

Evidence to Action

A photograph of two women in a lush green rice field. They are walking away from the camera, each carrying a large, heavy bundle of harvested rice stalks balanced on their heads. The woman in the foreground is wearing a yellow shirt and a pink headscarf. The woman in the background is wearing a yellow shirt and a colorful patterned sari. The field is filled with tall, vibrant green rice plants. In the top left corner, there is a decorative graphic of several parallel diagonal lines in shades of green and white.

BUILDING MARKETS TO
HELP SMALL-SCALE FARMERS

May 1, 2014 • Berkeley, California



CONTENTS

- p2. Agenda
- p5. Letter from the Sponsors
- p6. About CEGA
- p7. About J-PAL
- p8. About the Agricultural Technology Adoption Initiative
- p10. Speakers
- p14. Organizers

Cover photo: "Two women work in the paddy field in Hoogly District of West-Bengal, India" Arup Haldar, courtesy of Photoshare. Inside cover: "Drying rice and hired jeepney in field site" by Peter Srouji. p4 Ishita Ahmed, p6 Development Impact Lab, p8 Silvia Prina, p9 Glenna Gordon.

SESSION ONE

1:00pm – 1:20pm	Welcome Temina Madon (Executive Director, CEGA) and Graham Fleming (Vice Chancellor of Research, UC Berkeley)
1:20pm – 1:40pm	Achievements in Building Markets for Small-Scale Farmers Craig McIntosh (UC San Diego, CEGA)
1:40pm – 2:00 pm	New Technology: Promise and Risk (Sierra Leone) Rachel Glennerster (J-PAL)
2:00pm – 2:20pm	The Success of Flood-Tolerant Rice in Eastern India Kyle Emerick (UC Berkeley)
2:20pm – 2:40pm	Progress with Stress-Resistant Rice for Asia and Sub-Saharan Africa Umesh Shankar Singh (International Rice Research Institute)
2:40pm – 3:00pm	Leveraging Social Networks to Enhance Agricultural Extension (Malawi) Jeremy Magruder (UC Berkeley, CEGA)
3:00pm – 3:30pm	Coffee Break

AGENDA

SESSION TWO

3:30pm – 4:00pm	Keynote Address Andrew Youn (Co-Founder and Executive Director, One Acre Fund)
4:00pm – 4:20pm	Selling Low and Buying High? Understanding Farm Profitability (Kenya) Marshall Burke (UC Berkeley)
4:20pm – 4:40pm	The Value of Price Information to Small Farmers Marcel Fafchamps (Stanford, CEGA)
4:40pm - 4:55pm	Looking to the Future: Shallow Markets and the Technology Treadmill Alain de Janvry (UC Berkeley, CEGA)
4:55pm – 5:35pm	Panel Discussion: Challenges and New Approaches in Building Markets for Small-Scale Farmers Richard Caldwell (Bill and Melinda Gates Foundation), Ion Yadigaroglu (Capricorn Investment Group), Minh Le (Oxfam), David Ameyaw (Alliance for a Green Revolution in Africa)
5:35pm - 5:45pm	Closing Remarks Anand Radhakrishnan (Investcorps Technology Partners and Co-Chairman of the CEGA Advisory Board)
5:45pm – 6:45pm	Reception



WELCOME TO EVIDENCE TO ACTION: BUILDING MARKETS
TO HELP SMALL-SCALE FARMERS

LETTER FROM THE SPONSORS

Welcome to the fifth annual research symposium of the Center for Effective Global Action (CEGA). This year's event is cosponsored by the Abdul Latif Jameel Poverty Action Lab (J-PAL) and the Agricultural Technology Adoption Initiative (ATAI).

Our program explores the role of markets in the modernization of small-scale agriculture in the developing world. Nearly two-thirds of the world's poorest people are farmers, and most of them live in sub-Saharan Africa and South Asia. Increased agricultural productivity is perhaps the best mechanism to jumpstart economic growth and reduce poverty on a large scale. Moreover, existing technologies--such as fertilizer and modern inputs--have the promise to increase farmers' yields and boost their profitability. However, in sub-Saharan Africa in particular, the use of these products remains weak.

Why don't farmers use new tools and practices, even when proven to increase profits and improve livelihoods? There are many possible explanations--from missing information, to weather risk, to lack of access to credit-- yet until now, there has been limited evidence of what matters most. Today we will learn about a series of field experiments designed to understand and unleash farmers' take-up of modern technologies. Rigorous studies like these are bolstering the knowledge base and, as you will see today, generating evidence that is already transforming public policy.

Tackling agricultural productivity in low-income countries is not a job for academics, policymakers, or the private sector alone. Rather, a synergistic approach is needed to understand and address the challenges facing individuals, communities, industry, and government. Today's symposium will build a foundation for future research and forge a path toward more equitable economic development.

ABOUT CEGA



The Center for Effective Global Action (CEGA) is a leading center for research on global development, with a network of 50 faculty at the University of California, Stanford University, and the University of Washington. CEGA's affiliates use randomized controlled trials and other quasi-experimental methods to measure the impacts of large-scale social and economic development programs. The center brings a scientific lens to global development, integrating empirical economic analysis with expertise in agriculture, public health, education, technology, and the environment.

INNOVATION

To effectively tackle poverty, donors and governments need to know which policies, technologies, and programs actually improve economic and social welfare. CEGA works with funding agencies and policy leaders to design prizes and challenges that draw top academics into new, high-priority fields of research-- from the role of behavioral economics in reproductive health to the design of new technologies to measure development outcomes. This approach generates demand-driven evidence to guide NGO and government decision-making.

COLLABORATION

CEGA is committed to building the capacity of developing country researchers to undertake rigorous evaluations of development solutions. CEGA's portfolio of collaborative programs supports US-based sabbaticals for developing country researchers as well as joint studies, curriculum development, and regional meetings. These programs cultivate scientific leadership in African, South Asian, and Latin American institutions, thereby strengthening the voices of developing country academics in international policy debates.

IMPACT

To affect social change, evidence must be transformed into better policies and programs. Toward this end, CEGA regularly convenes decision-makers to share ideas and stimulate demand for high-quality evidence. Through collaborative programs, the center empowers international leaders to translate their own research into actionable blueprints for better public policy. Additionally, CEGA maintains deep relationships with select public and private sector partners, creating dedicated channels for the scale-up of proven interventions.



ABOUT J-PAL

The Abdul Latif Jameel Poverty Action Lab (J-PAL) was established in 2003 as a research center at the Economics Department at the Massachusetts Institute of Technology. Since then, it has grown into a global network of researchers who use randomized evaluations to answer critical policy questions in the fight against poverty. J-PAL's mission is to reduce poverty by ensuring that policy is based on scientific evidence, and research is translated into action. We do this through three main activities:

CONDUCTING RIGOROUS IMPACT EVALUATIONS

J-PAL researchers conduct randomized evaluations to test and improve the effectiveness of programs and policies aimed at reducing poverty. Our work spans several program areas: agriculture, education, environment and energy, finance, health, governance, and labor markets.

POLICY OUTREACH

J-PAL's policy group analyzes and disseminates research results and builds partnerships with policymakers to ensure that policy is driven by evidence and that effective programs are scaled up.

CAPACITY BUILDING

J-PAL equips practitioners with the expertise to carry out their own rigorous evaluations through training courses and joint research projects. J-PAL and its partners are driven by a shared

belief in the power of scientific evidence to understand what really helps the poor, and what does not. Its many partners include:

- NGOs and governments that run the programs that J-PAL affiliates evaluate;
- Governments, foundations, international development organizations, and NGOs that use J-PAL's policy lessons on what works in poverty reduction to scale up the most cost-effective programs;
- Donors that provide funding for evaluations, scale-ups and special initiatives, and
- Research centers that help administer J-PAL affiliates' randomized evaluations and who employ the staff associated with these evaluations.



J-PAL has over 492 completed and ongoing randomized evaluations conducted in 56 countries by our 102 affiliated professors.

ABOUT THE AGRICULTURAL TECHNOLOGY ADOPTION INITIATIVE

The Agricultural Technology Adoption Initiative (ATAI) is a collaboration between researchers at J-PAL and CEGA. Through semi-annual research competitions, supported by the Bill & Melinda Gates Foundation, DFID and an anonymous donor, ATAI funds well-designed randomized controlled trials (RCTs) that tell us what is most effective in promoting profitable agricultural technology adoption and the impact technology adoption has on smallholder farmers' lives.

ATAI researchers work with practitioners to define the most critical issues, technologies and adoption strategies in agricultural development to ensure that the resulting research has maximum impact on the lives of marginalized farmers in Africa and South Asia. Research focuses on technologies that have already demonstrated promise (e.g. inputs such as fertilizers or new seeds) and provides evidence on the strategies that work in helping farmers adopt these technologies. Research findings are translated into accessible metrics and actively disseminated among practitioners and policymakers to enable scale-up of the most effective strategies. Since its inception in 2009, ATAI has funded 31 unique projects that have changed the behavior of more than 7,800 farmers in 13 countries.





SPEAKERS



Temina Madon is the executive director of CEGA. Her research and training activities focus on health services, agricultural innovation, and technology design for emerging markets. Dr. Madon has worked as a science policy advisor for the National Institutes of Health-Fogarty International Center, with a focus on enhancing research capacity in developing countries, and received her Ph.D. from UC Berkeley and her B.S. from MIT.



Uma Shankar Singh is a Senior Scientist for the International Rice Research Institute (IRRI). He is also the South Asia Regional Coordinator of the Project Stress Tolerant Rice for Africa and South Asia (STRASA). As coordinator, Singh is responsible for the development and facilitation of a network of partner organizations in India, Bangladesh and Nepal, dissemination of seed varieties, impact assessment, capacity building, and facilitation of new national seed policies. Singh is a Fellow of the National Academy of Agricultural Sciences (India) and elected President of the Indian Phytopathological Society for the year 2012.



Graham Fleming is Vice Chancellor for Research and Professor of Chemistry at the University of California, Berkeley. He has overall responsibility for the university's research endeavor and exercises primary leadership in research policy, planning and administration for the Berkeley campus which includes relations between the university and industry, research compliance, research communications and research support. Fleming manages forty campus research units, twelve research museums and remote field stations, and research administration offices. He has authored or co-authored more than 400 publications, and is widely considered to be one of the world's foremost authorities on ultrafast processes.



Craig McIntosh is a Professor of Economics at the School of International Relations and Pacific Studies, UC San Diego, Co-Director of the Policy Design and Evaluation Lab, and member of the ATAI board. His main research interest is the design of institutions which promote the provision of financial services to micro-entrepreneurs. He has conducted fieldwork in Mexico, Guatemala, Malawi, Rwanda, Uganda, and Tanzania. He is currently investigating how to boost savings among the poor, whether schooling can be used as a tool to fight HIV/AIDS in Sub-Saharan Africa, and mechanisms to improve the long-term viability of Fair Trade markets. McIntosh has a Ph.D. in Agriculture and Resource Economics from UC Berkeley.

Jeremy Magruder is an Associate Professor of Agricultural and Resource Economics at UC Berkeley. His research focus on employment in developing countries and includes understanding the barriers to employment in South Africa, job networks in India, and HIV/AIDS and the role of social networks in agricultural technology adoption in Malawi. Magruder earned his Ph.D., M. Phil., and M.A. in Economics at Yale University, after completing his B.A. in Economics at Michigan State.



Andrew Youn is the Executive Director and Senior Partner of One Acre Found. He co-founded One Acre Fund, which is expected to serve one million farmers by 2020, with John Gachunga in 2006 and lives in Western Kenya. In 2011, he was named one of Forbes top 30 social entrepreneurs in the world. His work with OAF has been featured by PBS News Hour, Financial Times and the Christian Science Monitor. Youn is a former management consultant. He graduated from Yale magna cum laude and received his MBA from Kellogg School of Management.



Edward Miguel is the Oxfam Professor in Environmental and Resource Economics and Faculty Director of the Center for Effective Global Action at UC Berkeley, where he has taught since 2000. His research focuses on African economic development, the impact of ethnic divisions on local collective action, and interactions between health, education, and productivity for the poor. Miguel has conducted randomized evaluations of a deworming program in Kenya and of a nutrition supplement program in India. He has also conducted field research in Sierra Leone and Tanzania. Miguel received the Chancellor's Public Service Faculty Award for Research in the Public Interest in 2014.



Rachel Glennerster is the Executive Director of the Abdul Latif Jameel Poverty Action Lab (J-PAL) and ATAI board member. Her research includes randomized evaluations of community driven development, the adoption of new agricultural technologies; improving the accountability of politicians in Sierra Leone; empowerment of adolescent girls in Bangladesh; the behavioral economics of complying with tuberculosis medication in Pakistan; and health, governance, education, and microfinance programs in India. She has a Ph.D. in Economics from Birkbeck College.



Marshall Burke is a Ph.D. candidate in Agricultural and Resource Economics at UC Berkeley. He has conducted research on the impacts of climate on a range of social outcomes, including agricultural productivity, disease, and conflict. Burke is currently examining the effect of different credit and savings products on the adoption of fertilizer and hybrid seeds, farm productivity, and farmer spending on health, education, and food in Kenya. He holds a B.A. in International Relations from Stanford.



Kyle Emerick is a Ph.D. candidate in Agricultural and Resource Economics at Berkeley. His current work focuses on the effects of agricultural land certification on rural out-migration in Mexico, the impacts of flood-tolerant rice on farm investment in India, the ability of social networks to allocate new agricultural technologies, and measurement of adaptation to climate change in U.S. agriculture. Emerick completed his M.S. in Agricultural and Resource Economics from the University of Arizona and his B.S. in Environmental Economics and Policy from UC Berkeley.



Ion Yadigaroglu is Managing Principal at Capricorn Investment Group, an investment firm founded to demonstrate that it is possible to invest profitably while driving sustainable positive change. Previously, he executed a range of acquisitions and investments as a Director of Business Development at Koch Industries, the largest private company in the world by revenues. Yadigaroglu serves on several boards of directors including those of TrueCar, Agrica, SunPreme, Automatiks, Targeted Growth and Falcon Waterfree. He holds a Masters in Physics from Eidgenössische Technische Hochschule Zürich in Switzerland, and a Ph.D. in Astrophysics from Stanford University.



Marcel Fafchamps is a senior fellow at the Freeman Spogli Institute for International Studies and member of the Center on Democracy, Development and the Rule of Law. Before joining FSI, he served as Professor of Development Economics at Oxford University and as Deputy Director of the Center for the Study of African Economies. He also worked for the International Labour Organization in Africa. His research focuses on market institutions and social networks, writ large. Fafchamps holds a Ph.D. from UC Berkeley and degrees in Law and in Economics from the Catholic University of Louvain.



David Ameyaw is a native of Ghana and USA citizen. He has been Alliance for a Green Revolution in Africa's (AGRA) Strategy, Monitoring and Evaluation Director since June 2011. He has worked in several other senior international management positions in Haiti, Ghana and other parts of Africa, Europe, Asia and South America and brings almost 20 years of international development work, with a focus on work in Africa. Ameyaw is a member of the ATAI board.



Richard Caldwell is a senior program officer for agriculture at the Bill & Melinda Gates Foundation. He has over twenty-six years of professional international research and development experience with expertise in project monitoring and evaluation, quantitative data analysis, climate change, ecology, and agronomy. He started his career in Senegal as a Foreign Service Officer in USAID and later served as the Director for Africa for the Consortium for International Development. Caldwell is also an ATAI board member.



Minh Le is the Oxfam America Global Agriculture Advisor. She is an economist with 18 years of experience in the Greater Mekong Sub-Region. Le has held positions with various international development organizations, including DFID, World Bank and FAO. For the past five years, her work has concentrated on economic justice for the rural poor of Vietnam. Le holds a M.A. in Development Economics from Williams College.



Alain de Janvry is a Professor of Agricultural and Resource Economics at UC Berkeley. He has conducted field research in Latin America, sub-Saharan Africa, the Middle East, and India focusing on rural development, the impact of social programs, technological innovations in agriculture, and the management of common property resources. He has worked with many international development agencies, including FAO, IFAD, the World Bank, UNDP, ILO, the CGIAR, and the Inter-American Development Bank. De Janvry's main objective is to understand the determinants of poverty and identify approaches to improve well-being and promote sustainability in resource use.



Anand Radhakrishnan joined Investcorp Technology Partners in 2002, where he is currently a Principal in New York. Previously, he was with The Carlyle Group in Washington, D.C., where he worked in the Venture Capital Group and at Robertson Stephens in San Francisco, as a member of the Technology Mergers and Acquisitions Team. He currently sits on the boards of Kentrox, OpSec Security Group, Wireless Telecom Group and Zeta Interactive. Anand holds a B.S. in Electrical Engineering and Computer Science from MIT and an MBA with Distinction from the Harvard Business School.

ORGANIZERS



Jade Stone supports the incubation of new initiatives, execution of events and operations, and development of communication strategies and multimedia outreach. Prior to joining CEGA, Jade worked in the field of international education as a study abroad programs coordinator. As a Peace Corps volunteer in Vanuatu, she delivered workshops on topics such as literacy, health, leadership, and technology. Jade holds a B.A. from UC Berkeley in Interdisciplinary Studies.



Ellie Turner is the Research Initiatives Manager at CEGA, UC Berkeley where she leads the agricultural development and reproductive health programs. Previously she worked with the Economic Growth sector at Development Alternatives Inc., managing projects in Eastern and Southern Africa and Southeast Asia. She has also conducted research with the Food Security Group at Michigan State University (MSU) and the Corporate Executive Board. She has a Masters degree in Agricultural Economics from MSU.



Ben Jaques-Leslie is the agriculture program manager at J-PAL. He also manages recruitment efforts, and helps the research team with knowledge management of projects and people. In 2011, he served as acting Country Director for Innovations for Poverty Action in Sierra Leone. Previously, he was a research assistant investigating consumer demand for Fair Trade coffee and interned with the Grameen Foundation and PlaNet Finance in Beijing. Ben received his Master's in Pacific and International Affairs from UC San Diego.



Anna Schickele joined J-PAL as a Policy Analyst in 2013. She works in J-PAL's programs in Agriculture and Political Economy & Governance. Before joining J-PAL, she wrote her senior thesis on the adoption of irrigation technology in rural Peru and worked on an organic farm in Mexico. Anna received her B.A. from Stanford University.



Nisha Giridhar is the Research Initiatives Coordinator at CEGA. She supports the agriculture development and reproductive health initiatives. Previously, she was a Fulbright Student Scholar in Ethiopia where her research focused on urban agriculture and land security. She has also worked with domestic violence survivors and HIV infected women at Buduburam Refugee Camp in Ghana. Nisha holds a B.A. in International Relations from New York University.

GET INVOLVED

CEGA fosters innovative research, promotes collaboration among researchers across the globe, and help translates proven ideas into action. Visit www.cega.org to sign-up for our monthly e-bulletin or make a contribution.

CENTER FOR EFFECTIVE
GLOBAL ACTION

University of California, Berkeley
207 Giannini Hall
Berkeley, CA 94720-3310

Website: www.cega.org
Email: cega@berkeley.edu
Phone: (510) 642-4361



AGRICULTURAL TECHNOLOGY
ADOPTION INITIATIVE



Website: www.atai-research.org
Email: ATAI-research@povertyactionlab.org

THE ABDUL LATIF JAMEEL
POVERTY ACTION LAB

J-PAL Global at MIT
30 Wadsworth Street, E53-320
Cambridge, MA 02142

Website: www.povertyactionlab.org/
Phone: (617) 324-6566

ABDUL LATIF JAMEEL
Poverty Action Lab

TRANSLATING RESEARCH INTO ACTION