SALOME, *13, a Maasai in Tanzania orphaned at 6, lives with her granny, helping care for a younger brother and sister. Thanks to radio school broadcasts, she is completing her third grade of basic education. She also likes listening to health news and information of interest to girls, she says.*

THE VOICE OF HOPE

For Africa's Children, It Comes One Radio at a Time

By JAKE MILLER

NOT LONG AGO Kristine Pearson found herself in a ball gown at a dinner at Kensington Palace in London, talking about poverty in sub-Saharan Africa and the problems of children who have lost their parents to AIDS or to the war in Rwanda—kids struggling to keep their brothers and sisters alive and together as a family. She was seated next to a man who asked about her work as executive director of the Freeplay Foundation. Pearson explained that distributing self-powered radios and other energy self-sufficient technology takes her to rural villages and shantytown neighborhoods where she meets some of the neediest people in the world. He wondered if there weren't things that these children needed more than a radio—clean water, food, or medicine, for instance.

IN RWANDA *Kristine Pearson, back for a recent visit with Jonathan Macumi, 14, who has cared for four siblings since his parents died.*

It's a question that Pearson asks every time she meets the children who have received the foundation's Lifeline Radio: "I say to them, 'If you had to choose between a cow and this radio, what would you pick?' Every child I've ever talked to has chosen the radio," Pearson says. "Why? 'Because the radio brings me information,' they say. For children who have seen their parents die of AIDS or be murdered, it can be very hard to trust an adult. The one thing they say they can trust is the voice on the radio."

Your life will not change unless you have new information. A radio opens up the world for you.

That sense of trust can be a powerful force for progress, if development agencies, public health campaigns, and distance-learning programs can get their message into the right ears. "Your life will not change unless you have some new information," Pearson says she told the man at the palace. "With a radio, people can learn about new farming methods, understand the importance of washing their hands and boiling drinking water, or learn how to make sure they don't get bitten by the mosquitoes that bring malaria."

Pearson has come a long way to arrive at this work. Her journey begins in California, where she was raised. She had always felt drawn to Africa, and so, when she had an opportunity to do some travelling in 1986, she explored east and southern Africa on her own. "I just couldn't get it out of my mind," she says. "From the first time I set foot on African soil I knew it was home for me."

She was back in Africa again in 1989, this time focusing on South Africa, spending a year researching women's networks. "I attended all kinds of meetings with women from the left, right, and center," Pearson says. She met with members of the Black Sash, a group that was helping to organize resistance to apartheid's Pass Laws, and with conservative Afrikaner women's groups. "I took some time to learn as much as I could about the country. It was such a complex tapestry. I used the lens of women's movements to try to get a sense of the whole picture."

Pearson decided to emigrate, but she wasn't in Africa to do movement building or humanitarian work. She established her own business, a consultancy to help develop the role of South African women in business. She then spent several years working for a bank on strategic alignment, helping to align the bank's mission, vision, and values, dealing with issues that a country in transition from apartheid to freedom needed to face, and trying to build a service culture and a customer-focused organization.

REVOLUTIONARY AS THE PRINTING PRESS

During that time, Pearson met and married Rory Stear, a South African entrepreneur. In 1994 Stear had heard about an exciting new technology—a windup, self-powered radio. He bought rights to the technology and started a company, Freeplay Energy, PLC, which sold its first radios to consumers in 1996. Then, in 1998 Stear set up the Freeplay Foundation as a nonprofit sister to the company.

Jake Miller has written and photographed stories about human rights and international development from Haiti, Brazil, and Africa.

His vision is to make energy available to everybody all the time. Just like the printing press accelerated the spread of knowledge and technology in Europe starting in the 15th century, portable, self-powered radios with rechargeable batteries powered by hand-cranks or by little solar panels could ignite a renaissance in the developing world, widening access to information for people living beyond the reach of the information age.

The Freeplay board chose Pearson to run the foundation. "It wasn't something I'd ever even thought about," she says. "I can't say I knew what I was doing, but I wanted to find a role for us, particularly with women." Pearson knew someone with contacts in the humanitarian sector in Mozambique, and she took a bunch of radios and went to meet some women involved in a development project there.

She noticed that the only people in the community who had radios were men, and when she asked the women why, they said that only the men had jobs that paid cash, so only the men had money to buy batteries for the radio. This meant that the women didn't have access to news, crop prices, or any of the other information that might help them to improve their lives.

Photos Courtesy of Freeplay Foundation

"The feminist in me said, 'This isn't right. I have to do something to adjust this imbalance,'" Pearson recalls. "If women remain isolated from information and education, they can't progress, and if they can't progress then the continent can't progress."

As she settled into the work, she found that she liked the challenge. It also turns out that she's good at it: Under her leadership, in 2001 Freeplay won one of the first Tech Museum Awards from the Silicon Valley Museum in San Jose, and in 2005 she was named their Global Humanitarian (a prize that honored Bill Gates in 2006), along with other prizes, awards, and honors.

The Foundation got started distributing the off-the-shelf products that Freeplay Energy sold to other customers, but its signature product, the Lifeline Radio, was designed specifically for humanitarian projects. Since Lifeline's launch in 2003, more than 120,000 radios have been distributed, serving well over 2 million listeners. Many of the radios are used in distance-learning classrooms in countries like Zambia, with 40 or 50 students in a classroom and five or six classes per day.

"We started working with women as a priority, and then became more aware of the grave crisis of orphaned children heading households across the continent," Pearson says. According to the UN,

{ I HEARD IT ON THE RADIO }

Children in sub-Saharan Africa prize a radio, not to listen to music, as you might expect, but for the way it connects them to the wider world. The radio is companion, parent, mentor—helping them feel safe at night, bringing them advice on taking care of younger siblings, tips on farming and caring for animals, news of the market price of crops, the weather, or current events. And especially it is teacher.

Radio broadcasts of distance-learning programs like Zambia's *Learning at Taonga Market* and Tanzania's *Mambo Elimu* are reaching out to bring a high-quality basic education to some of the millions of children who cannot attend school—because they can't afford it, or live too far to walk to school, or are girls who are kept at home. The attrition rate of teachers is another obstacle: Two teachers are dying of AIDS for every one who is trained. Adult mentors can be trained to work with the radio lessons.

Each radio segment of the *Mambo Elimu* program has a mix of stories, dramas, games, activities, and songs presented by an engaging cast of characters that teach children basic reading and writing, mathematics, and English. Life skills—nutrition, hygiene, health, family relationships, decision-making, problem-solving, and environmental conservation—are also part of the curriculum. The program, which started as a pilot four years ago to reach child laborers, now has 400 radio lessons for grades one through four, with more in the works. Last year, the radio school students, who gather at community centers where groups of 40 may use a single radio, performed on standard government exams as well as—and sometimes better than—students in the state-run public school system. And then there are the lives changed. A 17-year-old orphan who cooks fries by the side of the road to earn a living no longer feels humiliated because he can't read money. A 10-year-old girl domestic worker proudly tells how she can read clocks, labels on medicines, signposts, and now the Bible.

CLASS PICTURE *Students take a break in their outdoor classroom in Tanzania.*

TRANSLATE GAME *In a Zambian village, a visiting educator—the students call her Ambuya, or Grandmother—takes children outside to review a radio lesson: She calls out an English sentence, and then, in unison, they call it back in their language.*

WEZA, *Freeplay's foot-powered generator, can be used to recharge a car battery that, in turn, might run the hair salon's clippers and recharge cell phones in a village far from the power grid.*

there are at least 12 million AIDS orphans in sub-Saharan Africa alone. Pearson travelled to Rwanda in 1999 to follow up on a distribution of some early off-the-shelf radios and to do research on the lives of children there.

"I don't have children of my own, and I wanted to understand the impact firsthand," Pearson says. "I was astonished at the conditions. They often own just the clothes on their back, a single pot, a stick to stir. They might have a small plot of land to farm, or they might help a neighbor for money. They're often exploited.

"At that time in Rwanda most of the children were orphaned in the genocide; increasingly now, it's from AIDS," she says. "Seventy-five percent of the time, the head of household is a girl. The oldest girl looks after the other children, has to provide parenting skills. I thought they might want a radio so they could listen to music, but they wanted to hear the news. They wanted to be connected to the world around them, and they didn't trust the adults. In Rwanda, at that time, there were still armed men roaming the countryside in lorries and fighting nearby. The kids just want practical information—to know where the fighting was, to know if the latest rumor they'd heard about how you get AIDS was true.

"The kids are so courageous, but emotionally it's pretty difficult to see the conditions they live in—children living alone, with no parents, no running water, distended stomachs, kids who have watched their parents die of AIDS. A radio gives hope. It eases isolation, gives children information they can trust. If they grow bananas and have a few extra to sell, they can find out the price of crops on the radio."

FINDING A WAY TO KEEP GOING

"There's poverty, and there's extreme poverty," says Pearson. "If you work in rural Africa you come face-to-face with extreme poverty. The stories are so sad—girls being multiply raped, children who have seen their parents being hacked to death—and they're not afraid of being raped, but of getting AIDS and dying.

"You have to find a way to keep going when you do this work. It's like a doctor having to come to terms with patients dying," she says. Pearson has had a yoga practice for some 20 years, which "helps keep me centered," she says. "I developed fibromyalgia so I can't do it the same way I used to, but I do stretching and breathing. My mom, who's in her 80s, still does yoga."

FAVORITE RADIO SHOWS *for young people in Rwanda are a health soap opera and Voice of America's youth-produced program* Ejo Bite?—*How About the Future?*

Freeplay bases all its work on a model of collaboration. The most obvious is the link with the for-profit company, which provides radios and other equipment royalty-free and at subsidized prices. The foundation also collaborates closely with on-the-ground partners—governmental and non-governmental—in the communities where it works, providing radios for existing education, health, and development projects. The best distance-education programming in the world doesn't do any good if people can't tune in, so Freeplay helps provide radios for projects like Tanzania's distance-learning programs.

Pearson was recently in a second-grade radio classroom there, where she met a 30-year-old woman named Rose. In Tanzania, children aren't allowed to be in regular second-grade classrooms after they're 10 years old, but there's no age limit in the radio classes. Rose's two children are attending school and she told Pearson, "If they're going to be literate, I'm going to be literate. No one can abuse you if you have an education."

The Lifeline Radio is itself the result of another collaboration—this one between the Foundation and the children who use the radio. After receiving funding from the Tech Museum in 2001, Freeplay was able to produce a radio it had designed specifically for its humanitarian work. To come up with the design, Freeplay had consulted with the experts: the kids who would be using the radio.

One girl said that if the radio was shaped like a handbag, it would be easier to carry to the fields. Others pointed out that black radios get too hot in the sun, and that the antenna should be easy to replace because it can break easily.

The designers took the kids' input and came up with a rugged, colorful radio that looks like a kids' toy: nice for kids to look at, and a deterrent for

INTERACTIVE LEARNING *Adult mentors are trained as facilitators for radio-based classes like this one in Zambia. Sometimes, a guidebook and posters are supplied to mentors with words to the songs and other instructions, including activities the learners should do before, during, and after each broadcast.*

grown-up thieves, who don't want to steal a toy. The dials are all different shapes so that someone who can't read can tell them apart. The crank can be wound in either direction—kids love it so much that they'd rather wind the radio by hand than let it charge in the sun.

In 2006 Freeplay entered the World Bank's Development Marketplace with a new alternative energy program built around the Weza, a foot-powered generator that can supply enough electricity to charge cell phones, jump-start a car, or run an air compressor to inflate a tire. Pronounced *way-zuh*, it means "power" in Swahili. More than 2,500 projects were entered in the competition, and Freeplay's Weza project was one of 30 winners. With its $199,000 prize, Freeplay is launching 50 pilot projects for micro-enterprises in rural Rwanda, where recipients will receive a Weza and training in how to run a small business providing much-needed electricity to villages outside the reach of electrification. Pearson says that in the future, Freeplay will be known more as a technology organization than as a radio organization, but for now, most of their work will continue to be with radio.

"The development world is very siloed," Pearson says. One project is for emergency relief, one for public health or distance education, but radio transcends everything. We get to work on them all, but in a focused way.

"I've been astonished at how few of the people who create these programs think about the challenge of getting working radios into the hands of the people who need them," she says. In some places the poverty is so deep that even a whole community can't afford a radio. And without something like the Lifeline, once they got the radio, they would still need batteries. The great broadcasts that are being made are not going to reach these people without the Lifeline Radio," she says. "It completes the circle."

Pearson has closed a circle in her own life. "Early on I couldn't have imagined going into the development sectors; now I couldn't imagine going back into business," she says. Her work brings her into the homes and lives of people who are struggling with great poverty.

"How do you make sense of this?" she asks. "The only thing that separates them from us is a certain amount of education or economic achievement. I find the work very humbling, and it's a great privilege—and a great responsibility—when people invite you into their lives. "There's so much potential in Africa, and in the world," she says. "You have to focus on what you can do to make things better."+

There's so much potential in Africa, you have to focus on what you can do to make things better.