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## Economics professor tackles poverty in Kenya and global climate change

### By Ashley Park

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Berkeley Economics Professor Edward Miguel has spent his career uncovering the structural forces behind poverty, instability and inequality. As the Oxfam Professor of Environmental and Resource Economics and co-director of the Center for Effective Global Action (CEGA), he leads groundbreaking research that ties together rural finance, climate change, conflict and human capital — often through long-term fieldwork in Sub-Saharan Africa.

Miguel's research isn't just about diagnosis. It's about evidence-based solutions, such as a recent study on post-harvest loans in Kenya that's reshaping how we think about agricultural markets and seasonal poverty.

He spoke to Berkeley Social Sciences about his academic interests, research on rural poverty and climate change, and how he mentors students to make a difference.

What inspired you to pursue economics, and how did that path eventually lead you to Berkeley? Edward Miguel: Even as a teenager, I was deeply interested in questions of global poverty and inequality. I wanted to understand why some countries — and communities within them — had so much while others struggled to meet basic needs. That curiosity stuck with me, and once I got to college, I discovered development economics. It was a revelation — this was a field that asked the exact kinds of questions I had always wondered about, and it used real data and tools to try and find answers.

Berkeley has always stood out to me for its intellectual tradition and social mission. Even before I came here, I admired the way Berkeley scholars tackled big, difficult questions. There's also a history here — a culture — of engaging with the world not just through research but through activism, justice and equity. So when the opportunity came to join the Economics faculty, it felt like a perfect match. I get to work with brilliant students, who care deeply about fairness and opportunity, and that energy keeps the work meaningful.

# Your recent research on post-harvest loans in Kenya offers a fresh take on how to address hunger season and food insecurity. Can you walk us through the key findings?

**Edward Miguel:** In many rural parts of Kenya, smallholder farmers face what's known locally as the "hungry season" — a period before the next harvest when food runs out, and families are at their

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most vulnerable. Ironically, this is also when market prices for grain are at their highest. It creates a cruel situation: people need food, but they can't afford it, even though they may have sold their own grain at very low prices just a few months earlier, right after the harvest when prices are low.

Our study tested a new idea: what if instead of giving loans before planting, we gave them after the harvest? This would allow farmers to purchase and store grain when it's cheap, or avoid selling their own grain immediately. The results were really promising. It helped stabilize food access throughout the year and reduced pressure during the hungry season. This flips the traditional timing of agricultural finance on its head, and it's a strategy that could apply to many other low-income, agriculture-based economies.

### You've done extensive work on health, education and climate. How do these areas connect? Edward Miguel: These areas are deeply interconnected — especially in the context of African economic development. Take child health, for example. One of our long-term studies in Kenya looked at the impacts of a health intervention in early childhood. Years later, we're seeing that the effects go far beyond the individual: their own children are healthier, with better cognitive performance and survival rates. That kind of intergenerational impact is powerful and shows how early investments can ripple forward.

But these gains are increasingly under threat. Climate change is disrupting agricultural cycles, straining public budgets and making life more unpredictable for already vulnerable populations. That affects everything — from the stability of food systems to governments' ability to fund health and education programs. In my work, I try to bring these threads together, because no single factor operates in isolation. A change in the climate can destabilize economies, which affects political institutions, and on it goes.

### You've co-founded organizations like the Center for Effective Global Action (CEGA) and Berkeley Initiative for Transparency in the Social Sciences (BITSS) that prioritize rigor and transparency. What role do these institutions play in shaping global policy today?

**Edward Miguel:** We founded CEGA in 2007, bringing together faculty, grad students and researchers who are all committed to using the best possible data and methods to study poverty, inequality and global growth. We've funded hundreds of studies in over 60 countries — not just because these topics matter, but because they deserve to be studied with care, precision and humility.

Similarly, BITSS is focused on improving research transparency in the social sciences. That means preregistering studies, sharing data and replicating findings. When we demand more accountability from ourselves as researchers, the insights we generate are more likely to be trusted — and used — by governments, aid organizations and communities. These institutions are helping move the field toward more responsible and impactful research.

# You've mentored more than 140 Ph.D. students. How do you approach mentorship, and what advice do you give to students interested in development economics?

Edward Miguel: For me, mentorship isn't about giving a single piece of advice that works for everyone

— it's about helping each student find their own path and navigate challenges based on their goals and interests. I've worked across a lot of topics and methods, so I try to draw from that experience to support students as they develop their ideas and avoid common pitfalls.

One of the most fun parts for me personally is how much I learn from them. Berkeley students bring incredible energy and fresh perspectives — many are drawn to development and global equity because they truly want to make a difference. Being part of their journey, helping shape their research, and seeing where it leads is one of the most rewarding parts of my job.

The advice I give most often is simple: work on something you genuinely care about. These are big, complex problems — poverty, climate, inequality — and the work isn't easy. But when your motivation is personal and authentic, it fuels your creativity and resilience. That's where the most meaningful insights and lasting impact come from. My work spans global development, conflict, climate and human capital — all deeply interconnected issues in African economic development. It's an incredible privilege to do this work at Berkeley, where rigorous research and real-world impact go hand in hand.

#### TOPICS

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