

The Healing Fields

Land mines once crippled a war-ravaged Cambodia. Today the nation is a model for how to recover from this scourge.

By Mark Jenkins

Delicately brushing away the soil with his fingers, Aki Ra uncovers a dark green land mine buried two inches beneath the overgrown dirt road. The size of a large soup can, the mine was planted by the Khmer Rouge about 15 years ago on this ox track in northwestern Cambodia—the most densely mined region of one of the most heavily mined countries in the world.

"This is the type 69 Bouncing Betty made in China," says Aki Ra, his breath fogging the blastproof visor of his helmet. Bouncing Betty is the American nickname for a bounding fragmentation land mine. The pressure of a footstep causes it to leap out of the ground and then explode, spraying shrapnel in every direction. It can shred the legs of an entire squad.

Soft-spoken and cherubic, Aki Ra knows the inner workings of the Bouncing Betty and just about every other variety of mine. In the mid-1970s, when he was five, the Khmer Rouge separated him from his parents and took him into the jungle with other orphans. At that time, Pol Pot, commander of the Khmer Rouge, had plunged the country into chaos, closing schools, hospitals, factories, banks, and monasteries; executing teachers and businessmen; and forcing millions of city dwellers into a gulag of labor camps and farms. The small hands of children like Aki Ra were invaluable tools. He was trained to lay land mines, defuse and deconstruct enemy mines, and reuse the TNT for what are now called improvised explosive devices (IEDs).

Some years later, when Vietnamese forces invaded Cambodia, they dragooned Aki Ra into their army, and he was forced to fight against his former captors. When the United Nations' peacekeeping forces finally arrived in 1992, he'd been living in the jungle for some 15 years. He joined the UN as a deminer. When the peacekeepers left two years later, much of the best agricultural lands—vegetable gardens, pastures, rice fields—were still mined. Farmers trying to reclaim their fields were being blown to pieces. For a decade and a half, using only a knife and a stick, Aki Ra worked as an unpaid sapper, defusing rather than detonating land mines, reclaiming his country one square foot at a time. By his own count, he has defused some 50,000 devices: blast mines, antitank mines, bounding mines, and other explosives.

"I found a lot of mines that I laid," he says with a conflicted sense of pride and shame.

Now a certified deminer, he has his own squad, the Cambodian Self Help Demining team, partially funded by the U.S. The deminers use special metal detectors to search for explosives; that's how they found the Bouncing Betty.

Sweat is dripping off Aki Ra's face as he carefully places a small charge beside the land mine, attaches wires, and runs a thin cable a hundred yards away. Like all official demining organizations, Aki Ra's team no longer defuses land mines but detonates them in situ instead. Squatting behind a tree, he pushes the red button. The explosion is terrifying. With half a grin, Aki Ra says, "One less land mine, one less child without a leg."

In the warfare that raged in Cambodia from 1970 until 1998, all sides used land mines. There are more than 30 different types. Villagers have prosaic names for them based on their appearance: the frog, the drum, the betel leaf, the corncob. Most were manufactured in China, Russia, or Vietnam, a few in the United States. Pol Pot, whose regime was responsible for the deaths of some 1.7 million Cambodians between 1975 and 1979, purportedly called land mines his "perfect soldiers." They never sleep. They wait, with limitless patience. Although weapons of war, land mines are unlike bullets and bombs in two distinct ways. First, they are designed to maim rather than kill, because an injured soldier requires the help of two or three others, reducing the enemy's forces. Second, and most sinister, when a war ends, land mines remain in the ground, primed to explode. Only 25 percent of land mine victims around the world are soldiers. The rest are civilians—boys gathering firewood, mothers sowing rice, girls herding goats.

Despite its horrific history, Cambodia has now become a model for how a nation can recover from the scourge of land mines. There are more than a dozen

programs for demining, land mine risk education, and survivor assistance in the country. The number of men, women, and children killed or injured each year by mines (both antipersonnel and antitank), explosive remnants of war, or IEDs has fallen from a high of 4,320 in 1996 to 286 in 2010. Survivors are offered medical and vocational assistance. Every schoolchild is taught about the dangers of explosives. Contests have even been held for the best hip-hop songs about land mine awareness.

"I've been rude since I was young," a male performer boasts in one winning song. "I can only make things from bombs."

"No need to exaggerate and show off to me," the female chorus replies. "I don't care and don't want to hear about this."

Major minefields have been mapped and are being systematically demined. There's even a Cambodia Landmine Museum, created by Aki Ra. Located outside Siem Reap, a provincial capital, it displays the mines and ordnance that he deactivated. With support from Americans Bill and Jill Morse, who founded the Landmine Relief Fund, Aki Ra also cares for and educates 35 children at an orphanage.

Worldwide, millions of land mines are buried in nearly 80 countries and regions—from Angola to Afghanistan, Vietnam to Zimbabwe. That's one of every three nations. Many of them are following Cambodia's example. In 2002 almost 12,000 people worldwide were reported killed or maimed by land mines or other explosives. Since then, annual casualties have fallen to fewer than 4,200. This dramatic improvement is a direct result of the Mine Ban Treaty signed in Ottawa, Canada, in 1997, an international agreement banning the use, production, or transfer of land mines and calling for mandatory destruction of stockpiles. Today 157 countries have become party to the treaty, including Afghanistan, Liberia, Nicaragua, and Rwanda; but 39 countries have refused to join, including China, Russia, North Korea, and the U.S.

The American position is complicated. The United States has not used antipersonnel land mines since 1991, not exported them since 1992, and not produced them since 1997. But the nation has a stockpile of some 10 million land mines, and prior to the '90s, it exported 4.4 million antipersonnel land mines, an unknown number of which are still in the ground. Ian Kelly, a State Department spokesman, described the government's official position in 2009: "We would not be able to meet our national defense needs nor our security commitments to our friends and allies if we signed this convention." Nonetheless, under pressure from the United States Campaign to Ban Landmines, the Obama Administration has been conducting a comprehensive review of its land mine policy.

Despite its refusal to join the treaty, the U.S. has done more to counteract mines than any other country, spending \$1.9 billion during the past 18 years through the Humanitarian Mine Action Program—roughly a quarter of the total spent on demining and other remediation activities around the world. There's been a special emphasis on helping Cambodia, which has received more than \$80 million since 1993.

As in many countries, the vast majority of demining in Cambodia is done by hand. Demining machines—30-ton, dinosaur-size rototillers that flail the earth to a depth of 12 inches—are exceedingly expensive. Only three are in use, along with 50 or so dogs trained to sniff out a mine. But in the end, a human must dig it out.

Demining operations have strict protocols. Outfitted in heavy, high-collared, crotch-protecting flak jackets and thick-visored helmets, a team of 10 to 25 deminers line up along the edge of a minefield with garden tools and a metal detector. Moving forward in yard-wide lanes, they first clear the vegetation from each three-foot-square block, then sweep the ground with the detectors. They toil straight through monsoonal rains and scorching heat, moving the detectors across the ground, listening for the telltale beep.

The salary is decent for Cambodia—about \$160-\$250 a month—but money is not the main motivation. When Hong Cheat was five or six years old, a cow he was tending stepped on a land mine. The explosion killed his mother and father and blew off his right leg. He was surviving on the streets of Phnom Penh as a beggar when Aki Ra adopted him and trained him to be a deminer.

"I like to clear the land mines," says Cheat. "I don't want to see any more people like me in my country."

There's a new sense of hope spreading across Cambodia. The country is becoming a place where you can dream of a better life—and where sometimes, those dreams come true. Just ask Miss Landmine Cambodia.

Dos Sopheap, a young woman from Battambang Province, lost her leg to a mine when she was six years old. Her father, then a soldier, was carrying her in his arms through the forest at night when someone in front of them stumbled on a trip wire. Her leg was amputated high above the knee, and she has always used crutches with her false leg—until now.

To the tearful clapping of her family, Sopheap is taking her new titanium prosthesis for a test run around their dirt front yard, scattering the ducks and chickens. As befits a beauty queen, she is wearing a flouncy, peach-colored dress lit up like a rose by the setting sun. Her twin sisters hang on to each arm as she walks stiffly in circles, and her mother weeps.

Competing against 19 other women who had also lost limbs, Sopheap won the 2009 title of Miss Landmine Cambodia through an Internet vote based on her photo. She was awarded \$1,000 in cash and a \$15,000 state-of-the-art prosthesis. The beauty pageant was founded by Morten Traavik, an eccentric Norwegian theater director who organized the first contest in Angola in 2008.

"The goal is to bring attention to the global issue of land mine contamination," Traavik had told me earlier at a beauty parlor in Battambang where Sopheap was being coiffed and made up for a photo shoot, "and to make us think about how we, able-bodied people, look at disabled people, and not least how disabled people perceive themselves and present themselves."

"It was so hard to watch other children run and play in the schoolyard," says Sopheap's mother. The other children teased the young girl. But that didn't discourage her. Beautiful and quiet, she became a top student, ranking fifth in her high school class. The other kids now call her Miss Landmine, which pleases her. She hopes to become an accountant someday. Her mother later confides that Sopheap also "just wants to be like the other girls and be able to wear jeans."

People aren't the only victims of land mines. A country's economy is crippled too. More than 60 percent of Cambodians are farmers, who can't work a field if it's mined, can't earn an income, and can't feed their families. This is one reason why so many other mine-poisoned countries have struggled for so long after armed conflict has ended.

"There's a clear link between land mine contamination and poverty," says Jamie Franklin of Mines Advisory Group (MAG), one of the major demining operations in Cambodia. Franklin has a large map of the country on the wall of his office in Phnom Penh. The eastern half is splattered with thousands of tiny red and purple dots, representing U.S. bombing raids during the Vietnam War. The western half is marked with hundreds of yellow squares, representing minefields. Unexploded ordnance and minefields are huge obstacles to increased agricultural production, which the government believes is necessary for economic development and recovery.

MAG has demined thousands of acres of contaminated land during the past two decades, including the village of Prey Pros in central Cambodia, where brilliant green squares of flooded rice fields shimmer as far as the eye can see. In Prey Pros, you can hear hammers and laughter. Crops have been good for the past few years, and residents are building homes.

Thath Khiev, the village chief, bounced a naked baby on his knee while his wife stirred a cauldron of bubbling rice. Seventeen years ago, their world was very different.

"We did not have enough food to eat," Khiev tells me. "We could not grow rice on our own land because the soldiers had laid the mines." Prey Pros was once a garrison for Cambodian government forces. Two companies of soldiers were stationed here to protect a nearby bridge. To deter the Khmer Rouge, the bridge was mined and the village's rice fields were also heavily mined as a no-man's-land perimeter. Even footpaths in the village were mined. "It was very difficult," Khiev says.

MAG demined the area around Prey Pros in 1994 and 1995, removing 379 antipersonnel mines and 32 unexploded ordnance.

"Now we can walk safely to the rice fields and work freely without fear of mines," Khiev says. Tossing his grandson in the air, he adds, "It's safe for little children. If they want to swim in the river, in the lake, they can."

As villages and rice paddies like Prey Pros have been cleared, Cambodia's economy has grown stronger. In 1999, the first full year of peace, Cambodia had a gross national income (GNI) of \$10 billion and a per capita annual income of \$820; 11 years later, in 2010, the GNI had almost tripled to \$29 billion, and personal income had more than doubled to \$2,040.

Since 1992 demining has cleared about 270 square miles, but there are still some 250 square miles of contaminated land left. Currently, 23 to 31 square miles are cleared a year, which means it will take another decade to rid Cambodia of mines and other explosives—a goal that has been achieved in less heavily mined countries like El Salvador, Honduras, and Albania.

"We simply cannot clear them fast enough," Franklin says.

Even though deminers are still busy, Cambodia is no longer a devastated nation. Cities and villages throb with industriousness.

"We have a future now," says San Mao.

Short and muscled, Mao is an elite runner. He rises at four o'clock every morning to train, threading five miles through the wet, black streets of Phnom Penh. An hour later, after changing his curved fiberglass prosthesis for a rubber foot, he goes to work, whizzing around town as a motorcycle taxi driver. At five in the afternoon, he picks up his young daughter from school, then goes out for another run. His efforts have paid off.

Nine times in recent years, Mao has won the Angkor Wat International artificial leg ten-kilometer foot race, part of the Angkor Wat International Half Marathon, which was founded in 1996 to help land mine survivors.

He doesn't run just to win races. Running has calmed his mind. He used to get headaches from thinking too much about the past. "Now I focus on making a living for just one day, on eating for one day," he says, almost smiling.

Mao was a 15-year-old farm boy in 1987 when he was kidnapped by the Khmer Rouge. Soldiers dragged him away from his family into the jungle near the Thai border, forcing him to carry ammunition and refusing to feed him. One morning he spotted fruit beneath a tree. The next thing he remembers he was lying in the mud, blood everywhere. The tree had been booby-trapped. "I cannot find anything to compare to the pain," whispers Mao. "I died there."

Three days later, unconscious but alive, he was found by other soldiers, who carried him to a hospital across the border in Thailand. Doctors amputated his leg below the knee. Upon returning to Cambodia, he began vocational training sponsored by Handicap International. That's where he met Ouch Vun, his future wife.

Today the couple live in central Phnom Penh with their daughter and ten other tenants. Their corrugated metal shack is set on stilts above a swamp with floating garbage. Inside, the walls are papered with pages from a pop culture magazine. Mao's race medals hang from nails behind the TV.

When I visit, Regina, their seven-year-old, offers me a bottle of water, then sits in her father's lap. Ouch Vun hobbles over and places a whirring electric fan before me, then awkwardly seats herself beside her husband, tucking her sarong over her artificial leg.

Vun is so shy she barely speaks. Her eyes drop when I look at her. She tells me that her right leg was blown off in 1990 when she was digging for gold with her impoverished family. "When the doctor cut off my leg, I cried for months," she says.

Regina has been watching first her father, then her mother, tell their stories. Mao is stroking her hair, Vun lightly touching her arm. Unlike her parents when they were her age, she can walk without fear of suffering the same fate.

A week later, on a mild December morning, a crowd of hundreds cheers the start of the Angkor Wat ten-kilometer race. It's a fitting location for the biggest race of its kind in Cambodia, with 50 or more runners. The famous ruins were once indiscriminately planted with land mines. Today Angkor Wat is one of the world's most popular tourist destinations.

When San Mao first comes into view, the clapping and cheering swell. Sweat streaks his cropped black hair; his round face is as calm as Buddha's. Whether he knows it or not, Mao is the embodiment of a country transcending its past. His feet, one muscle and bone, the other bowed fiberglass, are like wings. When they carry him first across the finish line, Cambodians erupt in jubilation.

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