

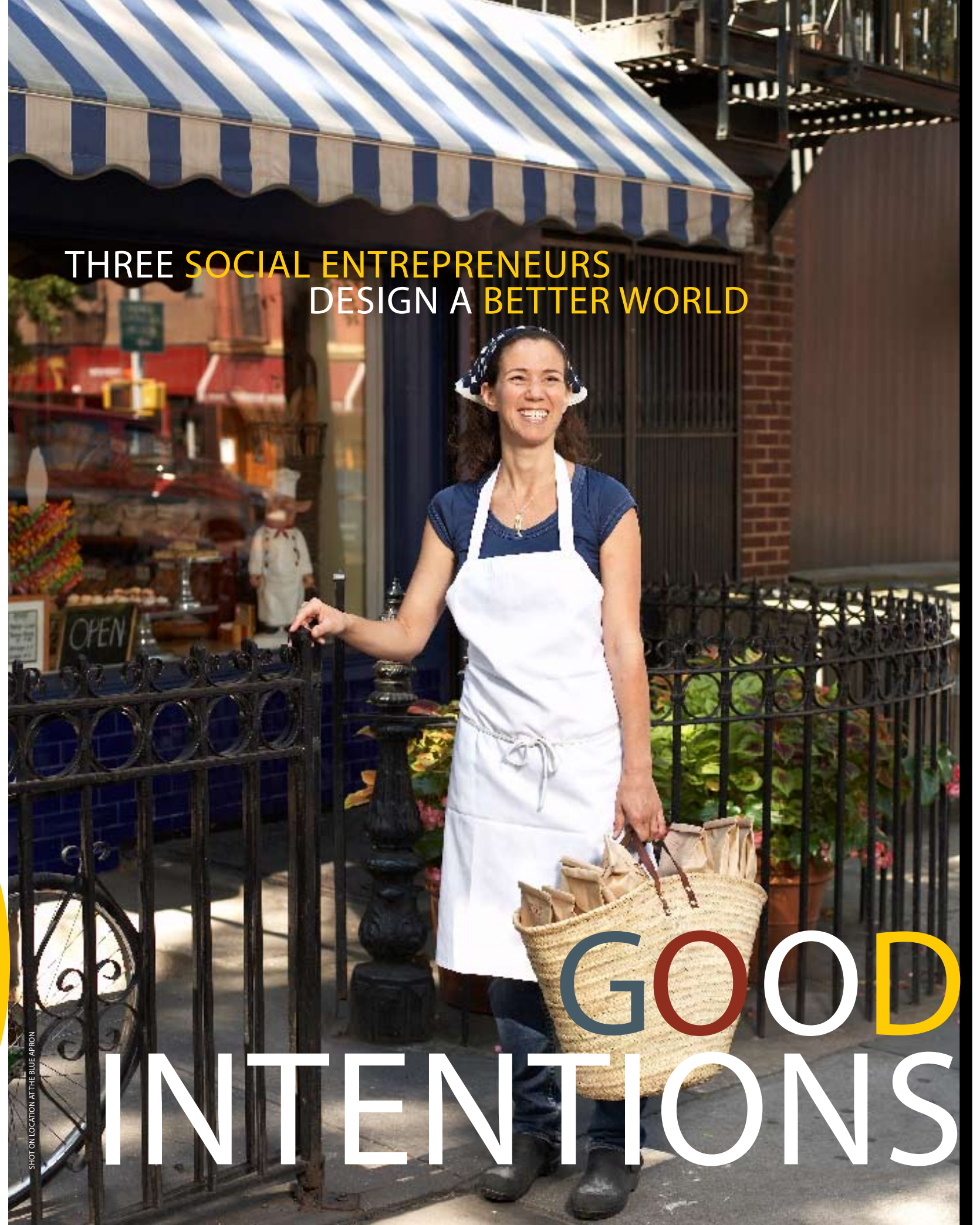
GOOD INVENTIONS

A barefoot mother in labor arrives at a makeshift Uganda clinic. In the pitch-black African night, a solar-powered flashlight illuminates the delivery—first light this baby, born to Batwa pygmy parents, will ever see.

In Batok Bay, Thailand, a sunburned American plunges backwards off a dive boat. He's overseeing the laying of hundreds of concrete reef balls, replacing the coral destroyed by the 2004 tsunami.

Closer to home, in Brooklyn, New York, Jessamyn Waldman pedals a stationary bicycle purpose-built to grind dried corn. She hands the corn dough to her head baker, a Mexican woman, who works it into tortillas just like her mother makes back home, helping a handful of immigrant women bakers earn a living wage selling to gourmet markets.

THREE SOCIAL ENTREPRENEURS DESIGN A BETTER WORLD



SHOT ON LOCATION AT THE BLUE APRON

GOOD INTENTIONS



clockwise from upper left
Kenyan BoGo light users; Todd Barber of the Reef Ball Foundation; two Cambodian children study by BoGo; a reef ball heads out to sea

These inventions—a solar-powered flashlight, artificial reef balls and a corn-grinding bicycle—are three examples of a new wave of innovation: the clever use of technology designed especially to benefit both the developing world, as well as the disadvantaged in our own backyard.

The people behind these goodwill gadgets are Mark Bent, Todd Barber, and Jessamyn Waldman—social entrepreneurs all. With a head for business and a heart for saving the world one flashlight, reef ball or tortilla at a time, these innovators are discovering what drives the three P's of social entrepreneurship—people, planet, and profits. Beyond the obvious fiscal payoff, they measure their gains against environmental and social yardsticks.

"That [note] really, really touched me," says Mark Bent, CEO and founder of SunNight Solar, maker of SunLight solar flashlights, as he recalls the e-mail he received from an American doctor running the clinic in remote Uganda. "It's amazing to think that some newborn, the first light they see, is my LED. It's just wonderful."

Wonderful—and the end result of a whole lot of work. Bent's idea? Simple: light an entire continent. A former U.S. Marine, diplomat and oil exploration consultant based in Houston,

Texas, he realized that in some African countries as little as five percent of the population has access to electricity. When the sun goes down, villagers huddle over smoke fires or kerosene lamps, inhaling noxious fumes from the increasingly expensive fuel. In cities, Bent says it's not unusual to see hundreds of children crowded around a single streetlight, trying to read.

So he decided to dedicate himself to the solitary task of designing a solar-powered light that was inexpensive, durable, long-lasting, and good for the environment, all the while worrying, "If I fail at this, millions of people won't get lights."

Seven years later, Bent, 51, has masterminded a design revolution; he now boasts he makes "the best flashlights in the world." With input from NASA-supported scientists, university researchers, and last year, a match

made halfway around the world with electronic designer Russell McMahon of New Zealand, Bent now markets an orthodox flashlight as well, the "Super BoGo" which illuminates an entire room.

The BoGo (Buy One, Give One) initiative means every light purchased in the U.S. is matched by a second light donated to the developing world. Bent's flashlights now light pathways for women in refugee camps in Ethiopia, illuminate eye surgery in Haiti, and enable children everywhere to read at night.

In Athens, Georgia, Todd Barber set his sights seaward. He's chairman of the nonprofit Reef Ball Foundation, dedicated to rehabilitat-

"I had this crazy idea," Barber explains, "I thought, what if we covered a beach ball in concrete, floated it into the ocean, popped the ball and then let nature take over?"

ing the world's ocean reefs and mangroves. What makes a successful management consultant forgo a hefty paycheck to help save coral and sea creatures from Belize to Bahrain? "I see this as my calling," answers Barber, 45. "I'll always have a roof over my head and food in my belly. I have a couple of kids now and I want them to feel good about what Daddy did."

What Daddy did is no mean feat. Since 1993, Barber's foundation, with the help of marine experts and hundreds of volunteers, has manufactured and submerged more than half a million concrete reef balls in nearly 60 countries and counting.

A year after Hurricane Gilbert wreaked havoc throughout the Caribbean, Barber returned to his traditional Cayman Islands dive spot to find most of the coral wiped out. "I had this crazy idea," Barber explains, "I thought, what if we covered a beach ball in concrete, floated it into the ocean, popped the ball and then let nature take over?"

The first reef ball was born. Made from marine-friendly concrete, and often grafted with fragments of coral, the reef balls are sunk to the bottom of the ocean. In time, the coral grows, creating new sources of shelter and food for fish, sponges and other aquatic life.

Coral experts predict some 60 percent of the world's reefs may die by 2050, victim of both natural and man-made pressures, including climate change, chemicals, construction and fishing with dynamite. But now, two weeks a month, Barber works in coastal countries, setting up new reef ball projects, determined to stem the tide of marine destruction.

Inventiveness needn't only create a device or artifact: a rethought process can equally engender positive change. Social entrepreneur Jessamyn Waldman, 32, combines her two passions—baking and the betterment of immigrant women—a little closer to home, in Brooklyn, New York. The transplanted Canadian is the founding director of Hot Bread Kitchen, a bakery helping newcomers from Afghanistan, Togo and Mexico turn their baking, business and English skills into new careers.


A former immigration advocate and avid home baker, Waldman got the idea for her bakery "kneaded with a social vision" ten years ago, while visiting a park back home in Toronto, Canada. Women from different parts of the world were all sharing an outdoor brick oven. "They talked, stoked the oven, and literally baked a community," Waldman says. "I committed to establishing an organization that embodied this power creating and sharing food fosters."

Using recipes passed down by their mothers' mothers, a hand-

ful of women gather at a rented kitchen in Long Island City to bake artisanal breads, including aromatic lavash flatbread, baguettes and focaccia; plus the tasty tortillas made from red, white and blue Mexican corn ground using the "Jessamolino 2000" bike-mill designed and donated by California architect Peter Brock.

Lead tortilla maker Elidia Ramos now earns 20 percent more than what she had

been making in a garment factory. Never in her wildest dreams could she have imagined being able to support her family, both here and back in Mexico, making tortillas.

People like Jessamyn Waldman, Todd Barber and Mark Bent are living proof—the simplest ideas do make a world of difference. Spread the word. 

www.sunnightsolar.com
www.reefball.org
www.hotbreadkitchen.org

DESIGN FOR THE OTHER 90%

Former psychiatrist Paul Polak is a pioneer in a growing field that includes designers, engineers, architects and social entrepreneurs, all dedicated to developing low-cost solutions to aid the nearly 6 billion people (the other 90%) who don't have regular access to food, clean water or shelter.

His work is the inspiration behind a traveling exhibition, "Design for the Other 90%," organized by the Smithsonian's Cooper-Hewitt National Design Museum in New York. It highlights products that are inexpensive, environmentally sustainable, and powered by people. These include the LifeStraw, a plastic tube fitted with a water purifier that removes harmful bacteria and viruses; One Laptop Per Child, a rugged \$100 computer that enables children in developing countries to learn on their own; and closer to home, the Katrina Furniture Project, a workshop that trains residents of New Orleans how to make and sell furniture made from wood debris left by Hurricane Katrina.

"Design for the Other 90%" demonstrates how a simple idea can transform lives at home and around the world.

FUTURE DATES:
February 20 to May 31, 2009
Global Health Odyssey Museum
Center for Disease Control, Atlanta, GA

