

Dialing for Development

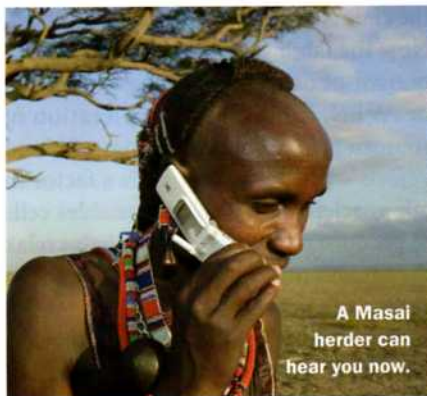
In poor countries, cell phones are modernizing everything from banking to health care

BY MARJORIE HOWARD

WHEN JENNY AKER, F97, first traveled to Ghana in 1997, the country was a communications desert. The rural villages where she worked had few landlines and no cell phones. Since then, cell phones have gripped the developing world. There are now sixty cell phone subscriptions for every hundred people on earth, according to a United Nations report. In developing countries, forty-eight percent have cell phones, more than eight times the number in 2000, and African cell phone subscriptions rose from 54 million in 2003 to nearly 350 million in 2008. Ghana has caught the wireless bug. “While not everyone in a village might have a phone,” says Aker, who is now an assistant professor of development economics at the Fletcher School, “at least a few do, and people share them.”

The technology provides a nearly instant communications infrastructure in places that have had little or none. “Across rural-urban and rich-poor divides, mobile phones connect people to people, to information, to markets, and to financial services, going where no technology has gone before,” Aker says. Now she and other Tufts community members are capitalizing on the phenomenon, initiating microfinance, literacy, and health-care projects that use cell phones as instruments of change.

Text messaging in particular exerts a magnetic appeal. In Niger in 2006, Aker noticed that people who had never attended school were teaching themselves how to read and write simple text messages. She and



A Masai herder can hear you now.

colleagues at Catholic Relief Services and Niger’s Ministry of Non-Formal Education started a training program called Project ABC to develop such skills further. The results, Aker says, were amazing. “There were people I met last year who were unable to hold a pencil and put it to paper. Four months later, they were able to send me a text message.” One woman told her she can now read her child’s health card.

Project ABC includes a component that Aker’s student Joshua Haynes, F10, helped develop: a system that lets users check agricultural market prices in four languages. This way, farmers who used to sell peanuts and sesame only at their village market—accepting whatever price they could get—can receive text messages about prices in other area markets where they might want to sell instead.

More recently, Haynes won a Clinton Global Initiative Grant for a pilot project to help Haitians use cell phones to keep track of their savings. He also helped organize a conference in Kenya on mobile banking, a concept quickly gaining popularity in the Philippines, Afghanistan, Tanzania,

Ghana, and South Africa. Haynes calls it a “bank for the unbanked.”

In India, meanwhile, cell phones are improving rural medicine. The Christian Medical College, in the southern state of Tamil Nadu, has started using the Tufts University Science Knowledgebase (TUSK)—an e-learning system that can be accessed by mobile phone—to support its network of some two hundred hospitals across the country. That’s because TUSK can now be used on mobile phones.

“Some of these medical posts are quite basic and isolated,” says Associate Provost Mary Lee, J75, M83, and under such conditions, TUSK can literally be a lifesaver. Imagine a doctor who encounters a patient with an unknown condition, yet has no medical library or peers to consult. With TUSK and mobile access, Lee says, the physician “could access the full wealth of Christian Medical College’s online resources, send an instant photo to peers for help with diagnosis, engage in an on-line discussion to obtain broad input from doctors across the network, and archive all that information into a searchable library so that other health workers could learn from that medical case in the future.”

Aker, who sees cell phones as a “transformative tool for development,” is enthusiastic about such efforts, but cautions that they can’t replace education and economic support for the poor. “Years of development experience have taught us that there are no silver bullets,” she says. “Mobile phones are a crucial piece of the puzzle, but they cannot stand alone.”

A VERSION OF THIS ARTICLE APPEARED IN TUFTS JOURNAL.

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