

## **The Quest for Scale**

By Louis C. Boorstin

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## The Quest for Scale

An effort to improve sanitation in developing countries yields lessons in how to achieve enduring, broad-based social impact. **BY LOUIS C. BOORSTIN**

IN DECEMBER 2006, I flew into Aurangabad, a city in the Indian state of Maharashtra. Before the trip, when I mentioned my destination to an Indian friend, she asked, “Are you going to visit the caves?” She was referring to the main attraction in the area—a series of Buddhist shrines carved centuries ago out of the nearby hills. No, I replied. I wasn’t planning to visit the caves. I was planning to visit some toilets.

In fact, what I’d typically seen when I visited India was the *absence* of toilets. More than 600 million Indians practice what is politely called “open defecation.” But in the Jalna district, which is near Aurangabad, officials had made real progress in persuading large numbers of rural households to install and actually use toilets. The key to success in Jalna, I learned, involved a community-based program that spurred demand for toilets and rewarded the desired outcome—villages free of open defecation—instead of simply paying to install toilets that few people used.

That trip was part of a quest for durable and scalable ways to improve sanitation. A year and a half earlier, I had joined a small team from the Bill & Melinda Gates Foundation that had a mandate to develop new program areas. My focus was on the field of water, sanitation, and hygiene.

For decades, that field had stymied government officials and international development experts. When I joined the Gates Foundation, the situation that we faced was daunting. More than 1 billion people lacked access to drinking water, and more than 2.5 billion people—half the population of the developing world—either relied on unsafe sanitation facilities or had no sanitation facilities at all. The consequences of these problems were profound: Each year, 1.5 million children under the age of five were dying from water-related diseases. The economic and social costs of days lost from work and schooling were significant, too. In addition, there was the simple indignity faced by billions of people who have nowhere “to go.”

The Gates Foundation brought to this challenge not only a considerable array of resources, but also a very ambitious goal: to make a real difference in the lives of the poor on a large scale. Between 2005 and 2012, the foundation funded more than 150 water, sanitation, and hygiene grants, at a total cost of more than \$400 million. From the experience of helping to make and administer many of those grants, I gleaned several lessons in how to pursue social innovation in a scalable way.

**Test at scale** | Most international donors and implementers embrace a pilot-to-scale paradigm. They support innovative pilots



and then just *assume* that the most promising pilots will be adopted at scale. But, as I came to realize, very few pilots are actually scale-ready. Too often, something is missing between the pilot stage and the stage of widespread adoption. What’s needed is a stage in which worthy programs are *tested* at scale. “Scale” here means the minimum level (district-wide, for example) at which a government or another large implementer would operate a program. Such an approach is consistent with the production of commercial goods: No manufacturer would assume that what works in a small job shop would translate readily into production on an assembly line. Instead, a company will typically develop and test manufacturing processes that will allow it to achieve economies of scale.

Several Gates Foundation grantees tried this test-at-scale approach in different settings. One grantee achieved mixed success by taking a community-led rural sanitation model—the model used in Jalna, India,

**LOUIS BOORSTIN** was deputy director of the water, sanitation, and hygiene program at the Bill & Melinda Gates Foundation from 2005 to 2013. Currently, he is advising other organizations on effective approaches to international development and impact investing.

that I mentioned earlier—and implementing it at a scale of more than 1 million people in each of four locations. Another grantee figured out how to support village-level water services at the district level (and did so in two separate countries). And a third grantee began testing several delivery models at the scale of hundreds of thousands of people for a remarkably user-friendly device that chlorinates water drawn from wells and springs.

**Change the system** | New or improved interventions—providing vaccines or water purifiers, for example—generate lots of excitement. And clearly, there is a need for technical innovation. (That’s why, for example, the Gates Foundation launched its Reinvent the Toilet Challenge.) Yet such innovations can succeed in the long run only if they are embedded in local service delivery systems. Social innovators who seek scaled impact, therefore, should focus on altering how pivotal institutions set policy, allocate funding, and deliver services on the ground. Applying influence at institutional leverage points can generate long-term, wide-scale improvements in services for the poor.

One grantee in Kenya, for example, changed its strategy from one of delivering sanitation services in schools to one of advocating an increase in government funding to maintain school latrines. The impact of that shift exceeded any outcome that would have come from a direct intervention. Another

grantee understood the power of systems change right from the start. Aiming to improve water and sanitation services for the poor in more than 400 municipalities throughout Maharashtra and Gujarat, another state in India, this grantee developed a common performance-assessment system that includes specific indicators to measure access by the poor. Today, that system is taking effect at the municipal and state levels, and the Indian national government has committed \$300 million in additional funding to the program.

**Change the debate** | Improving water and sanitation means digging wells and installing toilets, right? That’s the common perception, and it leads funders to focus on capital investments in hardware and to measure success by access to water and sanitation facilities. But that approach, we learned, is neither the right way to allocate money nor the right way to gauge progress. What really matters is whether the poor are receiving services in a sustained, affordable, and convenient way. So we worked to change the debate from “Are we funding that well or toilet?” to “Are we providing sustainable water and sanitation services?” One of our grantees, for instance, developed a new method for correctly estimating the full, life-cycle cost of water and sanitation services and then worked closely with governments, NGOs, and other parties to implement that approach in several countries.

**Define success carefully** | During my time at the Gates Foundation, I visited water and sanitation programs across Asia and Africa—programs run by NGOs, by governments, and by private companies. Many NGOs did a good job at the village level, but few could figure out how to scale up effectively, and often they struggled with long-term sustainability. Government programs typically operated on a large scale, but rarely were they as effective as NGO-led efforts undertaken at the village level. Those programs,

too, struggled to sustain services over time. Private-sector providers, meanwhile, often faced challenges when it came to extending services to the poor or to providing services at an affordable price.

These observations led me to define success in terms of three equally important goals:

- **Impact:** Does it demonstrably improve the health and socioeconomic well-being of the poor?
- **Sustainability:** Does it have enough resources to keep running for many years?
- **Scale:** Does it have the potential to reach millions of people?

Achieving success concurrently across all three goals isn’t easy. But for social innovators, they are important guideposts on the path to making a real, lasting difference.

**Pair implementers with evaluators** | A notable advance in international development has involved the application of rigorous evaluation methods to assess impact and to identify which interventions really work (or don’t). Yet too often such analyses

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end up in academic studies that don’t influence how programs are implemented on the ground. Most implementers, meanwhile, have weak learning systems and often rely on anecdotal evidence to guide their practices. From the outset, we paired implementers—governments, international organizations, NGOs, private ventures—with evaluators. That way, the former could learn more effectively, and the latter could achieve greater impact. Some of these pairings fared better than others, but in each case the learning on both sides was substantial.

**Build a diverse team** | The colleagues whom I recruited to our team included a PhD in fecal sludge management, a professional with 30 years of field experience in water and sanitation in Asia and Africa, a systems thinker extraordinaire, two social science PhDs with deep expertise in measuring impact, a policy and advocacy whiz, and a former investment banker. They hailed from an equally diverse range of countries: Cote d’Ivoire, Italy, the Netherlands, Romania, and the United States. Given our varied perspectives, conflicts inevitably arose—but some of our most productive dialogues emerged from those conflicts. In retrospect, I see that assembling this multi-disciplinary cast of characters may have been an effort to internalize a “systems view.” In any event, it reflected my recognition that taking a single-discipline approach was unlikely to yield strong results.

I have one last thought to share about the quest for scalable innovation: The common thread that united our most effective grantees was an ability not only to focus on systems, but also to *listen*—to listen very carefully to the poor. In other words, they were able to observe the choices being made by the poor and to understand the motivations behind those choices. That combination generates approaches that have the potential to achieve large scale and sustainability. ■