



UC BERKELEY

Annual Report ⁰⁸| ⁰⁹
Center of Evaluation for Global Action

The Center of Evaluation for Global Action (CEGA) is the University of California's premiere center for global development research. We believe that by rigorously testing economic and social development programs in "real world" settings, we can learn how best to alleviate poverty and improve lives. Our research generates policy-relevant knowledge about which anti-poverty programs work, and why. Alongside partners in over 30 low- and middle-income countries, our researchers have evaluated a broad array of development models, from microfinance and women's self-help groups, to community-led development and school-based health care.

Bringing a Scientific Lens to Global Development.

Measuring the impact of social development programs is complicated by the rich array of factors influencing household welfare: everything from access to education and healthcare, to seasonal drought and job loss. To isolate the real impacts of social programs, we employ a tool long-trusted in the medical field: randomized experiments. By randomly assigning individuals to two groups—one which participates in a social program, and one which does not—and comparing their outcomes, we can accurately measure the effects of new interventions. This rigorous approach generates knowledge that, if applied, can focus development assistance on cost-effective programs with measurable impact.

This annual report shares some of the latest findings from impact evaluations carried out by CEGA throughout the world. It also highlights the student research, training, and policy activities that help us foster a vibrant research community at the University of California and beyond.

Findings from recent CEGA evaluations:

- Rural Western Kenya: Installing chlorine dispensers at community water sources may offer a low-cost solution for providing safe drinking water. These may be more user-friendly and cost-effective than the household chlorine products that are commonly promoted by NGOs [1].
- Urban Mexico: Replacing dirt floors with cement in the homes of urban slums can provide cost-effective improvements in children's health and cognitive development, by interrupting the transmission of intestinal parasites [2].
- Andhra Pradesh, India: Providing teachers with bonuses (based on average improvement in their students' test scores) boosts student performance on independent learning assessments [3].

You can read more about these and other studies by visiting CEGA's website, at <http://cega.berkeley.edu>

Spotlight: African Agricultural Development



In the 2008-2009 academic year, CEGA's "team research" and training efforts have focused heavily on agricultural development in Sub-Saharan Africa. Led by Professors Alain de Janvry and Elisabeth Sadoulet in UC Berkeley's Department of Agriculture and Resource Economics, CEGA co-sponsored a conference in May 2009 with the African Economic Research Consortium on the theme of agriculture as a tool for African development. Supported by the Ford and Bill & Melinda Gates Foundations, the conference resulted in a series of 12 competitively selected white papers, most authored by junior African economists, to be published in a **Special Issue of the African Journal of Agricultural and Resource Economics**. You can view the working papers online at <http://repositories.cdlib.org/cega>.

CEGA's staff has also partnered with the UC Berkeley School of Journalism on a new **Africa Agriculture Reporting Project**, which trains U.S. and African journalists to report more effectively on the issues affecting African women farmers. The Center is providing evaluation support for this innovative project. Also this year, we linked up with the Bill and Melinda Gates Foundation and the Jameel Poverty Action Lab at MIT, to develop a new **Agricultural Technology Adoption Initiative**. The project has not yet been officially launched, but look for a press announcement in November 2009.

Research into Action: Kenya School Deworming

The year 2008 marked a major success for CEGA in the translation of research into practice, with the announcement of a commitment at the Clinton Global Initiative to implement **school-based deworming for 20 million school-age children** in 25 countries. Led by the non-profit organization "Deworm the World," the initiative cited research by CEGA faculty director Edward Miguel as a major driver for the program's development.



Why Deworming? People don't often think about how intestinal worms relate to learning. But hookworms and roundworms each infect 1.3 billion people around the world, and two other parasites—whipworm and schistosoma—affect 900 million and 200 million people each year, respectively. Of those infected, most are children living in developing countries. And while the infections are rarely lethal, they have dire long-term impacts, including malnutrition, cognitive and developmental deficits, listlessness and reduced school participation.

Cheap deworming medications for most of these infections are currently available. So why haven't they been widely adopted by people in low-income countries? In part, the answer lies with research: most rigorous studies of deworming drugs have failed to systematically account for the various benefits of deworming—and hence have underestimated their cost-effectiveness as an educational intervention.

To build the evidence for deworming, Miguel and his colleagues (including more than 20 UC Berkeley graduate and undergraduate students) have carefully evaluated a school-based deworming program in Western Kenya, measuring not only the health benefits of the drugs, but also their returns to school attendance, classroom participation, and learning. The evaluation, which compares children from schools already receiving deworming drugs with those slated to receive them a year later, found that deworming reduces absenteeism in schools by 25 percent. It suggests that **an additional year of education can be gained for just \$3.50 per child**, simply by distributing deworming drugs to children through their classrooms. This proves significantly more cost effective than providing additional teachers or giving away free school uniforms. In fact, deworming is perhaps the most cost-effective way to increase education in endemic countries. You can watch a short film about Deworm the World at <http://www.youtube.com/user/DEWORMTHEWORLD>

Training the Next Generation

A major priority for CEGA is to translate our research into social impact. One of the most effective ways to accomplish this is **cultivating local evaluation expertise** in the countries where we work. We recognize that policy-makers and governments listen most to local academic leaders; thus, we are developing partnerships with universities throughout the world to help develop new curricula in rigorous evaluation methods and practice. In just the last year, we have built formal links with institutions in Mexico (Instituto Nacional de Salud Pública), Chile (Universidad de Chile), and Uganda (Makerere University).

Also in the last year, we have held workshops on evaluation methods for nearly **300 developing country researchers and professionals** in Latin America and Sub-Saharan Africa (see box), with additional workshops planned for 2009-2010 in India and Uruguay. These workshops have largely been funded by a grant from the Lowenstein Foundation, to provide impact evaluation training to health professionals in developing countries.

2008-2009 Workshops

Workshop	Partners	Trainees
Abuja, Nigeria April 23-25, 2008	Nigerian Federal Ministry of Health	38
Abuja, Nigeria April 27, 2008	International Youth Conference, Johns Hopkins University	70
Kampala, Uganda January 12-14, 2009	Makerere University	10
Managua, Nicaragua February 12-16, 2009	Nicaragua Ministry of Health, Mexico Institute of Public Health, Sustainable Sciences Institute	45
Cape Town, South Africa March 13-17, 2009	The World Bank Multi-Country AIDS Program	70
Mombasa, Kenya May 30, 2009	African Economic Research Consortium	55



In Fall 2008, CEGA also launched a 2-unit course in **Impact Evaluation for Global Development** at UC Berkeley, with support for graduate student facilitators provided by the Lowenstein Foundation. More than 40 undergraduate and graduate students participated in the course, representing multiple departments—from public policy, political science and economics to public health and biology. The class explored impact evaluation theory through weekly case studies of field research, culminating in practice evaluation projects that allowed students to apply the techniques they had learned. Because of its early success, this course is being offered again in 2009, with Center support for the Ph.D. instructors.

In addition to classroom training, the Center has awarded a number of \$1,000 dissertation fellowships to UC students in 2008-2009, including:

Owen Ozier (Economics) *Long-term Effects of Early Childhood De-worming*

Francois Gerard (Economics) *A Randomized Evaluation of a Speed School Program in West Africa*

Alex Rothenberg (Economics) *Distributional Consequences of Infrastructure Improvements*

Jing Cai (Agriculture & Resource Economics) *Effect of Crop Insurance on the Rural Financial Market*

New Partnerships

One of CEGA's scientific goals is to cultivate **multi-disciplinary research** by creating incentives for faculty members from disparate disciplines to collaborate—both with each other and with outside partners. Thus, we have recruited top researchers to join the Center from a range of fields, including economics, business, public health, education, agricultural economics, international relations and public policy. This has allowed us to tackle complex, multi-sector challenges, like strengthening the role of women in agriculture, and preventing HIV through economic opportunity.

To continue this trend, CEGA expanded UC-wide in 2009, and now includes 15 faculty researchers from five UC campuses. As a UC-wide center, we have the capacity to capture new opportunities for research, training and policy. For example, through a partnership with the Institute for Global Conflict and Cooperation (another UC-wide initiative with offices in Washington, DC), we will soon have capacity to host high-level meetings in the nation's capitol, to speed the translation of research into policy.

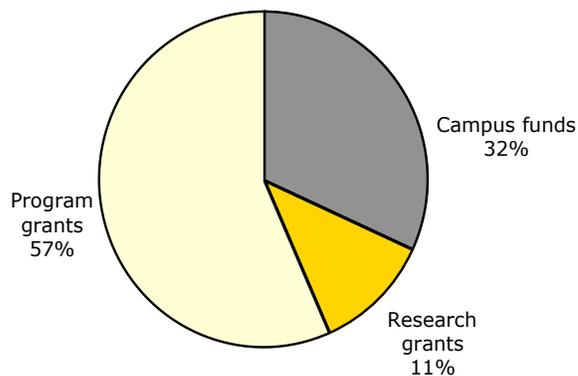
Over the last year, the Center has also brokered meetings with leading off-campus groups, such as CARE International, The World Bank and The Asia Foundation. These meetings promote partnership with development practitioners working at the front lines, which is essential for our work to achieve impact.

Sponsors

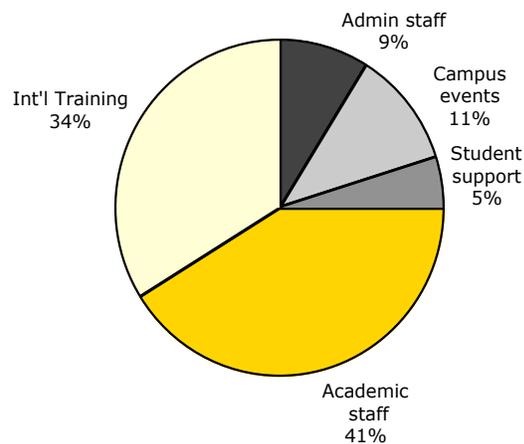
In the last year, we have enjoyed generous support for programs and research from the Lowenstein Foundation (for international training activities), the Ford Foundation, the Hewlett Foundation, and the Bill and Melinda Gates Foundation. We would also like to acknowledge the financial support, as well as administrative services and office space, provided by several units of the University of California, Berkeley in 2008-2009:

Department of Economics
College of Letters & Sciences
Haas School of Business
Department of Agriculture and Resource Economics
Institute of Business and Economic Research

2008-2009 Income



2008-2009 Expenses



Contact

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<http://cega.berkeley.edu/>

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Further Reading: CEGA Faculty Publications

[1] "Spring Cleaning: Rural Water Impacts, Valuation, and Institutions". (2009) Edward Miguel with Michael Kremer, Jessica Leino, and Alix Zwane. NBER Working Paper, <http://ideas.repec.org/p/nbr/nberwo/15280.html>.

[2] "Housing, Health and Happiness." (2009) Paul Gertler with Rocío Titiunik, Sebastián Martínez, Sebastian Galiani, and Matias Cattaneo. American Economic Journal: Economic Policy. <http://ideas.repec.org/p/dls/wpaper/0074.html>

[3] "Teacher Performance Pay: Experimental Evidence from India" (2009) Karthik Muralidharan with Venkatesh Sundararaman. NBER Working Paper. <http://ideas.repec.org/p/nbr/nberwo/15323.html>