In much of West Africa, there is a simple solution to poverty.

A woman treks to a traditional well in Dara, Niger. In some regions, women spend as many as seven hours a day gathering water.
just add water

BY JAMES ADDIS | PHOTOGRAPHS BY JON WARREN
ABOVE, OPPOSITE PAGE: Women in Kpalang, Ghana, draw water from a dirty pond. “We know the pond is infected with Guinea worm,” says a local girl, “but that is our only source of water.” RIGHT: Meimunatu, a mother of four in Kpalang, lost one baby to diarrhea. She worries about the new baby on the way.
In West Africa, poverty assumes many guises. Take the village of Kpalang in northern Ghana. Here, both children and adults suffer regular bouts of typhoid, cholera, and diarrhea and often play unwilling host to a debilitating parasite known as Guinea worm (see sidebar, page 20). Villagers have less energy to devote to farms, meaning less food and lower incomes. Children such as 13-year-old Amina must devote their entire day to the stern task of simply staying alive—luxuries like going to school are out of the question. Children die often and early; those who don’t frequently go blind due to trachoma—an eye infection that can usually be successfully countered by face-washing.

It might seem incredible that all these grievous problems—problems that have been evident for centuries—could have a simple solution. But they do—it’s water. Ironically, in an age where we can send astronauts into outer space, one in five people in the developing world—1.1 billion people—struggle in abject poverty for want of a basic natural resource.

Until that commodity is reached, Amina, like generations of West African children before her, must spend her day making several trips to draw water from a filthy pond that is prone to dry up. She then has to lug the water home in a bucket that, when full, can weigh about 50 pounds.

And what disgusting water it is. When Rich Stearns, president of World Vision in the United States, visited Kpalang last year, he dipped a glass into a bucket of water drawn from the same pond Amina gathers from every day. Holding the sample up to the light, he discovered he was holding a gray stew of mud and animal feces. Even the thought of drinking it would make most Westerners retch.

“I can’t imagine letting my children drink this,” said Stearns, “but it is what I can’t see that frightens me even more”—a reference to the harmful bacteria that Kpalang villagers are forced to ingest with every sip they take.

Amina’s mother, Meimunatu, tries to make the best of it by straining the water through a sack to get rid of most of the muck, but the weariness in her voice suggests she is facing a losing battle.

“I had a baby last year who got sick and died because of the water,” she says. Soon Meimunatu will bear another child. It’s not an occasion for rejoicing. She holds out little hope for her newborn’s survival unless clean water comes to the village fast.

While it’s clear that water is the answer to West Africa’s problems, providing it
calls for money, determination, and imaginative thinking on a global scale. In 2002 the United Nations organized the World Summit on Sustainable Development in Johannesburg, South Africa. At its conclusion, nations recommitted themselves to work toward a United Nations’ Millennium Development Goal of halving the number of people lacking access to safe water and basic sanitation by 2015.

This would not be the work of governments alone. The summit ushered in a new era of partnership—governments, businesses, academic institutions, and aid organizations would combine forces to tackle global problems. One partnership in particular epitomizes the new thinking: the West Africa Water Initiative.

For years, the Conrad N. Hilton Foundation and World Vision have worked together to bring clean water to poor rural areas in Ghana. In 2002 these organizations joined forces with eight others, including the Nevada-based Desert Research Institute, the U.S. government, and Cornell University’s Institute for Food, Agriculture, and Development. Each organization committed to bring their resources and expertise to drill more than 1,000 new boreholes, open up scores more alternative water sources, and provide 10,000 new latrines—an effort expected to benefit 500,000 people in Ghana, Mali, and Niger.

World Vision is responsible for drilling most of the wells, educating communities about well maintenance, sanitation, and hygiene, and channeling into the program more than $23 million of donors’ money—matched by the Hilton Foundation. As Steven Hilton, grandson of the hotel chain’s founder, said of WAWI: “We felt it was where we could have maximum impact on the most lives for the monies invested.”

Almost five years down the track, World Vision’s six well drilling teams and associated staff—hydrologists, sanitation specialists, and civil engineers—are working hard to complete all project goals by the end of 2008. So far the initiative
Now that water is plentiful, women have time to make a better life for themselves and their families.

– HALIMA, ADIMA’S MOTHER

World Vision Summer 2007
The man who oversees World Vision's component of the West Africa Water Initiative, Braimah Apambire, was born to an illiterate mother and semi-literate father in the poorest region of northern Ghana. But those humble beginnings failed to prevent him from pursuing a stellar academic career, earning a doctorate in hydrogeology from the University of Nevada. He puts his achievement down to God's grace, personal determination, and supportive parents.

Braimah delighted in a life of research and teaching, but when the opportunity came to work for World Vision to bring relief to water-starved communities around the globe, he describes it as a "calling from God." It's hardly surprising that the work should be close to his heart. As a child, he sometimes had to walk up to four miles to fetch water during the dry season. He vividly remembers the sense of relief and ecstasy when in 1979 the Canadian government funded a well in his home village of Zuarungu—about 100 miles north of where World Vision currently operates.

"Having had this experience myself, I felt it would be very important for me to contribute my technical skills to support this kind of work," Braimah says.

He says it's a rewarding job. A favorite memory is bringing water to the village of Nabule, Ghana, where women were forced to compete with angry bees to draw water from a pathetically inadequate mud hole. World Vision brought in one of its borehole drilling teams. After drilling 100 feet, there was still no water, and the geological assessment on the chances of finding it was virtually nil. The team started praying and kept drilling. At 115 feet they hit the jackpot. Now Nabule has the highest-yielding well in the area and has become a thriving community.

Braimah says that coming from a water-hungry African community is a huge advantage in performing his job. Many water projects in the developing world have failed in the past because engineers did not understand or engage the community in which they worked.

"They would put these water systems in place, but within a year or two something would go wrong—maybe something that could be fixed for less than five dollars. But because there was no understanding in the community, the whole system would be left unused."

The West Africa Water Initiative addresses the social dimension by integrating water projects with existing, long-term World Vision development programs funded by child sponsors. Development staff teach communities how to maintain wells and manage their water resources to ensure a continuous supply of clean water for years.

"We think of ourselves as social workers first and engineers or scientists second," Braimah says.

—James Addis
Community health worker Maazou Nouhou says that many common childhood ailments have simply disappeared. “Before, you would see children with trachoma and other problems, but now there are no such diseases in the village,” he says.

Abida’s father, Mallam—a village elder—recalls the way the lack of water blighted village life for years. Even an inadequate hand-dug well was the envy of surrounding villages, and people would come for miles to draw filthy water from it. “People were drawing water in the night because it was the only well. It was very difficult for women. They were even sleeping at the well to stay in the queue for their turn to get water,” he says.

What a difference today. Abida’s mother, Halima, says now that water is plentiful, women have time to make a better life for themselves and their families. She has joined with other women to begin a soap-making business (see sidebar, page 21). Even Abida makes a little extra money by decanting water into clay pots and selling a refreshing drink to thirsty market-goers.

Meanwhile, with more water, the health of livestock has improved. Building construction is undergoing a transformation. There is now time and water to make clay bricks—villagers are gradually replacing straw walls to make better, sturdier homes.

Today, Mallam marvels at the different life his daughter can enjoy. He is especially pleased by her success in school. She is one of the brightest in her class. “I think she’s fantastic,” he raves. “I have many hopes for her because she can go to school. I’m only sorry I did not get the chance to go.”

But while one can rejoice with the people of Dara, it pays not to lose sight of girls like Amina, and the villagers of Kpalang, whose experiences are a window on what it is like for millions and millions who still suffer every day for want of clean water. So far World Vision has drilled two boreholes in Kpalang, but neither was successful. The hard rock in the area makes the task of finding water especially difficult.

The drilling team will keep trying. World Vision is committed to the global effort to provide clean water for all—millions of children like Amina deserve nothing less. ■

—With reporting by Mary Peterson and Tom Costanza
**WOMEN MEAN BUSINESS**

**A borehole allows women to start a soap-making venture.**

Name your favorite labor-saving device—dishwasher, washing machine, clothes dryer, food processor? For Halima Issa of Dara village, Niger, the choice is easy. The village’s borehole means she no longer wastes hours every day fetching water from remote sources, nor does she have to treat children who would otherwise be falling sick due to drinking polluted supplies.

Finally, the mixture is rolled into tennis-ball-sized spheres ready for sale at the market. Each fetches 150 francs (about 30 cents), undercutting the price of imported soaps.

It’s good soap, too. Halima shyly admits profits have been down a bit because village women have taken to using the product themselves—it makes their skin softer and smoother than other soap. Nevertheless, they anticipate the business will ultimately generate a healthy income. The women are not only thinking of nice things they can buy with the extra cash but also ways they can invest in new enterprises such as raising chickens.

World Vision hydrologist Braimah Apambire says such ventures show how shortsighted organizations have been in the past by not making access to water a priority. Although the health benefits of good access are obvious, he says, investing in water resources also provides a good economic return.

“Everything will follow when you are able to provide water.”

But time saved does not mean she is putting her feet up. She and about 40 other village women have started a fledgling soap-making business, established with World Vision’s help.

The women meet regularly under a sweet-smelling neem tree and help each other with each stage of production, creating a sense of camaraderie. First, vegetable oil is boiled and strained. Then soda powder, glue, and powdered detergent are added. World Vision hydrologist Braimah Apambire says such ventures show how shortsighted organizations have been in the past by not making access to water a priority. Although the health benefits of good access are obvious, he says, investing in water resources also provides a good economic return.

“The truth is, once people have water, there will follow many things,” he says. “Agricultural development, economic development—everything will follow when you are able to provide water.”

—James Addis with reporting by Mary Peterson and Tom Costanza