph.D.**
Department of Ecology, Evolution, and Environmental Biology. Fall of 2008 to Summer 2014.
Advisors: Shahid Naeem and Ruth DeFries
- **Princeton University, A.B., with Honors**
Department of Ecology and Evolutionary Biology. Fall of 2003 to Spring 2007.
Advisor: Daniel Rubenstein

PUBLICATIONS

1. Fishman, R., **M. Jain**, A. Kishore (In Review). Patterns of migration, water scarcity, and caste in rural northern Gujarat.
2. Mondal, M., **M. Jain**, M. Zukowsk, G. Galford, R.S. DeFries (In Revision). Quantifying fluctuations in winter cropped area in the Central Indian Highlands.
3. **Jain, M.**, R.S. DeFries, S. Naeem, A.S. Jina, S.A. Wood, P. West, B. Orlove (In Revision). Adapting Adaptation Research: A Systematic Review of the Climate Adaptation Literature in the Agricultural Sector.
4. Feola, G., A.M. Lerner, **M. Jain**, M.J.F. Montefrio, K.A. Nicholas (2015). Understanding Farmer Behavior in Climate Change Adaptation and Sustainable Agriculture: Lessons Learned From Five Case Studies. *Journal of Rural Studies*. 35: 74-84.
5. **Jain, M.**, S. Naeem, B. Orlove, V. Modi, R.S. DeFries (2015). Understanding the Causes and Consequences of Differential Decision-Making in Adaptation Research: Adapting to a Delayed Monsoon Onset in Gujarat, India. *Global Environmental Change*. 31: 98-109.
6. Mondal, P., **M. Jain**, R.S. DeFries, G.L. Galford, C. Small (2015). Sensitivity of crop cover to climate variability: Insights from two Indian agro-ecoregions. *Journal of Environmental Management*. 148: 21-30.
7. Mondal, P., **M. Jain**, A.W. Robertson, G.L. Galford, C. Small, R.S. DeFries (2014). Winter crop sensitivity to inter-annual climate variability in central India. *Climatic Change*. 126: 61-76.

8. Wood, S., A. Jina, **M. Jain**, P. Kristjanson, R.S. DeFries (2014). Smallholder farmer cropping decisions related to climate variability across multiple regions. *Global Environmental Change*. 25: 163-172.
9. **Jain, M.**, Y. Lim, J.A. Arce-Nazario, M. Uriarte (2014). Perceptual and socio-demographic factors associated with household water treatment in rural Puerto Rico. *PLoS ONE*. 9(2): 1-8.
10. **Jain, M.**, D.F.B. Flynn, C.M. Prager, G.M. Hart, C.M. DeVan, F.S. Ahrestani, M.I. Palmer, D.E. Bunker, J.M.H. Knops, C.F. Jouseau, and S. Naeem (2014). The importance of rare species: A trait based assessment of the potential for rare species to contribute to ecosystem function in tall-grass prairies. *Ecology and Evolution*. 4(1): 104-112.
11. **Jain, M.**, P. Mondal, R.S. DeFries, C. Small, G.L. Galford (2013). Mapping cropping intensity of smallholder farms – a comparison of methods using multiple sensors. *Remote Sensing of Environment*. 134: 210-223.
12. Balvanera, P., M. Uriarte, L. Almeida-Lenero, A. Altesor, F. DeClerck, T. Gardner, J. Hall, A. Lara, P. Laterra, M. Pena-Claros, D.M.S. Matos, L.P. Romero-Duque, A.L. Vogl, L.F. Arreola, A.P. Caro-Borrero, F. Gallego, **M. Jain**, C. Little, R. de Oliveira Xavier, J.M. Paruelo, J.E. Peinado, L. Poorter, N. Ascarrunz, F. Correa, M.B. Cunha-Santino, A.P. Hernandez-Sanchez, M. Vallejos (2012). Ecosystem Services Research in Latin America: The state of the art. *Ecosystem Services*. 2: 56-70.
13. **Jain, M.***, C.B. Yackulic*, M. Fagan*, A. Jina, Y. Lim, M. Marlier, R. Muscarella, P. Adame, R.S. DeFries, M. Uriarte (2011). Biophysical and Socioeconomic Factors Associated with Forest Transitions at Multiple Spatial and Temporal Scales. *Ecology and Society*. 16(3): 15.
* first authorship was shared equally by the starred authors.
14. Odadi, W., **M. Jain**, S. Van Wieren, H.T. Prins, D.I. Rubenstein (2011). Facilitation between bovids and equids on an African savanna. *Evolutionary Ecology Research*. 13:237-252.
15. Flynn, DFP. N. Mirotchnick, **M. Jain**, M.I. Palmer, S. Naeem (2011). Functional and phylogenetic diversity as predictors of biodiversity-ecosystem-function relationships. *Ecology*. 92(8): 1573-1581.
16. Forbes, T., V. Goss, **M. Jain**, P.C. Burns (2007). Structure Determination and Infrared Spectroscopy of K(UO₂)(SO₄)(OH)(H₂O) and K(UO₂)(SO₄)(OH). *Inorganic Chemistry*. 26(18):7163-7168

FELLOWSHIPS AND GRANTS

- **National Science Foundation** Sustainability Postdoctoral Fellowship (SEES; \$487,020). Fall 2014 –2017.
- **Google Earth Engine Research Award** (\$62,867). Summer 2014-2015.
PIs: G. Galford, R.S. DeFries; Co-PIs: **M. Jain**, G. Fiske, P. Mondal
- **National Science Foundation** Doctoral Dissertation Improvement Grant (DDIG; \$14,488). Spring 2013 to Fall 2015.
- **National Science Foundation** Graduate Research Fellowship (NSF GRF; \$150,000). Fall 2009 to 2012.
- **National Geographic** Young Explorers Grant (\$5,000). Fall 2011

- **Advanced Consortium on Cooperation, Conflict, and Complexity** Fellow (\$3,000). Fall 2011
- **NASA Land Cover and Land Use Change Grant** (\$787,000) Summer 2011 to 2014. PIs: R.S. DeFries, C. Small, G. Galford; Collaborator: M. Lal, **M. Jain**
- **Compton Foundation** Mentor Fellowship (\$36,000). Fall 2007 to 2008.
- **Becky Colvin Fund**, Undergraduate Thesis Research (\$2,500). Summer 2006

AWARDS AND HONORS

- **CHANS (Coupled Human and Natural Systems) Fellow**. NSF CHANS-Net 2012
- **Voted Among Best TAs**, Columbia Spectator, Columbia University. 2011
- **Top Seminar Presentation**, Columbia University E3B Seminar. 2009, 2010.

TEACHING AND ADVISING EXPERIENCE

- **Teaching Assistant**, Columbia University. 2009 – 11
 Environmental Biology II (Introductory Biology for Undergraduates), Spring 2011
 Sustainable Development (Undergraduate), Fall 2010
 Environmental Biology I (Introductory Biology for Undergraduates), Fall 2009
- **Guest Lecturer**, Columbia University and American Museum of Natural History (AMNH). 2010-14
 Food Ecology and the Environment. Summer 2014
 Biodiversity and Climate Change, Columbia University. Spring 2013
 Undergraduate Conservation Biology, Columbia University, Spring 2010 – 2011
 High School Science Seminar, AMNH, Spring 2011
- **Tutor, Boys and Girls Club**. Menlo Park, CA. 2014-present.
- **Volunteer in Children's Discovery Room**, AMNH. 2008-13.
- **Girls' Science Day and Middle School Experiment Leader**, Columbia University. 2009-13
- **Graduate Student Advisory Council, Department Student Rep.**, Columbia University. 2008-14

PROFESSIONAL SERVICE AND SKILLS

- **Skills:** Software: Fluent in R, ArcGIS, ENVI, Amazon cloud computing, and APSIM Crop Modeling. Versed in Python, IDL, and NetLogo. Languages: Fluent - Hindi, Conversational - Gujarati, French.
- **Reviewer:** Global Change Biology, Global Environmental Change, Ecology Letters, Journal of Development Economics, Ecology and Society, Regional Environmental Change, Human Ecology, ICARUS 2012 (Conference Abstracts).
- **Member:** Sigma-Xi Society, Ecological Society of America (ESA), American Association of Geographers (AAG), American Geophysical Union (AGU), New York Academy of Sciences (NYAS).

SELECT PRESENTATIONS

- **2014 American Geophysical Union.** San Francisco, CA – Irrigation as an Adaptation Strategy to Rainfall Variability. Poster.
- **2013 American Geophysical Union.** San Francisco, CA – Mapping Cropping Intensity Using MODIS and Landsat. Invited Talk.
- **2013 NASA Land Cover Land Use Change Conference.** Rockville, MD – Mapping Cropping Intensity of Smallholder Farms in South Asia. Poster.
- **2012 American Geophysical Union.** San Francisco, CA – Mapping Agricultural Vulnerability to Climate Variability in Northwest India. Poster Presentation.
- **2012 ICARUS Adaptation Conference.** Columbia University – Mapping Agricultural Vulnerability to Climate Variability in Northwest India. Oral Presentation.
- **2012 Interdisciplinary Ph.D. Workshop in Sustainable Development.** Columbia University – Mapping Agricultural Vulnerability to Climate Variability in Northwest India. Oral Presentation.
- **2012 NASA Land Cover Land Use Change Conference.** Rockville, MD – Mapping Cropping Intensity of Smallholder Farms in South Asia. Poster.
- **2012 Governance of Adaptation Symposium.** Amsterdam, Netherlands – Framework for analyzing adaptation in socio-ecological systems. Oral Presentation
- **2012 American Association of Geographers.** New York, NY – Mapping Agricultural Vulnerability to Climate Variability in Northwest India. Oral Presentation.
- **2011 Student Conference on Conservation Science.** New York, NY – Agricultural Adaptation to Climate Variability: Farmers’ Responses to a Variable Monsoon. Oral Presentation.
- **2011 ICARUS Adaptation Conference.** University of Michigan – Agricultural Adaptation to Climate Variability: Farmers’ Responses to a Variable Monsoon. Oral Presentation.
- **2010 Student Conference on Conservation Science.** Bangalore, India – Forest Conservation and Ecosystem Services in Community-Managed Forests in India. Poster.

REPORTS AND FILMS

- **Jain, M.** (2013). Indian Farmers Cope with Climate Change and Falling Water Tables. Water Currents. *National Geographic News Watch.*
- Naeem, S., P. Olmsted, J. Sircely, **M. Jain**, S. Smukler, C. Ingram (2010). Ecosystem services: A Primer for Biodiversity Conservation. Natural Resources Management and Development Portal. USAID.
- **Jain, M.** (2010). Western Burrowing Owl: A Species of Special Concern. 20 minute film produced for the Fish and Wildlife Service in Washington State.
- **Jain, M.** (2010). Conservation wisdom of a pastoral community in the Aravalli Hills, Rajasthan, India. *People in Conservation.* Kalpavriksh. 3(1).