

# ANDREW HOBBS

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## EDUCATION

- Ph.D., Agricultural and Resource Economics**, *University of California, Davis* 2015-2019 (Expected)  
**M.A. Economics**, *University of British Columbia* 2010  
**Honors B.S. Economics, B.A. International Studies**, *University of Utah* 2009

## CURRENT RESEARCH

### Using satellite data to measure spikes in deforestation after floods in Mozambique

Many Mozambican farmers subsist by combining farming and harvest of forest products, especially charcoal. Many of those farmers live in the Zambezi, Limpopo, and Lurio river basins, where floods are frequent and destructive. Farmers often grow crops along the river, and in the event of a flood they rely on forests for subsistence. This study uses satellite data to measure impact of floods on deforestation, and finds that more frequent, more severe floods due to climate change are also leading to forest loss through this channel.

### Combining index-based livestock insurance with a poverty graduation program in Kenya

*with Michael Carter, Andrew Mude, Nathan Jensen, and Munenobu Ikegami*

Kenya's Index-Based Livestock Insurance (IBLI) program has proven successful in improving quality of life in several arid areas in northern Kenya. BOMA's Rural Entrepreneur Access Program (REAP) has also alleviated poverty by providing business opportunities for women to support their families during the dry months. We are implementing a randomized controlled trial to test whether a combination of the two yields greater benefits than the sum of the individual effects.

### Modeling pastoralist risk preferences with games

Behavioral economics has introduced dozens of possible explanations for why uptake of index insurance has generally been low in developing countries, despite the fact that it can be very effective in mitigating serious risks at a low cost. I am developing a tablet-based game that will be played in the field with women and men in Samburu County, Kenya. The model that best explains in-game choices under cross-validation will be used to develop a suite of new and improved insurance products for the real world, and we'll test whether in-game choices are predict real-world choices.

## EMPLOYMENT

- Graduate Student Researcher**, *University of California, Davis* 2016-Present  
**Analyst**, *Climate Policy Initiative* 2010-Present

- Led Climate Policy Initiative's (CPI) work program on agriculture and forest protection in Mozambique, working closely with Barclays Africa on agricultural credit initiatives, value chain analyses, and land tenure issues.
- Managed projects analyzing the impact of solar leasing in California, building codes in the U.S., land use policy in Mozambique, and oil refinery emissions in the European Union.
- Conceptualized, designed, and coded the California Carbon Dashboard, an interactive website that informs stakeholders about California's carbon price and related policies.
- Supported research on concentrating solar power in South Africa and building energy efficiency in China, Germany, and the United States.

**Graduate Research/ Teaching Assistant, University of British Columbia** 2009 - 2010

- Developed novel statistical methodology for groundbreaking research on the determinants of equity share splits among founders of startups.
- Taught introductory and development economics courses for classes of 20 and 120 students throughout the year.

**Research Assistant, University of Utah Department of Pediatrics** 2007 - 2009

- Managed data collection and developed and maintained a database for a study focused on identifying the healthcare needs of Spanish-speaking families of children with special healthcare needs such as severe ADHD, neurological problems, physical disabilities, and chronic illnesses.

**Senior Project Supervisor, Amigos de las Américas, Chontales, Nicaragua** 2008

- Worked with PLAN Nicaragua to develop a program focusing on environmental stewardship, health promotion, and youth leadership.
- Trained and supported a team of six supervisors and 56 volunteers in 23 Nicaraguan communities.

**SKILLS**

- Economic modeling, econometric analysis, statistical methods, GIS analysis, and financial modeling.
- Full professional proficiency in Spanish; proficient in Portuguese.
- Data analysis and numerical methods in python and R.
- Visualization and analysis in Google Earth Engine, QGIS, and D3.js.

**PUBLICATIONS**

"Challenges and Opportunities for Efficient Land Use in Mozambique: Taxes, Financing, and Infrastructure" (2016). *Climate Policy Initiative*. with Amanda de Albuquerque

"The California Carbon Dashboard." (2013). *Climate Policy Initiative*. Interactive Website.

"Improving Solar Policy: Lessons from the solar leasing boom in California." (2013). *Climate Policy Initiative*. with Elinor Benami, Brendan Pierpont, and Uday Varadarajan.

"Building Energy Efficiency in China, Germany, and the United States." (2012). *Climate Policy Initiative*. with Hermann Amecke, Aleksandra Novikova, Yang Xiu, and Shengyuan Zhang.

"Clearing the Air: Carbon Pricing and Local Air Pollution in California." (2012). *Climate Policy Initiative*. with Kath Rowley.

"Codes to Cleaner Buildings: Effectiveness of U.S. Building Energy Codes." (2011). *Climate Policy Initiative*. with Jeff Deason.

"Measuring the effect of bi-directional migration remittances on poverty and inequality in Nicaragua." (2012). *Applied Economics*, Volume 44, Issue 19.

**PRESENTATIONS**

"Lessons for South Africa from the solar leasing boom in California." Presentation at Solar Indaba, September 4, 2013, Cape Town, South Africa.

"Financial Incentives for Energy Efficient Retrofits in Buildings." Presentation at the 2012 ACEEE Buildings Summer Study, August 12, 2012.

"Remittances, Poverty, & Inequality in Nicaragua." Presentation, *University of Utah Undergraduate Research Symposium*, Salt Lake City, UT, USA, March 31, 2009.