



Annual Report 2010-2011

Bringing a Scientific Lens to Global Development



Student in Nangina, Kenya. Courtesy of Lisa Chen.

Spotlight on Education

Changing Political Beliefs through Education

Merit-based scholarship programs can increase the total number of years that girls stay in school and improve their test scores, according to a randomized study in Kenya published in 2009 by Edward Miguel and colleagues. Now, a follow-up study with young women from the original project is generating interesting results. Kenyan women whose primary schools participated in a girls' scholarship program in 2001 are today more likely to question the legitimacy of domestic violence and less likely to enter into arranged marriages. They also demonstrate an increased knowledge of Kenyan politics—and express less satisfaction with local political authorities.

These findings are consistent with the hypothesis that education empowers women and promotes their political awareness. However, there is no evidence that greater education leads to increased voting or civic participation. Additionally, young women from the scholarship schools are more likely to accept the use of political violence. As *The Economist* notes in its coverage of the research, “education may make people more interested in improving their own lives but they may not necessarily see democracy as the way to do it.”

Quality Primary Education in India

The Millennium Development Goals call for universal access to primary education. To meet this mandate, governments across the globe have invested in programs to increase school enrollment. However, simply increasing school enrollment—without improving student learning—is an inefficient way to generate human capital. To enhance learning outcomes, CEGA affiliate Karthik Muralidharan has been evaluating the effectiveness of various policy options to improve the quality of primary education in India.

His most recent work is a collection of randomized trials demonstrating the comparative cost-effectiveness of five strategies for improving test scores. These studies were conducted in Andhra Pradesh, a large state in India, in partnership with the Azim Premji Foundation, the Government of Andhra Pradesh, and the World Bank. The results suggest that individual teacher bonuses, conditioned on students' learning outcomes, are an effective tool for increasing students' scores on math and language tests. The results-based payments, also known as “pay for performance,” are significantly more cost-effective than providing schools with additional teachers or grants for student learning materials. The studies also demonstrate that locally-hired contract teachers, who lack teaching credentials and receive just one-fifth the salary of government civil service teachers, are just as effective in improving test scores.

To help translate this research into action, this year Muralidharan has held high-level meetings with several agencies within the Government of India, including the Planning Commission, the Ministry of Human Resource Development, the Ministry of Finance, and officers from the Performance Management Unit of the Cabinet Secretariat. This engagement is providing Indian officials with inputs based on rigorous multi-year research for implementation of the recently passed “Right to Education” Act in India.



Classroom in Andhra Pradesh, India. Courtesy of Karthik Muralidharan.

Changing the Landscape of Development Policy

CEGA joins the Independent Commission for Aid Impact

Over the next four years, the British government will increase its foreign assistance budget, meeting an international commitment to spend 0.7% of GNP on official development assistance. Britain is on track to become the seventh country to achieve this target. However, the growth comes at a time of austerity in the UK, marked by a decline in spending on domestic social services. To increase oversight of the expanding aid budget, the British parliament has established a non-governmental body, the Independent Commission for Aid Impact (ICAI), to evaluate the effectiveness and “value for money” achieved by UK development programs.

ICAI will evaluate a sample of programs implemented by the UK Department for International Development (DfID) and will assign a rating based on each program’s economy, efficiency, effectiveness, and equity. ICAI will also determine the extent to which DfID’s programs are based on rigorous evidence.

CEGA has joined the technical consortium supporting the Commission’s work. Over a 4-year time frame, the Center will provide ICAI with literature reviews, secondary data analysis, and policy recommendations—all based on evidence from randomized trials and other rigorous forms of evaluation. In addition, using modeling techniques, CEGA will be able to estimate the expected impacts of UK programs on poor peoples’ lives. These estimates will provide “targets” or benchmarks against which DfID’s per-

formance can be measured. For example, we can estimate improvements in children’s school performance that might be expected for an input of \$2 per child.

The UK government is one of the first to establish an independent body for evaluation of aid effectiveness. Long term, ICAI hopes to improve aid impact by promoting DfID’s use of available evidence and encouraging the use of rigorous evaluation for innovative programs that lack an evidence base.

Translating Research to Action

In 2010, UC San Diego affiliate Paul Niehaus helped launch GiveDirectly, a non-profit that provides direct cash payments to poor households using mobile phone technology. The organization’s approach is grounded in research demonstrating the impacts of cash transfers on health, education, and labor outcomes. For example, conditional cash transfers have increased children’s school attendance in numerous countries—from Mexico to Morocco. Conditional transfers can also expand the use of preventive health services by the poor. Furthermore, new evidence in Malawi has shown that unconditional transfers are just as effective as conditional transfers in reducing teenage pregnancy and marriage rates.

As part of their commitment to transparency, GiveDirectly is conducting a randomized trial of their model in Kenya. The study will measure the impacts of transfers on hunger and nutrition, entrepreneurial activities, and physical and emotional health. It will also examine effects on levels of the stress hormone cortisol, an innovative new way of quantifying well-being. Visit www.givedirectly.org to learn more.

Research and Policy Dissemination Events	Date(s)	Partner(s)
Evidence Summit: Agricultural Technology Adoption & Food Security in Africa	Jun 1-2, 2011	United States Agency for International Development (USAID); Agricultural Technology Adoption Initiative (ATAI)
Evidence to Action: The Returns to Investment in Girls	Apr 28, 2011	University of California (UC), USAID, Alliance for a Green Revolution in Africa (AGRA), Bangladesh Rural Advancement Committee (BRAC)
Water, Sanitation, and Hygiene Evaluation Convening	Mar 31-Apr 1, 2011	The Bill and Melinda Gates Foundation
Pacific Conference for Development Economics (Pac-Dev)	Mar 12, 2011	Bay Area Development Association
West Coast Launch of the 2010 UNDP Human Development Report	Feb 9, 2011	United Nations Development Programme (UNDP)
Seeding New Ideas: 2010 ATAI Match-Making Meeting	Jan 20-21, 2011	ATAI, Brookings Institution, Abdul Latif Jameel Poverty Action Lab (J-PAL)
Working Group on African Political Economy 2010	Dec 17-18, 2010	University of California, Los Angeles (UCLA)
CEGA Day: Innovating for the Poor	Oct 29, 2010	University of California
Agriculture for Development - Revisited	Oct 1-2, 2010	World Bank, Consultative Group on International Agricultural Research (CGIAR)

Supporters & Sponsors

CEGA relies on contributions from organizations and individuals who share our commitment to rigorous research, evidence-based policy-making, and investment in the next generation of development innovators. We would like to thank our donors for their generous support:

\$100,000+

The Bill and Melinda Gates Foundation

\$5,000-\$24,999

Cornerstone Research
College of Letters and Sciences, UC Berkeley
Department of Agricultural and Resource Economics, UC Berkeley
Department of Economics, UC Berkeley
Joseph and Susan Ducote
Julian Dwek
Charles and Feralee Levin
Douglas Wyatt and Shehla Imran

\$25,000-\$99,999

Derek Schrier and Cecily Cameron
Andrew and Bonnie Weiss

Under \$5,000

Stephen Abel
Alexander Aganin
Eric and Julie Forister
Ajay Krishnamurthy
Mike Kurzman
Matthew and Anne Lynde
Tim Sun
Anonymous Donor

Financial Report



Woman at water tap, Tanzania. Courtesy of Ruth Carlitz.



Women at water well, Tanzania. Courtesy of Ruth Carlitz.

Expense Category	Amount
Core Staff Support	\$177,500
Supplies and Expenses	\$7,000
Graduate Student Support	\$22,500
*Special Opportunity Conferences	\$54,000
Research and Dissemination Conferences (On-campus and in D.C.)	\$17,000
Research Challenge Funds	\$700,500
Total	\$978,500

*One-time conferences with partner organizations.

CEGA in Washington D.C.

Enhancing Agricultural Technology Adoption

In 2011, CEGA and the Abdul Latif Jameel Poverty Action Lab (J-PAL) co-sponsored two meetings in Washington, D.C. to promote linkages and learning between researchers, agriculture professionals, and policy-makers.

In January, we organized a matchmaking conference in support of our Agricultural Technology Adoption Initiative (ATAI). At the event, our researchers had the opportunity to network with people from 28 rural development organizations in Africa and South Asia. Hosted by the Brookings Institution, the meeting created new collaborations and learning opportunities in the field.



USAID Evidence Summit. Courtesy of USAID Agrilinks.

A second meeting, the Evidence Summit on Agricultural Technology Adoption and Food Security in Africa, was held in June 2011. Organized by CEGA, J-PAL and USAID, the conference served as “continuing education” for decision-makers in Washington DC—particularly those designing rural development programs in African countries. The 2-day forum brought together nearly 80 government staffers, development professionals, and researchers for a series of panels highlighting cutting-edge field research by CEGA and J-PAL affiliates. This meeting provided USAID professionals with the latest evidence in research on technology adoption in agriculture, allowing them to better design programs for small-holder farmers.

Local Impact: *Investing in the Next Generation*

Over the last 3 years, CEGA has become a leader in undergraduate and graduate education on impact analysis and global development. In Spring 2011, CEGA Affiliate Fred Finan led a new course at UC Berkeley on “Global Poverty and Impact Evaluation,” which represents the formalization of an elective course offered by CEGA since 2008.



Alina Xu, UC Berkeley Class of '11

“Professor Finan’s class was invaluable in showing us that we can make a meaningful contribution to the field of international development by determining the effectiveness of approaches in a range of policy areas.”

A complementary course, “Selecting Successful Strategies to Reduce Global Poverty,” was taught by CEGA co-founder Paul Gertler. It provided business students with a practical guide to designing and implementing impact evaluations. The course also featured guest speakers discussing challenges to the development and implementation of evaluation projects in the field.

“I took this course because I’ve always had a broad interest in international development, but was eager to learn more about how development projects are actually implemented and tested in the field.”



T.J. Laher, UC Berkeley Class of '11



The Center of Evaluation for Global Action (CEGA) is the University of California’s premiere center for research on global development. Our faculty affiliates use two powerful techniques—rigorous evaluation and economic analysis—to measure the impacts of large-scale social and economic development projects. The Center integrates business and economic approaches with expertise in agriculture, public health, education, and the environment. As a result, we have produced some of the most influential and policy relevant studies in recent years, including cash incentives for women’s empowerment, low-cost water technology for rural communities, and early childhood health interventions for improved adult economic outcomes.

Highlights from the Levin and Weiss Family Graduate Student Fellowships



Gautam Rao, winner of the 2010 Levin Family Fellowship, is a fourth year PhD student in the Department of Economics at UC Berkeley. He spent this past summer in Delhi, India studying elite private schools, which were recently brought under a government mandate to reserve one-quarter of their seats for students from poor families. Using a combination of experimental games and field observation, he finds that **having classmates from poor families causes affluent students to become more charitable towards the poor**. The effect is not explained simply by having better information about the lives of poor people; rather, it is driven by a true change in an underlying preference for fairness. He also finds suggestive evidence that wealthier students are better able to cooperate with new poor children when they socially interact with them. Ongoing research is examining the effects on poor students of attending the private schools. Preliminary evidence suggests large increases in learning for the students, as well as changes in spending patterns within their households.

Ruth Carlitz, a second year PhD student in Political Science at UC Los Angeles, received the 2011 Andrew and Bonnie Weiss Fellowship. She spent the summer in Tanzania investigating the role of mobile phones in improving water service delivery. She is working with Daraja, a non-governmental organization that encourages citizens to monitor the quality of their local water supply via text messages, which are then transmitted to relevant government officials and local media. The lack of access to clean water is a major public health issue in Tanzania, and of particular significance to Tanzanian women and girls (who bear responsibility for household water provision). While her research is still in its early stages, preliminary analysis reveals that **adoption of new technological platforms is the main barrier to participation in the program**. Although the majority of survey respondents report having access to a mobile phone, most prefer calling to text messaging, often citing illiteracy or a preference for direct communication. For women, program accessibility is a two-tiered challenge: not only are women less likely to own mobile phones, they also exhibit lower levels of literacy.



Kelly Jones completed her PhD in Agricultural and Resource Economics at UC Berkeley this past summer, and was also a recipient of the 2011 Andrew and Bonnie Weiss Fellowship. Her research focused on “The Mexico City Policy”, also known as the global gag rule, which restricts activities of foreign NGOs that receive U.S. population assistance. The intent of the policy is to reduce abortions in developing countries, and has been repealed and then reinstated several times over the last two decades. Jones examines whether the policy has achieved its aim in Ghana by estimating the likelihood of aborting a pregnancy when the policy is in effect versus when it has been repealed. Using a panel dataset which details information on pregnancies by each woman per month, she finds no evidence that the use of abortion is reduced as a result of the policy. On the contrary, when the policy is in effect, there are increased rates of conception (a 12% increase in rural pregnancies) and an associated increase in abortions among rural women. This is estimated at about 100,000 additional abortions and over 250,000 additional unintended births. Because the policy has induced budget shortfalls in population assistance, NGOs may be forced to cut rural outreach services that provide contraceptives. **Reduced access to health services is likely responsible for the observed increase in rural pregnancies and abortions**. Kelly is now a Postdoctoral Fellow at the International Food Policy Research Institute (IFPRI).

Our Mission

To be a trusted voice on evidence in global development, by:

- » Identifying **novel solutions** to the world's most pressing development challenges and applying **rigorous evaluation** and economic analysis to measure their impact;
- » Promoting the adoption of **successful programs** by governments and other major decision-makers; and
- » Investing in training and **capacity building** of researchers and other partners both locally and in developing countries.



Learn More about Our Work: Recent Findings from CEGA Evaluations

Ecuador

Poor children are at higher risk for physical, cognitive, and behavioral health problems, in both wealthy and poor countries. To mitigate these disadvantages, the Ecuadorian government designed Bono de Desarrollo Humano (BDH), a social assistance program providing unconditional cash transfers to poor families on the order of 6-10% of average household income. The program resulted in significant improvements in language development for very young children, particularly in rural areas.

"Effect of Ecuador's cash transfer program (Bono de Desarrollo Humano) on child development in infants and toddlers: A randomized effectiveness trial," Lia Fernald and Melissa Hidrobo, 2011. *Social Science & Medicine* Volume 72, Issue 9. <http://www.sciencedirect.com/science/article/pii/S0277953611001481>.

Morocco

In Tangiers, Morocco, homeowners without a private connection to the city's water grid were offered the chance to purchase a household connection – on credit at zero percent interest. The majority of households accepted the offer. The increase in water access generated important time gains, resulting in increased participation in leisure activities, improved social integration, and reduced conflict among households that previously competed for limited public water supplies. However, water quality was unchanged by the intervention.

"Happiness on Tap: Piped Water Adoption in Urban Morocco," Florencia Devoto, Esther Duflo, Pascaline Dupas, William Pariente, and Vincent Pons, 2011. NBER Working Paper #16933, <http://www.nber.org/papers/w16933>.

India

Corruption among government officials is a challenge for many emerging economies, in part because of complex human behavior. In 2007, a government welfare program in India issued a permanent increase in wages paid to rural workers. This created large incentives for local officials to over-report the number of hours worked (since they can pocket the extra money). However, the wage increase also means that officials have more to lose if caught. They appear to adjust their behavior accordingly, becoming more conservative in their over-reporting. As a result of these dynamic trade-offs, theft rises by 75% less than would otherwise be expected.

"Corruption Dynamics: The Golden Goose Effect," Paul Niehaus and Sandip Sukhtankar, 2011. BREAD Working Paper 233. <http://dss.ucsd.edu/~pniehaus/papers/nrega.pdf>.

Get Involved!

Visit <http://cega.berkeley.edu> to sign-up for our bi-monthly e-bulletin, follow us on Facebook, or find out more information on CEGA's activities.

We count on **supporters like you** to continue our work at the University of California and abroad. Make a gift to CEGA online today: <http://cega.berkeley.edu/donate>. Your contribution will be greatly appreciated!



Two school children in Ecuador. Courtesy of Amanda L'Esperance.