

SUMMARY

Applied Economist and Researcher specializing in causal inference and experiment design. Experienced in designing large-scale decision systems for development, market and climate adaptation contexts. Published in top journals and collaborated with global institutions to translate research into scalable, data-driven policy and product solutions.

SKILLS

Causal Inference • Experiment Design • Econometrics • Machine Learning • R • Python • Stata • Cross-functional Collaboration

PROFESSIONAL EXPERIENCE

Precision Development (PxD)

Postdoctoral Researcher & Research Collaborator

2021-2025

Instrumental in design and development of a **digital weather-forecast system** reaching **50,000+ farmers**, improving decision-making and climate resilience; secured external funding and designed randomized experiments, surveys, and A/B tests to evaluate adoption and inclusivity; demonstrated a **3x benefit-cost ratio** and translated empirical findings into product and policy design; **mentored research teams** and built reproducible data systems for large-scale studies.

University of California, Berkeley

Postdoctoral Scholar, Graduate Student, Research & Teaching Assistant

2014-2021

Gates Foundation-funded postdoctoral research on women's self-help groups in India using causal inference to show institutional capacity strengthened **households' resilience to economic shocks**; dissertation research combined econometrics, and **financial and geospatial data** to provide the first empirical evidence that **informal lenders** in India borrow from banks to on-lend to rural borrowers; organized initiatives advancing diversity in economics in **academic leadership roles**.

The World Bank

Consultant & Research Collaborator

2015-2019

Collaborated on an **8000-household randomized evaluation** of Bihar's rural livelihoods program (**>10 million beneficiaries**); led econometric analysis and co-authored a peer-reviewed publication informing policy design.

Centre de Sciences Humaines, New Delhi

Research Assistant

2012-2014

Constructed a household-panel dataset for a **seven-decade village study** in India; validated India's **Socio-Economic Caste Census (2011)** data (1.21B individuals) for the Ministry of Rural Development; aided design of inclusion/exclusion criteria for social protection programs benefiting **millions** for India's Planning Commission.

EDUCATION

University of California, Berkeley

Ph.D. in Agricultural and Resource Economics

Berkeley, CA

2020

London School of Economics and Political Science

MSc. in Economics

London, United Kingdom

2012

Indian Institute of Technology, Madras

5 year Integrated MA in Economics (Bachelors & Masters)

Chennai, India

2011

SELECT PAPERS

"Relief from Usury: Impact of a Self-Help Group Lending Program in Rural India," with Vivian Hoffmann, Vijayendra Rao, Upamanyu Datta. *Journal of Development Economics*, 2021, Vol 148.

"The Moneylender as Middleman: Formal Credit Supply and Informal Loans in Rural India". *Revision requested, The Review of Financial Studies*.

"Risk Sharing, Commitment Constraints, and Self-Help Groups," with Orazio Attanasio, Anjini Kochar, Aprajit Mahajan. *NBER Working Paper No. 31245*.

"Weathering Climate Change: How Farmers Learn from Forecast Outcomes," with Shawn Cole, Tomoko Harigaya. *Working Paper*.

For additional research papers, funding secured, and public research communication, see www.vaishnavisurendra.com