Andrew Crane-Droesch

Contact Information Barrows Hall, 310

Energy & Resources Group

University of California, Berkeley

Fax: (510) 642-1085

E-mail: andrewcd@berkelev.edu

Berkeley, Ca 94720

Website: http://andrewcd.berkeley.edu

Tel: +1 (215) 435-2644 (US) +254 (0)719872150 (Kenya)

Research Interests Economic development and environmental change in sub-Saharan Africa, agriculture, soil carbon, climate change adaptation & mitigation, program/project evaluation, applied statistics, environment/development policy.

EDUCATION

University of California, Berkeley, Berkeley, California, USA

Doctoral Candidate, Energy & Resources Group, (expected graduation date: May 2015)

- Dissertation Topic: "Comparing means of technology dissemination for soil fertility management and carbon sequestration in Western Kenya: experimental evidence on impact and adoption"
- Committee:
 - David I. Levine
 - Daniel Kammen
 - Margaret S. Torn
 - Edward Miguel

M.S., Energy & Resources, May 2011

Columbia University, New York, New York USA

M.A., Climate and Society, August 2006

University of California, Santa Cruz, Santa Cruz, California USA

B.A., Environmental Studies, December, 2003

Honors and Awards

U.C. Berkeley:

Center for evaluation of global action (CEGA) Evidence to Action (E2A) Climate Change Research Challenge (2013-2014)

U.S. Borlaug Fellowship in Global Food Security, 2012-2014

U.S. Department of Education Foreign Language and Area Studies Fellowship (Swahili), 2010-2013

Innovations for Poverty Action Graduate Student Fellowship, 2011

National Science Foundation Graduate Student Research Fellowship (Honorable Mention), 2011-2014

ThinkSwiss Graduate Research Scholarship, 2010

U.C. Santa Cruz: Regents Scholarship 1999-2003, graduated with College Honors, Departmental Honors, and Thesis Honors, 2003

Current Research PROJECTS

Scaling Biochar - Investing in Soils, Improving Livelihoods and Sequestering Carbon (PI).

Description: A randomized controlled trial examining the livelihood benefits and diffusion dynamics of farm-scale biochar systems in Western Kenya, while testing the efficacy of various approaches for promoting environmentally-friendly technologies more generally. Implementing partners: Innovations for Poverty Action, Re:char Kenya Ltd.

Funding: \$99,952 (USAID/Development Innovation Ventures), \$45,000 (Others)

January 2013 - December 2014

Publications

Crane-Droesch, A., Abiven, S., Jeffery, S. Torn, M.S. 2013. "Heterogeneous global crop yield response to biochar: a meta-regression analysis." *Environmental Research Letters* Vol 8, pp 44-49.

Crane-Droesch, A. 2006. Environmentally Sustainable Transport and Climate Change: Experiences and lessons from community initiatives. GEF Small Grants Program, United Nations Development Program, November 2006.

Papers in Preparation

Crane-Droesch, A., Clare, A.J., De Pinto, A. 2013. "Biochar profitability in the presence of a carbon price: Evidence from Kenya and Vietnam." Working paper.

Crane-Droesch, A., Clare, A.J. 2013. "Climate change mitigation/warming potential of biochar production technologies: integrating kiln emissions, efficiency, and biochar residence time in soil" Working paper.

Conference Presentations

Crane-Droesch, A., Abiven, S., Schmidt, M.W.I., Torn, M.S. 2010. "A meta-analysis of plant response to biochar." 2nd International Biochar Initiative Conference, Rio de Janeiro, Brazil, September 2010.

Professional Experience

United Nations Development Program, Energy & Environment Group, New York, New York USA

Coordinator, Community Based Adaptation Program

October, 2006 - August, 2009
Coordinated implementation of the \$4.5M UNDP/Global Environment Facility Community-Based
Adaptation Program. Built the capacity of country-level grantmakers to engage in the climate
change adaptation focal area, conducted technical review of country program strategies and project
proposals, participated in project development activities in Morocco, Jamaica, and Guatemala.

Global Environment Facility Small Grants Program (GEF/SGP), New York, New York USA

Summer Intern: Sustainable Transportation June, 2006 - September, 2006 Conducted a thematic review of the GEF/SGP's grantmaking activities in the sustainable transportation focal area.

Consulting

International Food Policy Research Institute, Washington DC

January 2013 - Present

Assessment of the economics of biochar systems, drawing on case studies in Kenya, Ghana and Vietnam.

Programming, Languages

- Statistical Packages: R. Stata, Matlab/Octave
- Basic unix/linux shell scripts, cluster/parallel supercomputing using Torque
- Languages: English (native speaker), Swahili (proficient), Spanish (intermediate), French (basic)