

"This local project was small enough that it was not particularly on my radar, but I kept hearing from villagers that it was causing a lot of conflict because it was riddled with corruption," she says.

Based upon prodding from villagers, Ensminger decided to dig further. Fortuitously, she had just completed her once per decade survey of the local population. Armed with several decades' worth of socioeconomic data on the same people, she was able to link people's positions in the socioeconomic hierarchy, including their social network position, to the benefits received as a result of corruption in the project.

"I never set out to study corruption, but I recognized this as a quite rare opportunity to gather actual payoff data at the individual level and link it with 30 years of economic and demographic data on the same individuals," she says.

Still, Ensminger did not perceive this small research effort as a career-changing move. "I was at the time deeply involved in co-administering a collaborative project running economic experiments around the world in small-scale societies. When I wrote that first paper on corruption I saw it as a one-off exercise," she says.

But then something rather dramatic happened: Within three weeks of presenting the paper to the research department of the World Bank, the operations staff running the large funding project sent a convoy of six vehicles out to the village where Ensminger had reported corruption. Says Ensminger, "There were many aspects of that 'investigation' that were highly irregular, not the least of which was the fact that the people that the World Bank in Washington sent to do the investigation were potentially implicated."

Ensminger traveled back to Kenya to assess the situation and quickly deduced that it was worth asking whether the corruption she had observed in this one microproject was representative of similar problems elsewhere in the larger World Bank project. The drama of the World Bank's reaction to her research

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led her to wonder if where there was smoke, there was fire, she says.

"I began to reorient the course of my future research, though for several years my time was divided as I wrapped up the cross-cultural experimental project," says Ensminger. "Along the way, I conducted more than 1,000 interviews on corruption in the larger World Bank project, talking to project staff, village beneficiaries, World Bank staff in Washington, and prominent Kenyan members of civil society, human-rights groups, and Parliament."

Her goal was to understand the extent of the corruption—in a project that spans over 75 percent of Kenya and ran for 17 years—by getting to the root of how it all worked, including how project funds were siphoned off for use in election campaigns and for personal consumption. As Ensminger says, "It became a classic 'follow the money' exercise, but in the process, I learned a lot about the aid business, and the incentives that explain why these problems persist.

"It is no surprise to most people that there is a lot of corruption in aid funds, but just what order of magnitude and what types of aid are most at risk is important to understand," she says. Toward this end, Ensminger is currently working to develop a quantitative method of detecting fraud in aid data.

"Faking numbers that resemble true distributions is actually quite difficult for people, and there are digit analysis techniques that we can use to detect such fraud," she says.

In collaboration with Caltech

undergraduate Jetson Leder-Luis (pictured with Ensminger on the previous page), a double major in economics and applied math who graduated in 2014, Ensminger adapted and developed approximately one dozen statistical tests used to detect fraud in the reported data of the World Bank project. At the same time, the World Bank was conducting its own forensic audit of the Kenyan aid program. The results of their two-year investigation concluded that 66 percent of the thousands of financial transactions they analyzed were suspected of being fraudulent or were questionable.

"What we demonstrate from the results of our method is that they match fairly well with those of the forensic audit," says Ensminger, who is continuing to refine her tests. "That is good for aid, because those who wish to monitor problems in real time, and from anywhere in the world, now have a method for doing so that is more timely and cost-effective than a full-blown forensic audit. Donors should be able to identify risky areas more quickly and respond to stem the damage."

A research agenda focused upon corruption isn't what she set off to study as a young anthropologist 30 years ago, but Ensminger says research is always about adapting to the unexpected twists, turns, and opportunities that present themselves.

"The most rewarding thing about this particular turn in my research is that the people of Kenya—from the village where I have lived for over 30 years, to the leaders of civil society in Nairobi—are more engaged with this aspect of my research than anything else I have done," she says. "We are learning together about the who, what, when, where, and how of corruption, and that collaboration is the most satisfying of my career to date." ESS

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