

He had a chat with a former aide, Dr. Peter Bourne, who was then leading a very ambitious effort, ultimately abandoned, by the United Nations to bring clean drinking water to every village in the world.

"He had slides of Guinea worm to show me," Mr. Carter said. "I was intrigued."

Soon after, on a human rights mission to Pakistan, he mentioned the disease to Mohammad Zia ul-Haq, then the president. "General Zia didn't know anything about it," he said, "but his prime minister had come from a village with Guinea worm."

It turned out that 2,000 villages did, but villagers never reported it, thinking it was "a curse of God, or some confluence of planets, or came from drinking goat blood."

President Zia told a general to wipe it out, and in 1993, Pakistan became the first country to do so.

Mr. Carter himself first saw the worms in Ghana in 1988, in a village where 300 of 500 inhabitants were disabled by it.

"My most vivid memory was of a beautiful young 19-year-old-or-so woman with a worm emerging from her breast," he said. "Later we heard that she had 11 more come out that season."

He arranged for a well to be drilled, "and when we went back a year later, they had zero cases -- zero."

But drilling, at \$1,500 a well, is prohibitive. Filtering out the larvae-carrying fleas is cheaper. At a lunch in 1989 with Edgar M. Bronfman, the Seagram's liquor heir, Mr. Carter explained the technique with a damask napkin. Mr. Bronfman, who held a major stake in the DuPont chemical company, had its scientists develop a tough but fine mesh.

Other donations followed: Abate larvicide from the BASF chemical company, pipes with steel mesh filters from a Norwegian power company, \$16 million from the Bill and Melinda Gates Foundation.

When Mr. Carter started organizing his campaign, his experts estimated that eradication would take 10 years. Asked if he worried that the worms would outlive him, he grinned and shook his head.

"I don't have any doubt that it will be eradicated during my active service," he said. "The discouraging thing is the extreme cost. I have to keep explaining to donors why it costs so much for these last few cases."

### An Army of Volunteers

While his campaign could not have succeeded without a large vision and contributions to match, the eradication of a disease ultimately depends on the dedication of workers in the field.

In rural Nigeria, as is true everywhere when literacy rates are low and telephones rare, everything must be done face to face. Twenty years ago, the Carter Center began its campaign by surveying 95,000 villages in Nigeria alone, sending someone to each one to ask if it had any cases of Guinea worm.

In each of the 6,000 villages that did, a team had to be formed to visit the authorities, explain the campaign and ask them to pick a "Guinea worm volunteer," someone who could read and write, would be willing to track each case, teach others how to roll worms out on a stick and keep their larvae out of drinking water.

The volunteers are unpaid. "They get a T-shirt, and people look up to them," said Dr. Cephas Ityonzughul, a consultant for the Carter Center's program in central Nigeria.