rate reporting including, most recently, One Report: Integrated Reporting for a Sustainable Strategy (Wiley). Although only a few American companies—including United Technologies and American Electric Power, in addition to Southwest—have so far adopted the practice, these firms “are coming to it for the same reason,” he says. “It is like moving from an externally driven sustainability strategy of being ‘green,’” meaning that a company operates in a way that is environmentally responsible as defined by regulation or social expectations, to “a sustainability strategy for the company”: a strategy that recognizes and accounts for the durability of a company’s activities over long periods of time. How long, for example, will regulators allow a coal company to operate without accounting for the social or environmental costs of pollutants? Integrated reporting, Eccles says, “is going to lead to better resource-allocation decisions that will create value over the long term, while allowing companies to take a more holistic view of their role in society.”

Eccles says companies find that one of the first benefits of this emerging practice is that it “enables them to take a more disciplined and integrated approach across all the different organizational silos.” That allows them to “improve the way they are managed, to ensure that they have a sustainable strategy that will enable them to create long-term value for shareholders and society.” Southwest Airlines, for example, discovered that it didn’t have an easy way to track water and electricity usage in all its facilities. Now it has a system in place to capture those data.

Improved management is one reason for moving to integrated reporting, but external forces can also play a role. Socially responsible investors increasingly demand information about environmental performance, and government regulation may even require it. South Africa has mandated integrated reporting for the 450 publicly traded companies on the Johannesburg Stock Exchange and on January 25 released a first-draft South African Framework for Integrated Reporting. According to Harvard Business School dean Nitin Nohria, “Integrated reporting is a big idea and the kind of idea HBS should support and practice.”

Putting all a company’s (or a city’s or a university’s) information in one place is not without risk, Eccles acknowledges, because it forces tough decisions and conversations. A corporation might buy electricity generated by nuclear power to reduce carbon emissions, but produce radioactive waste instead. Integrated reporting rapidly leads to the realization that “you can’t satisfy everybody,” he explains. Ultimately, the resolution of such trade-offs requires corporations to think about their role in society. “Integrated reporting,” he says, “instills the discipline to be much more specific about the relationships between financial and nonfinancial performance, and this will benefit all stakeholders.”

—JONATHAN SHAW

ROBERT ECCLES WEBSITE:

FRIENDING FARMING

An African Breadbasket?

REPORTS OF FAMINE in Africa are so common that it becomes easy to assume the continent will always face food shortages. But Calestous Juma, professor of the practice of international development at the Harvard Kennedy School, says Africa could feed itself—and even become a net exporter of food—within a generation.

Despite worldwide advances in agricultural technology, food production in Africa has actually fallen in the last 40 years—even as aggregate global food production has more than doubled. Although the majority of the continent’s population derives its income from farming, “only 4 percent of Africa’s crop area is irrigated, compared to 39 percent in South Asia,” Juma writes in his book The New Harvest (Oxford). Fertilizer use per hectare in Africa is less than 10 percent of the world average. Fully 70 percent of the population lives more than two hours’ travel time from a market.

In Juma’s eyes, that means there is plenty of room for improvement. Inadequate infrastructure (transportation, communication, energy) has hampered large-scale agricultural production, but he notes that this handicap also presents an opportunity for innovative solutions. To take one example, a partnership between mobile phone companies, governments, and nongovernmental organizations (NGOs) is creating a network of 5,000 automatic weather stations across Africa; the data they gather, when disseminated via mobile phone, will help farmers and fishermen in their trades.

Juma bases his arguments on initiatives like this one. “Most studies of Africa tend to be theoretical,” he said in an interview. “They’re based in models. But people can always construct a model that shows a different outcome.” He believes innovative projects are showing how African countries, through agriculture and the science, technology, and entrepreneurship that support it, can leave behind their role as aid recipients and instead pilot new strategies that the rest of the world might copy.

Agriculture was a part of life during Juma’s childhood on the shores of Lake Victoria, in western Kenya. His father was a fisherman; his mother grew (and still does grow) cassava. Juma first went to teachers college; graduate work on renewable energy at the University of Sussex led to his interest in agriculture. “You can’t study fuel
alcohol,” he says, “without studying how cane is produced.” In 1988, he founded the African Centre for Technology Studies, the continent’s first NGO dedicated to promoting the application of science and technology to sustainable development. Now, at Harvard, he directs the Agricultural Innovation in Africa Project (funded by the Bill & Melinda Gates Foundation) and teaches courses such as “Technology and Sustainability” and “Innovation, Development, and Globalization.”

He believes African countries must rethink the assumptions that underpin their education systems: agriculture should be treated “as a skill to be learned, valued, and improved upon from early childhood through adult careers,” he writes, not “as a last resort for people who cannot find the resources to move to a city and get an industrial job.” He calls for creating more universities of science and technology that integrate research and teaching, as well as practice; as it stands, he says, most African education in agriculture includes no hands-on experience.

As a model for what is possible, he points to a non-African example. Costa Rica’s EARTH University, founded in 1990 with international aid and foundation money, converted an existing banana plantation on its campus to sustainable and socially responsible farming practices (buyers include the Whole Foods supermarket chain). Students get hands-on experience on the university’s farm and through internships with local producers. An entrepreneurship program offers loans for students’ ventures, and they keep their profits after repayment.

Juma cites initiatives within Africa as well. Turning from educational reform to the benefits of improved infrastructure, he lauds a project in Uganda that increased agricultural productivity by building roads to link rural areas to markets, focusing on secondary roads, which boost economic development more than the ribbons of new highway that may make a country appear more developed. Moving on to technological innovation, he notes that the use of genetically modified Bacillus thuringiensis corn and cotton has reduced pesticide use and increased crop yields in Burkina Faso, South Africa, and Egypt. In catalyzing such changes, he believes multinational regional bodies should play a role, citing the West African Power Pool, through which the 14-member Economic Community of West African States cooperates on energy production and infrastructure, and an effort by the Common Market for Eastern and Southern Africa to bolster the inland fishing industry by supporting development of new products, such as fish burgers for export to Europe.

Juma says he wrote the book as a sort of instruction manual for African governments; he mailed an autographed copy to each African president. One critic noted that with the grab bag of solutions the book offers, it’s difficult for an African nation to know where to start. Juma’s response: “It doesn’t matter where you start, so long as you get started.”

Multiple Wives, Substandard Lives

In TV shows like Big Love and the documentary Sister Wives, polygyny—the practice of a man marrying multiple women—looks like a pretty good deal for everyone. Sure, it may be challenging to orchestrate meals with so many kids, or to schedule a husband’s time evenly among his wives, who occasionally feel jealous of each other. And in the United States, where plural marriage is illegal, family members have to be careful about whom they share their polygynist identity with. But the wives on screen claim the benefits of their marriages outweigh the risks, particularly when it comes to parenting. If it takes a village to raise children, these polygynists argue, then they have an edge on mainstream society: There’s always a mom around to take care of the kids.

But who’s taking care of the moms? Rose McDermott, the 2010-2011 Bessell Fellow at the Radcliffe Institute and a professor of political science at Brown, has spent the last decade accumulating data and stories from across the globe bearing on this and other questions about polygyny, and has found evidence to con-