

## EDUCATION

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- COLUMBIA UNIVERSITY, School of International and Public Affairs** New York, NY  
**Master of Public Administration**, Development Practice May 2020  
Specialization in Advanced Economic and Policy Analysis
- OHIO STATE UNIVERSITY, College of Arts and Sciences** Columbus, OH  
**Bachelor of Arts**, Economics and Political Science May 2016  
Magna Cum Laude with Research Distinction  
Thesis Title: “Spatial Mismatch: Understanding Differences in Income Mobility Between Cities”

## RESEARCH INTERESTS

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Economics of pastoralism and community conservation; participatory field research methods; the use of Bayesian methods in climate decision support; spatial econometrics and the use of remote sensing data in economic research.

## RESEARCH AND TEACHING EXPERIENCE

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- INTERNATIONAL RESEARCH INSTITUTE FOR CLIMATE AND SOCIETY** New York, NY  
**Staff Associate II (Sep 2020 – Sep 2022), Staff Associate III (October 2022 – present)** September 2020  
- present
- Led design of agricultural index insurance products for WFP, ICRC and other humanitarian partners in more than 6 countries
  - Co-developed mobile tools for farmer crowdsourcing and participatory research
  - Contributed to academic papers on behavioral economics, insurance design and basis risk estimation

- COLUMBIA UNIVERSITY** New York, NY  
**Teaching Assistant - Microeconomic Analysis (Fall) and Global Food Systems (Spring)** September 2019 – May 2020
- Taught 120 first year masters’ students an intermediate microeconomics curriculum. Topics include general equilibrium theory, welfare analysis, market failures and application of microeconomic theory to policy issues. (Fall)
  - Developed course materials and lesson plans for a first-year seminar course on the policy, economics and science of food systems. (Spring)

- INNOVATIONS FOR POVERTY ACTION** Oshakati, Namibia and New York, NY  
**Research and Policy Analyst** May 2016 – January 2019
- Managed \$2m, multi-year impact evaluation of sustainable rangeland management project in northern Namibia for Millennium Challenge Corporation.
  - Developed survey instruments for impact evaluation, led 10 months of data collection and trained over 100 local enumerators on survey protocol and software use.
  - Conducted analysis of impact evaluation data with Prof. Dean Karlan, presented results to government and NGO stakeholders in Namibia and USA.
  - Wrote over 25 thematic briefs and project summaries for a policymaker audience, developed grant applications and press pieces.

- OHIO STATE UNIVERSITY DEPARTMENT OF ECONOMICS** Columbus, OH  
**Research Assistant, Prof. Trevon Logan** January 2016 – May 2016

- INNOVATIONS FOR POVERTY ACTION** Accra, Ghana  
**Urban Sanitation Project Intern** September 2015 –  
December 2015

## PUBLICATIONS

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### Lead Author

- Mauerman, M., et al. (2022). An Information-Theoretic Approach to Reconciling Historical Climate Observations and Impacts on Agriculture. *Weather, Climate and Society*, doi:10.1175/WCAS-D-22-0019.1
- Mauerman, M., et al. (2022) The Long-Term Impact of Multi-Season Droughts on Livestock Holdings and Pastoralist Decision-Making in Marsabit, Kenya. *Journal of Arid Environments*. doi:10.1016/j.jaridenv.2022.104928
- Mauerman, M., et al. (2022). High-quality historical flood data reconstruction using Hidden Markov models. *Proceedings of 8<sup>th</sup> International Conference on Water and Flood Management*, ISBN 978-3-030-95721-6

### Co-Author

- Hernandez-Aguilera, J., et. al. (2020). Framed Experiments and Games in Agriculture: A Systematic Review of the 21st Century in Economics and Social Science. *Games, 11 (4)*. doi: 10.3390/g11040047
- Diro, R., et. al.(2023). Financial Education and Games in Weather Index Insurance. Chapter in “Rethinking Education for Sustainable Development”, ed. Iyengar, R. & Caman, O. *Bloomsbury Press, ISBN 9781350256125*
- Giezendanner, J., Mukherjee, R., Purri, M., Thomas, M., Mauerman, M., Islam, A. K. M. S., & Tellman, B. (2023). Inferring the Past: A Combined CNN-LSTM Deep Learning Framework To Fuse Satellites for Historical Inundation Mapping. *Proceedings of the IEEE/CVF Conference on Computer Vision and Pattern Recognition 2154–2164*.
- Mauerman, M., Tjiseua, V., & Groves, D. W. (2023). Seeing Cattle like a State: Sedentist Assumptions of the Namibian Livestock Identification and Traceability System. *Nomadic Peoples, 27(2), 171–197*. <https://doi.org/10.3197/np.2023.270202>

### Other Contributions

#### Led fieldwork and contributed to study design and analysis:

- Coppock, L., et. al. (2022). Community-based rangeland management in Namibia improves resource governance but not environmental and economic outcomes. *Nature Communications Earth & Environment, 3 (1)*. doi: 10.1038/s43247-022-00361-5

## **CONFERENCE PRESENTATIONS**

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### Oral Presentations

- Mauerman, M., Groves, D., Tjiseua, V. (2022, April). *The Political Economy of Rangeland Degradation and Conservation: Evidence from Namibia*. Midwest Political Science Association, Chicago, IL.
- Mauerman, M., Tellman, B. (2021, June). *Climate Insurance: (Mal)adaptation, delaying inevitable retreat or migration, or building resilience?* Columbia University Managed Retreat Conference, New York, NY.
- Mauerman, M., et. al. (2021, March). *High-quality historical flood data reconstruction using Hidden Markov models*. International Conference for Water and Flood Management, Dhaka, Bangladesh.

### Poster Presentations

- Mauerman, M. (2016, March). *Spatial Mismatch: Understanding Differences in Income Mobility Between Cities*. International Association of Political Science Students, Berlin, Germany.
- Mauerman, M. (2015, Feb). *Spatial Mismatch: Understanding Differences in Income Mobility Between Cities*. Harvard National Collegiate Research Conference, Cambridge, MA.

## **HONORS AND AWARDS**

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- Columbia University Mabel V.P. Forsyth Scholarship 2018 – 2020
- 1<sup>st</sup> Prize, Columbia University SIPA Consulting Club Case Competition 2018
- Humanity in Action Fellowship 2015
  - First ever recipient from Ohio State University
- 3<sup>rd</sup> Prize in Government, Policy and Law, Harvard National Collegiate Research Conference 2015
- 2<sup>nd</sup> Prize, William Jennings Bryan Award, Ohio State University 2015
  - Awarded to best undergraduate papers in comparative politics and political theory
- 2<sup>nd</sup> prize in Social Sciences at OSU’s Denman Research Forum 2014
- Ohio State University Gledhill Prize for Applied Economics 2014
  - Awarded to top 2 undergraduate theses in applied economics each year

## **OTHER RELEVANT PROFESSIONAL EXPERIENCE**

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### **TETRA TECH ARD**

#### **Consultant**

Remote  
May 2023 - Sept 2023

- Developed flexible climate risk analysis platform in Google Earth Engine for Tetra Tech ARD Climate Analytics Unit
- Conducted impact analysis of climate risk management programs using household survey data for a multilateral client

### **WORLD FOOD PROGRAMME**

#### **Intern (2019), Consultant (2020), Asset Creation and Livelihoods Unit**

Rome, Italy / Remote  
May 2019 – August 2020

- Authored report on the impacts of WFP’s resilience-building programs, synthesizing findings from over 100 projects
- Conducted a global cost-efficiency assessment of WFP asset creation activities using statistical analysis in R
- Co-designed 3 country-level impact evaluations of resilience-building programs in collaboration with WFP regional offices

### **BCG PLATINION**

#### **SIPA Capstone Workshop Consultancy**

New York, NY  
January 2020 – May 2020

- Served on a team of graduate student consultants to develop an analysis of commodity market risk from climate change.
- Created a quantitative scenario analysis tool (using forecast data and ecological niche modeling) for cocoa production risk.

- Delivered a white paper and presentation on findings to a Fortune 500 client.

## **UNIVERSITY SERVICE & PROFESSIONAL MEMBERSHIPS**

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- President of SIPA Monitoring and Evaluation Student Society 2019 - 2020
- Civic Hall Labs Delta.NYC Project Manager 2018
- Youth Writer, United Nations Department of Public Information 2014

## **LANGUAGES & TECHNICAL SKILLS**

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Languages: Fluent in English, working knowledge of Spanish

Software: R, STATA, ArcGIS, QGIS, Google Earth Engine, Python, SurveyCTO / ODK , NVivo, MaxQDA

## **REFERENCES**

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Daniel Osgood, Research Scientist  
International Research Institute for Climate and Society, Columbia University  
[deo@iri.columbia.edu](mailto:deo@iri.columbia.edu)

Glenn Denning, Professor of Professional Practice in International and Public Affairs; Director, Master of Public Administration in Development Practice (MPA-DP)  
School of International and Public Affairs, Columbia University  
[gd2147@columbia.edu](mailto:gd2147@columbia.edu)

Dean Karlan, Professor of Economics and Finance; Co-Director, Global Poverty Research Lab; President and Founder, Innovations for Poverty Actions  
Kellogg School of Management, Northwestern University  
[karlan@northwestern.edu](mailto:karlan@northwestern.edu)

Sara Watson, Associate Professor  
Department of Political Science, Ohio State University  
[watson.584@osu.edu](mailto:watson.584@osu.edu)