JEROO BILLIMORIA STARTED THE CHILDLINE INDIA Foundation in Mumbai, India, as a toll-free telephone help line connecting street children with a wide range of support services. She quickly became aware of the need to change the behavior of police, railway, and health officials. ChildLine began offering training workshops and helped launch the National Initiative for Child Protection, with government support. Through these efforts, ChildLine has served more than 3 million children in 73 cities across India, and it has changed the way officials and institutions relate to street children.

The same is true for Martin Eakes at Self-Help. This organization started out by giving reasonably priced home and business loans to low-income North Carolina families. But after seeing the wider problems that low-income families experienced when seeking loans, Self-Help expanded its goals and now aims to change the landscape of low-income lending in the United States.

What distinguishes social entrepreneurs like Billimoria and Eakes from other service providers is that instead of just trying to alleviate the symptoms of problems, their organizations are trying to solve the underlying problems. To create significant and long-lasting changes, social entrepreneurs must understand and often alter the social system that creates and sustains the problems in the first place. This social system includes all of the actors—the friends, foes, competitors, and even the innocent bystanders—party to the problem, as well as the larger environment—the laws, policies, social norms, demographic trends, and cultural institutions—within which the actors play.

To understand and change these social systems, social entrepreneurs should borrow insights from ecology and use an ecosystems framework. Long ago, biologists discovered the limits of studying living organisms in isolation. Biologists gain a much deeper understanding only by considering the complicated relationships between organisms and their environments. They look not only at the impact that environmental factors such as soil and water have on organisms, but also at the impact that these organisms have on one another and their environment.

Human societies are just as complex as ecosystems, with many different types of players and environmental conditions. Management scholars have recognized the parallels between biological and economic systems. Recently, researchers in the field of strategic management have focused greater attention on the parallels between biological and organizational systems, even adopting the phrase “ecosystem strategy” to refer to an approach for guiding an organization’s strategic choices. Proponents of an ecosystems framework stress the value of understanding the complexity and dynamics of the wide-ranging forces an organization faces. This broader framework has been used to explain the success of companies such as Wal-Mart and Microsoft that have been particularly adept at shaping their environments.

The ecosystems approach departs from the industrial organization economics framework, generally associated with Har-
Self-Help’s Ecosystem

Self-Help is one organization that has made far-reaching changes by tackling a problematic ecosystem. Martin Eakes, a Yale Law School graduate and a native of rural North Carolina, founded Self-Help in 1980 with his wife, Bonnie Wright. The organization originally provided management assistance to worker-owned businesses in the state, but soon shifted its emphasis to helping disadvantaged residents build wealth through home and business ownership. One main vehicle was reasonably priced loans.

In 1993, Self-Help was making more than $15 million in home mortgage loans each year in North Carolina. But the organization recognized that it could make only as many loans as its on-hand capital and loan officers could support. In contrast, mainstream lenders could make nearly limitless numbers of loans because they could sell their debt to investors in secondary markets, using intermediaries such as Fannie Mae and Freddie Mac. With the new capital from the secondary markets, mainstream lenders were able to make new loans. Unfortunately, Self-Help’s mortgages to low-wealth borrowers were viewed as too risky for most investors, which meant that the nonprofit could not get more capital from secondary markets.

To sidestep this problem altogether, Self-Help changed the larger financing ecosystem by creating a secondary market for “nonconforming” loans – i.e., home mortgages that are not eligible for sale to either Fannie Mae or Freddie Mac. Self-Help first bought $20 million in loans from Wachovia Bank, taking on the risk of default, packaging them, and reselling them to private investors. Wachovia committed to relend the proceeds to new low-income borrowers. Self-Help made enough profit on this transaction to increase the amount of loans it bought the next time.

In 1998, Self-Help decided to create a national market for high-quality nonconforming loans. To secure this market, Eakes and his colleagues convinced the Ford Foundation to grant Self-Help $50 million to cover possible defaults. Ford’s grant made it less risky for Fannie Mae to purchase qualified loans originated by Self-Help or sold to Self-Help by other lenders around the country. Numerous lenders have participated, including Wachovia, Bank of America, RBC Centura, Sky Financial Group, and CCO Mortgage. These participating lenders have committed to lend the proceeds to low-income homebuyers in the future.

Since its inception, Self-Help has purchased loans from 47 states and the District of Columbia. By the end of 2006, investors had purchased a cumulative total of $4.3 billion worth of nonconforming mortgage loans through this program. Moreover, Self-Help has not had to tap the reserve funds, because defaults on these mortgages have been low. As Eakes says, “If someone has a chance to own a home who has never had a chance to own one before, they will do anything to keep that home.”

As Self-Help was developing this mortgage market, the organization embarked on a second ecosystem change: implementing new laws and regulations against predatory lending. By the late 1990s, predatory lending was clearly undermining many of the gains that poor families had made. A low-wealth family might build up its assets, in the form of home equity, only to see the...
value of that asset stripped away by aggressive lenders who offered tempting opportunities to pay off bills or reduce monthly payments through refinancing with an adjustable rate loan. These lenders typically offered low initial payments that increased dramatically a few years into the loan. The borrowers often did not understand the costs and risks of these loans and ended up losing their equity and, in many cases, their homes.

To improve the financial well-being of its clients and other low-income borrowers, Self-Help worked with a coalition of business groups (banks, credit unions, realtors, homebuilders, and others) and activist organizations (AARP, NAACP, the N.C. Council of Churches, and others) to advocate for a predatory lending law. North Carolina passed this law – the first law of its kind in the country – in 1999.

Although Self-Help changed the state’s financial and legal ecosystem, the organization saw that preying on the poor was unique neither to North Carolina nor to the home mortgage market. And so in 2002, Self-Help created the Center for Responsible Lending (CRL) to eliminate abusive financial practices on a national scale. With the support of CRL, several states have passed new laws to constrain both predatory mortgage lending and payday lending – short-term loans with the equivalent of a 390 percent annual interest rate. CRL has gotten the attention and changed the practices of corporate decision makers, as indicated by a headline in The Wall Street Journal in 2005: “When Martin Eakes Speaks, Citigroup Listens.”

Mapping an Ecosystem

Eakes and his colleagues at Self-Help created change in the housing and lending markets largely by instinct. To make ecosystem change more systematic, social entrepreneurs should create a map of their ecosystem that identifies all of the players and environmental conditions along with the relationships between them.

The first step social entrepreneurs must take when creating an ecosystem map is to define their organization’s ultimate intended impact, as well as the series of steps that will lead to that impact – that is, they must define their theory of change. They must ask themselves: “What do we want to accomplish?” “How will achieving this result make society a better place?” “What’s the first step on the path to this change?” “How will taking this step get us closer to our goal?” “Why do we believe that this step will lead to change?”

Next, social entrepreneurs must identify the various parts of their ecosystem, including the players (individuals and organizations) and the environmental conditions (norms, markets, laws) that do or potentially could influence their ability to create and sustain the organization’s intended impact. The distinction between players and environmental conditions is a bit artificial because the two often affect one another, but for mapping purposes it is useful to look at the ecosystem through both of these lenses.

PLAYERS. Biological ecosystems are made up of complex webs of interrelated organisms, or players, each of which has a role. A flowering plant, for example, relies on certain birds and insects to spread its pollen. The birds and insects, in turn, receive nutrition from the plant. Other birds and insects might feed on the flowering plant, and competing plants might rob the flowering plant of needed sunlight, water, and nutrients.

Social ecosystems operate in much the same way. Social entrepreneurs get help from some individuals and organizations, give help to others, fend off threats from others, and compete with still others. Social entrepreneurs must identify all of the relevant players and the roles that they play. To keep the ecosystem-mapping exercise manageable, we recommend dividing the players into six roles:

• Resource Providers. These players include providers of financial, human, knowledge, networking, and technological resources, and any brokers or intermediaries that channel these resources to those who want them. Inadequacies and inefficiencies in this category can seriously constrain social entrepreneurs’ ability to achieve impact, just as a plant will struggle if it is cut off from adequate sunlight, water, or other nutrients. By creating a secondary market, Self-Help was tapping into a new supply of financial resources for low-income mortgages.

• Competitors. This category includes both organizations that compete with the social entrepreneur’s organization for resources and those that compete to serve the same beneficiaries. For instance, Teach for America competes for talent with McKinsey & Co. and Goldman Sachs, even though neither one of these organizations serves the same beneficiaries as Teach for America. And schools of education compete with Teach for America to supply teachers to America’s schools. Competition can be healthy if it helps channel resources to the most effective uses and beneficiaries to the most effective programs. Nevertheless, it can also lead to fragmentation and inefficiency...
when it is not linked to performance — a common problem in the social sector.

**Complementary Organizations and Allies.** These players are organizations or individuals that facilitate a social entrepreneur’s ability to create impact. This includes partners who perform critical steps in the social entrepreneur’s theory of change, individuals and organizations supporting the same cause, and people providing important complementary services. Parents, for example, play a central role in the preschool literacy program Raising a Reader, which provides books for parents to read to their children. Although weaknesses in this category are easy to overlook, they can seriously inhibit effectiveness.

**Beneficiaries and Customers.** These players include clients, patients, customers, and others who benefit from social entrepreneurs’ activities. In some cases, the paying customers might not be the ultimate beneficiaries — for instance, when a government agency pays for social services delivered to low-income families. In other cases, the ultimate beneficiaries may not interact with the organization at all. For example, the primary beneficiaries of Mothers Against Drunk Driving (MADD) are everyone who runs the risk of being injured by a drunk driver on the road, including those who have never heard of MADD.

**Opponents and Problem Makers.** These players contribute to the problems social entrepreneurs are addressing, undermine the ability of the organizations to achieve and sustain their intended impact, or oppose their efforts politically. Some, such as open political adversaries and those most directly responsible for the problems in question, are easy to identify. And so groups seeking to slow global climate change, for example, know they have to counter the efforts by the Global Climate Coalition and the Competitive Enterprise Institute, which have tried to raise doubts about the science of global warming. Others may be harder to identify because they are neutral about the social entrepreneurs’ cause and do damage to the cause indirectly, unintentionally, and sometimes even unknowingly.

**Affected or Influential Bystanders.** This is a catchall category designed to provoke social entrepreneurs to think about players who have no direct impact now, but who are affected by their efforts or who could influence their success. Of particular importance are organizations that could be harmed if the social entrepreneur succeeds. These players may eventually become opponents or problem makers. Think of how labor unions might respond to a job skills development program that graduates many talented workers who are willing to work for lower than union wages. Conversely, social entrepreneurs may also be able to identify organizations that incidentally benefit from their success and turn them into allies or resource providers. Finally, social entrepreneurs may identify parties who are currently neutral or on the sidelines, such as members of the media, who could influence (both positively and negatively) the change they want to bring about.

These categories are dynamic and not mutually exclusive. Players can take on more than one role at a time, they can switch roles over time, and new players can enter. The same organization can be both a competitor when it comes to vying for limited resources, and an ally when it comes to working together to expand the resource pool or advocate for legislation to serve the same cause. For example, faced with research from the Center for Responsible Lending, major financial institutions might not only curb their more aggressive lending practices, but also find ways to work with Self-Help. Social entrepreneurs’ ecosystem maps should reflect the dynamic nature of their ecosystems, noting trends and anticipating potential changes.

**Environmental Conditions.** Biological ecosystems are made up not only of organisms, but also of environmental conditions like soil, weather, sunlight, and water. These environmental conditions have a significant impact on the type of organisms that can exist, as well as on their relationships with one another. And so environmental conditions determine what types of organisms will live and which will die.

Social ecosystems also contain environmental conditions that significantly impact the overall ecosystem. Laws and regulations, demographics, the economy, and culture all affect which orga-
nizations can exist as well as their relationships with one another. Although social ecosystems influence the people and organizations within them, those people and organizations can, in turn, shape and even change the ecosystems of which they are a part.

Our model for environmental conditions in a social ecosystem is based on the work of Harvard Business School’s Pankaj Ghemawat. To help international businesses understand the locations in which they might operate, Ghemawat identified four categories of important environmental differences. We have modified these categories for the needs of social entrepreneurs. Social entrepreneurs should think about current conditions and potential changes within each category. The four environmental conditions are:

- **Politics and Administrative Structures.** This category includes rules and regulations along with the political dynamics of the jurisdictions in which social entrepreneurs operate. It also includes the processes and procedures affecting these rules, including levels of corruption among politicians and enforcement officials. For example, the Community Reinvestment Act of 1977 and the Community Development and Regulatory Improvement Act of 1994 played vital roles in shaping community development finance in the United States, affecting both Self-Help and its banking partners.

- **Economics and Markets.** This environmental condition includes the overall economic health of the regions in which social entrepreneurs operate and seek resources, as well as the region’s distribution of wealth and income, economic prospects, levels of entrepreneurial activity, and relevant markets. The growth of the mortgage-backed securities market opened an opportunity for Self-Help. Unfortunately, others have used secondary markets to help fuel the explosion of subprime lending.

- **Geography and Infrastructure.** This category includes not only the physical terrain and location, but also the infrastructure that social entrepreneurs count on for transportation, communication, and other operating needs. What works in dense urban areas may not work nearly as well in sparsely populated rural areas. Treating HIV/AIDS in a country with an extensive network of medical clinics is a different challenge from treating it in one with few clinics outside the main urban areas.

- **Culture and Social Fabric.** This environmental condition covers the norms and values, important subgroups, social networks, and demographic trends of the people living in the area. Though less concrete, these conditions are as important as infrastructure, politics, and economics. Many microfinance institutions target women. The challenges of this work vary widely depending on local cultural norms about the role of women in the economy.

Defining these environmental conditions is easiest for social entrepreneurs operating in a single, well-defined geography and political jurisdiction. Social entrepreneurs working across many legal, economic, cultural, and geographic environments face a greater challenge. They need to have a robust model that is capable of thriving in different environmental conditions, or they need to choose the different environments carefully to assure a better fit with the model, or they need to adapt their model to accommodate the different environmental conditions.

Because ecosystems are large and complex, constructing an ecosystem map runs the risk of becoming a tedious bureaucratic exercise. This would defeat the purpose of this process. Mapping ecosystems should be a dynamic process that results in strategic insights. An ecosystem map should be a living document that is modified as social entrepreneurs gain insights about the players and the environmental conditions that have or could have a significant impact on their efforts. Social entrepreneurs should push beyond the obvious to consider the factors that influence the behavior of other players and also consider the direction of change in environmental conditions.

To visualize an ecosystem map we have included one for Self-Help before and after the organization created the secondary market for nonconforming mortgages and the Center for Responsible Lending (see figures above).
The Four C’s
Changing Your Ecosystem

We have identified four practices that social entrepreneurs can use to create systemic ecosystem change. These four practices are the “Four C’s” – Coalitions, Communications, Credibility, and Contingencies. The relative importance of these four practices varies depending on the change the social entrepreneur intends to create, the dynamics of the particular ecosystem, and the organization’s position in its ecosystem.

Paths to Systemic Change

Once social entrepreneurs have created their ecosystem map, they can use it to hone their strategy. There are two primary paths for creating systemic change. One involves changing one or more of the environmental conditions that shape the behavior of players. The other involves introducing an innovation that spreads well enough to establish new and stable behavior patterns.

The first path is the clearest form of systemic change. It includes creating new public policy and regulations, establishing markets and changing the ways existing markets operate, establishing new cultural norms and social dynamics, and building new infrastructure. Self-Help’s work on predatory lending, for example, changed public policy at the state and federal level and is shaping market behavior through its work with large financial institutions. The MADD campaign to create designated drivers changed the culture and social dynamics in the United States and reduced the number of accidents caused by drunk drivers.

Social entrepreneurs can also create systemic change by introducing new practices, organizational structures, and business models that others adopt. The introduction of hospices, for example, changed how the medical system deals with end-of-life care. Hospices originated in the United Kingdom, but did not enter the United States until 1974 with the establishment of the Connecticut Hospice. Now there are more than 3,200 hospices in the United States. Perhaps the best-known example of a socially entrepreneurial innovation that has spread and caused systemic change is microfinance. This innovation, pioneered by Acción International, Grameen Bank, and others, has become so widespread that it has changed the financial systems for serving the poor in many parts of the world.

Often, systemic change requires both a shift in environmental conditions and the introduction and establishment of innovative practices. Changes in environmental conditions can reinforce new behavior patterns and facilitate their spread by changing rules, costs, norms, and incentives. For instance, legislation in the 1980s that authorized Medicare to reimburse hospice care helped hospices spread throughout the United States.

Of course, ecosystem change is no easy task. Social entrepreneurs who wish to create this level of change may find it helpful to keep in mind what we have labeled the “Four C’s”: Coalitions, Communications, Credibility, and Contingencies (see “The Four C’s: Changing Your Ecosystem” above).

Other Uses of an Ecosystems Framework

An ecosystems framework can help social entrepreneurs in many ways besides creating systemic change, including:

- Imparting a deeper understanding of an organization’s theory of change by making the environmental conditions and relationships on which the organization depends more visible, possibly leading to a revision of that theory.
- Mapping the resource flows into and within the ecosystem,
alienate other players. Consider the way Self-Help contrasts predatory lending with responsible lending. Talking about predatory lending certainly offended some lenders, even though the overall impact was to help create the desired change.

**CREDIBILITY.** It is often hard for social entrepreneurs to convince others that a systemic change is needed, and even more difficult to make the case that the change they propose will work. That is why it is important for social entrepreneurs to find ways to establish their credibility. Sometimes, an idea is so big or the timing is so urgent that a social entrepreneur has to act immediately on a large scale. But it is often more effective to establish one’s credibility by demonstrating the idea on a small scale and learning from that experience before attempting a more dramatic change. Self-Help, for example, first made home loans to low-income and minority borrowers and then tested its secondary market idea with Wachovia Bank – before later enlisting the help of the Ford Foundation and Fannie Mae to take the idea to the larger market.

**CONTINGENCIES.** Biological and social ecosystems are by their nature complex, which makes it difficult to predict all of the consequences of any significant intervention. Because of this, creating systemic change is often an experimental and learning process. It is important for social entrepreneurs to forecast how their ecosystem and the players in it might react to any change – and be prepared with potential countermoves to ameliorate or capitalize on the situation. Starting change on a small scale helps one understand any unanticipated consequences. Antitobacco groups, like the Campaign for Tobacco-Free Kids, for example, were prepared to fight aggressively for state and local laws banning indoor smoking and raising taxes after initially losing the fight in Congress to have tobacco regulated by the U.S. Food and Drug Administration.

> —P.N.B. & J.G.D.


revealing constraints, bottlenecks, and underused sources, perhaps suggesting alternative resource strategies for the organization.

- Identifying new operating partnerships, perhaps with complementary organizations, that fall short of systemic change but that promise to enhance the social entrepreneurs’ impact by increasing the coordination of otherwise independent players.
- Determining the minimum critical environmental conditions required for an organization’s operating model to be a success and using that information to guide the social entrepreneurs’ efforts to take the model into new areas.
- Developing different operating models for different ecosystems, or a more robust operating model that works in a variety of different ecosystems.

Of course, looking at society and social entrepreneurs in terms of ecosystems has its limits. Nevertheless, we believe that much can be learned by using this idea to illuminate the dynamic, interconnected, and complex character of the environments in which social entrepreneurs work.

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3 Iansiti and Levien. The Keystone Advantage.
8 These loans should be distinguished from the adjustable rate “subprime” loans that in recent months have caused serious problems in the U.S. financial markets. As will be seen below, Self-Help has long been campaigning against those kinds of loans.