

e think big at The Carter Center. Big ideas, big plans, big goals. Guinea worm disease was a big problem—3.5 million cases a year—when we started working on it, but today we're within reach of eradicating it. Observing 103 elec-

n the mid-1990s, Monica McWilliams spent two years at negotiating tables sitting next to the leader of an armed group that had tortured and killed her best friend during the Northern Ireland conflict known as The Troubles.

"After two years at the table," McWilliams told members of the Sudanese government, civil society, and opposition groups at a series of Carter Center-organized meetings in December, "we were best friends."

All that time spent talking to each other made the friendship possible.

"Dialogue creates understanding," she said. "I hope eventually you will get to taste the prize of peace in Sudan as we are in Ireland."

Sudan has been mired in conflict since 1983. Over the years, armed struggles have claimed the lives of more than 2 million people and displaced many more millions. There have been breaks in the fighting, and a peace agreement that eventually led to the formation of the new country of South Sudan, but permanent peace has proved elusive. Even after South Sudan's independence, war between the government and opposition groups has continued in the region of Darfur in western Sudan and in the southeastern part of the country

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position of responsibility to eliminate a disease truly brings honor to these volunteers," Sienko said. "And that's appropriate, because without their dedication to their communities, we could not be successful."

Involvement at the community level makes the effort to achieve a goal personal, added Dr. Moses Katabarwa, senior epidemiologist in the Carter Center's River Blindness Elimination Program.

"Certainly a doctor has knowledge about a particular disease, but a patient has more experience of the disease than the doctor," Katabarwa said. "Involving a patient and his or her family in the fight against a disease is a much more powerful weapon than the medicine itself."

Sometimes noticeable improvement of conditions can tempt communities to let down their guard. As Mexico made progress in the campaign to eliminate river blindness there, health authorities rallied community leaders to encourage every family to keep taking Mectizan on schedule. Failure to keep up treatment could have allowed the disease to resurge.

"It's like when your doctor tells you to take the full, 10-day course of antibiotics even though you feel better after seven days," said Dr. Frank Richards, director of the Carter Center's river blindness, schistosomiasis, and lymphatic filariasis programs. "You need to keep taking it for those last three days to make sure the illness doesn't come back."

The community strategy worked, and the World Health Organization certified Mexico free of river blindness in 2015.

Community ownership isn't just about taking medicine; it's also about encouraging healthy behavior. Take Guinea worm disease, for example. No medicine or vaccine exists for that parasitic disease, yet a Carter Center-led campaign has reduced cases from 3.5 million a year in 1986 to just 25 in 2016. This was achieved almost entirely through behavior modification as communities learned practices to interrupt the life cycle of the parasite. They started filtering their water to avoid ingesting the water fleas that carry the worm larvae, and those with a Guinea worm emerging from their skin have to stay out of water sources to deny the worm an opportunity to lay its eggs.

Community members watch out for infections and police their own water sources. Before Ghana had eliminated Guinea worm, a chief named Tahanaa in northern Ghana imposed fines—such as a goat—on anyone who put the village's pond at risk. In the same way, many communities erected signs and appointed marshals to make sure people with emerging worms stayed out of the water. Case containment centers provided a place for sufferers to stay and be cared for until their worms were gone.

The other, equally important, side of the community-involvement coin is empowerment. When communities succeed in controlling or even eliminating ancient diseases, those communities gain the tools and confidence to tackle other big challenges.

"When a community takes a look at what it has accomplished — through its own efforts — the people are then able to say, 'What else can we do together? What other problems can we solve?'" said Kelly Callahan, director of the Carter Center's Trachoma Control Program. "It's a powerful thing to watch unfold."





## Cen e A i \_i h S dan' Heal h Inf a c e

Udan is a vast country, the secondlargest in Africa, its population flung across deserts and mountains, river banks and seashores. Reaching people with even minimal medical care is a challenge: It's estimated that 7 percent of Sudan's residents will live their entire lives without ever seeing a health worker.

When the government of Sudan determined that it needed to improve its health care infrastructure, it invited The Carter Center to join the endeavor. The Center agreed, and the Sudan Public Health Training Initiative was born.

"The initiative is a cornerstone for health services in Sudan," said Dr. Isameldin Mohammed Abdalla, the undersecretary of Sudan's Federal Ministry of Health, which provides a substantial portion of the funding. "We don't have enough resources to provide for our citizens. The public health training initiative is mainly focusing on improving the training of our human resources."

In collaboration with Emory University in Atlanta, the Center has been working with the Academy of Health Sciences under the Federal Ministry of Health in Sudan to improve the learning environment of students enrolled in 50 health science training institutions, recommend key updates to midwifery and community health curricula, "We think that having The Carter Center assist us in this area is very vital for what we are trying to achieve," Abdalla said.

The initiative emphasizes the health of women and children in remote rural areas. According to World Bank indicator estimates, the maternal mortality ratio for Sudan in 2015 was 311 per 100,000 births, with a decreasing trend over the years. Similarly, child mortality was reduced to 70 per 1,000 live births. Both figures are still unacceptably high, and that's why midwives need to be well trained, Abdalla said.

"The health of women and children is a very serious concern for the Ministry of Health," he said. "But we have a program that is addressing these areas of concern."

Sudan hopes the initiative will enhance the skills of 10,000 midwives and community health workers, as well as 9,000 medical assistants, sanitary overseers, anesthesia technicians, and surgical attendants.

"We have already started to see the impact of this support through feedback from the students who are being trained, through changes in the teaching and learning environment, through an improvement in recruiting, and from scores on student

> exams," Abdalla said. "Now we want to see an impact on the health indicators themselves — on mortality rate and the prevalence of various health conditions, etc.

> "The Carter Center is playing a vital role in expanding the delivery of services to those who are now unreached. We are very optimistic about the results."



ennie Lincoln's career in the Carter Center's Latin America and Caribbean Program has allowed her to be part of some incredible moments.

In Panama in 1989, she stood at a press conference with President Carter as he denounced as fraudulent the very first election the Center observed.

In Nicaragua in 1990, she sat in on a historic meeting between President Daniel Ortega and Violeta Chamorro on the evening after Chamorro bested him in an election, listening as he agreed to concede and allow Nicaragua's first peaceful transition of power in decades.

And in Colombia just last year, she participated in that country's "roller coaster ride" that culminated in the signing of a peace accord that brought an end to a 52-year civil war.

"To be on the inside and to see it developing, to be there when it was signed, and now to have the opportunity to work on the peace accord's implementation," said Lincoln, "is a highlight of my career."

The story of how a girl who grew up in a small Ohio town with no Hispanics came to be the director of a former U.S. president's Latin America and Caribbean Program begins in a high-school Spanish class. Her love of the language led to all that followed. "In college I studied abroad in Mexico; then I went to Spain. When I did my dissertation research, I lived with a family in Peru, and later I was a Fulbright professor in Costa Rica."

She landed at The Carter Center as an associate director in 1989. She left two years later for Georgia Tech, where she taught foreign policy and Latin American politics before the promise of more oncein-a-lifetime experiences lured her back to the Center in 2015.

Lincoln hasn't had a moment to breathe since. Last year, she said, she made 17 international trips. The majority of those were to Colombia: "Now that the peace accord between the government and the FARC guerrillas is signed, the challenge is implementation. The Carter Center has pledged its continued support, because it's going to take generations to bring complete peace to Colombia."

The program currently has five projects underway in the country, involving everything from mapping human rights systems to helping reform electoral laws, from supporting peace education to monitoring the reintegration of the FARC child soldiers.

Lincoln and her team are also busy in Nicaragua, working with the Organization of American States on a new project to help strengthen democratic institutions and encourage political participation.

Revisiting Nicaragua reminds her of the somewhat comical tale of a trip she made there during her first stint at The Carter Center, when she arrived in the country only to discover that her suitcase had been lost. The time and nature of the trip meant there was no room for shopping.

"Secret Service gave me t-shirts to sleep in," she recalled. For the next five days, she wore the same dress — and because she had dressed for her flight in a hurry, one black shoe and one blue shoe.

She laughed: "So that was an unglamorous experience."

But that's OK, because for Lincoln, it's always been about the work.

"The countries of Latin America and the Caribbean are our neighbors. When they suffer, we suffer. When they prosper, we prosper. When there is democratic stability in our neighborhood, it strengthens our democratic stability as well," she said. "President Carter's values of waging peace, fighting disease, and building hope are an inspiration throughout the hemisphere, and for me, it's an honor to be a small part of that."