

# MIRA KORB

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Dept. of Agricultural and Resource Economics  
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## EDUCATION

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Ph.D. in Agricultural and Resource Economics, University of California, Davis (Anticipated) 2020-2025  
DISSERTATION: *Three Essays in Development Economics*

B.A. in Economics (*summa cum laude*), University of Virginia May 2014-2018

B.A. in Mathematics (*summa cum laude*), University of Virginia May 2014-2018

## REFERENCES

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Prof. Ashish Shenoy (**Co-chair**)  
Department of Agricultural and Resource Economics  
University of California, Davis  
(530) 752-0824  
shenoy@ucdavis.edu

Prof. Jamie Hansen-Lewis (**Co-chair**)  
Department of Agricultural and Resource Economics  
University of California, Davis  
(530) 752-1534  
jhansenlewis@ucdavis.edu

Prof. Travis Lybbert  
Department of Agricultural and Resource Economics  
University of California, Davis  
(530) 554-1393  
tlybbert@ucdavis.edu

## RESEARCH FIELDS

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Primary: Development Economics  
Secondary: Environmental Economics

## WORKING PAPERS

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*Isolating the Effects of Pollution Externalities from Natural Resource Extraction on Local Agricultural Output in Africa* **Job Market Paper**

This paper explores the extent to which pollution externalities and market-based effects from industrial mining affect local agricultural output in Sub-Saharan Africa. I combine mine geolocations, topographical data and satellite-based measures of pollution, yields and weather to identify areas around mines that are disproportionately exposed to pollution but not market-specific effects. Leveraging the staggered openings of mines across Sub-Saharan Africa, I find that air and water pollution externalities from mines account for 44% of the overall reduction in yields caused by industrial mining. Finally, I use both standard heterogeneity analysis, as well as machine learning methods, to document that the negative effects of pollution externalities on local yields are 2-3 times larger for mines in countries with poor governance and regulatory environments.

*The Economic Potential for Area-Yield Crop Insurance: An Application to Maize in Ghana*  
(Forthcoming, Journal of Agricultural Economics) with Ashish Shenoy

*Causal Inference with Predicted Outcomes: A satellite-based impact assessment of 'Direct Seed Marketing' in Ethiopia*

(Submitted, Journal of Development Economics) with Johanne Pelletier, Solomon Alemu, Manex Bule Yonis, Travis J. Lybbert and Matthieu Stigler

*The Cost and Cost-Effectiveness of Vitamin A Supplementation: An Assessment of a Vitamin A Days-Plus Event in Burkina Faso*

(Submitted, Maternal and Child Health Journal) with Stephen Vosti, Melissa Baker, Rolf Klemm, Romance Dissieka, David Doledec and Regina Khassanova

## WORK IN PROGRESS

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*Responsiveness to Environmental Risk in Developing Countries*

AEA RCT Registry: AEARCTR-0014166

*Time is (Not) Money: The decay of machine learning models using cellphone data to predict wealth levels over time*

With Travis Lybbert and Oscar Barriga-Cabanillas

*Unearthing Inequality: The Impact of Mining Operations on Politically Marginalized Communities*

With Ebad Ebadi

*Contract Complexity and the Demand for Agricultural Insurance*

With Ashish Shenoy, Anujit Chakraborty, Jon Einar Flatnes, Richard A. Gallenstein, Sabastain Awondo and Irene Egyir

## RESEARCH EXPERIENCE

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### University of California, Davis, Department of Agricultural and Resource Economics

Research Assistant: Prof. Eric Edwards	2024 - present
Research Assistant: Prof. Ashish Shenoy	2022 - 2024
Research Assistant: Prof. Travis Lybbert	2022 - 2024
Research Assistant: Prof. Jamie Hansen-Lewis	2023

### The World Bank

Short Term Consultant: Office of the Chief Economist of the Sustainable Development Practice	2024
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### Helen Keller International

Consultant	2022
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## TEACHING EXPERIENCE

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**Teaching Assistant**, University of California, Davis

Undergraduate: Financial Management of the Firm

Fall 2021

## SCHOLARSHIPS, HONORS, AND AWARDS

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International Growth Centre Grant, \$42,000, London School of Economics (LSE) 2023-2025

Structural Transformation and Economic Growth (STEG) Grant, \$12,000, LSE 2023-2024

*Henry A. Jastro* Graduate Research Scholarship Award, \$6,000, UC Davis 2023-2024

Agricultural and Resource Economics Summer Research Fellowship, \$4,000, UC Davis 2024

Provost's 1st Year Ph.D. Fellowship, \$25,000 Stipend, UC Davis 2020-2021

## PROFESSIONAL ACTIVITIES

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### Conferences

North East Universities Development Consortium (NEUDC), Boston, MA 2024

NetMob World Bank, Washington D.C. 2024

Standing Panel on Impact Assessment (SPIA) Matchmaking Event, Cali, Colombia 2022

## OTHER

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Languages: English (native), Spanish (intermediate)

Software: R, Julia, Stata, MATLAB, Python, ArcGIS,  $\LaTeX$ , Google Earth Engine

Affiliations:

American Economic Association

Agricultural and Applied Economics Association

Structural Transformation and Economic Growth

International Growth Centre