

Mozambique looks to a

Efforts to demine Mozambique have dragged on for years, but a recent cash injection means it may be free of old explosives by 2014.

Henrik Lomholt Rasmussen reports

Weeding her vegetables on the outskirts of Maputo could have proved lethal for Rosita Justina Matusse. “I was hoeing when I found a round, hard thing,” she says. “I didn’t know what it was but a man who had come to look said, ‘It’s a landmine! Don’t touch it!’”

The 64-year-old is standing next to a small hollow where the mine was buried on her plot, just a few square metres, in Benfica, a densely populated, poor Maputo suburb. She grows maize and cassava and says she has farmed the tiny plot for years.

The area is dominated by pylons that supply Maputo with electricity from South Africa and follow the N4 highway to the border, 90km away. But it is the spaces around the pylons that are dangerous — Frelimo government forces mined them in the 1980s to protect them from sabotage by apartheid-backed Renamo during Mozambique’s civil war.

Of course, it’s not just the lines to Maputo that were affected. Mines were planted all over Mozambique during the war. This was in addition to the landmines planted by the Portuguese during the independence struggle from 1964 to 1974. By the end of the civil war Mozambique was one of the world’s most heavily mined countries. Some estimates have put the number of landmines and unexploded ordnances at 500 000. Other Southern African countries, such



Ratted out: Giant pouch rats are used in some mine-clearing operations that are part of the push to rid Mozambique — once known as one of the most heavily mined countries in the world — of landmines by 2014. Photo:Howard Burditt/Reuters

as Malawi and Zambia, have been declared free of mines, but they still pose a problem in Mozambique.

How many are left is hard to guess because there are few records and maps of mine laying in the country.

By 2004 the four northern-most provinces were declared mine-free after Halo Trust, a British-based NGO, found and destroyed more than 100 000 landmines in the region. But they are still a threat to people

in southern Mozambique, says Susan Eckey, president of the Mine Ban Treaty, which was signed by 1 300 civil society organisations and 95 countries in 1999.

Landmines were a hot issue then but, over the years, the clearing of landmines has slipped off many donors’ agendas and has been replaced with HIV/Aids, climate change, good governance, anti-corruption and other development

issues. But in March this year Mozambique received a much-needed donation of \$1-million (about R7.4-million) from Norway for clearing landmines, which the donor community hopes will be followed by others.

Meanwhile the landmine death rate continues to mount on the outskirts of Maputo.

“Last month a woman was killed by a mine near one of the pylons, of which 165 are still mined. Since the outbreak of the war a recorded 65 people and 73 livestock have been killed near the pylons. [But] the number is probably higher,” says Henrik Mathiesen, project officer for Halo Trust, which has been involved in demining in Mozambique since 1997 with support from the United States, Ireland, the United Kingdom, Japan, Norway, the Reece Foundation and the United Nations Development Programme.

The residents of the area are still dependent on NGOs to help them. Even after the landmine was found on Matusse’s plot, it wasn’t removed until a year later.

“The locals informed the Mozambican military about the mine but they did not do anything, since they don’t have a demining squad,” says Mathiesen.

It wasn’t until Halo deminers came in April last year that it was removed and detonated.

But Matusse, who lives a kilometre from the plot, kept on cultivating her crops, well aware of the risks.

“Land is scarce around here so I had to hold on to what I had. Otherwise I would not have been able to put food on the table,” she says.

Mathiesen shakes his head. “This just shows how desperate the situation is around here.”

The large influx of people from the countryside into Maputo looking for a better life creates a big demand for land.

“The newcomers don’t know that

Saved by a giant rat

One more step and I will be blown to pieces. Right in front of me lies an undetonated mine. Luckily it is marked with two wooden poles that are painted red on top.

A few days ago the deadly device was found by one of the 32 rats that work as mine detection rats (MDRs) in southern Mozambique. Since October last year Belgian NGO Apopo has used giant pouched rats to detect mines in a remote region of the Gaza province that was heavily mined during Mozambique’s civil war.

“They are more efficient than human deminers since they can cover larger areas in a shorter time and work nonstop for hours,” says Luís Chicohe, Apopo’s operational officer on the site in Mabalane.

At the Sokoine Agricultural University in Tanzania, the NGO worked for several years to try to turn the giant pouched rat’s natural behaviour of scavenging for food into an ability to find landmines.

“At the university’s research centre the rats were trained to detect TNT by rewarding them with a piece of banana whenever they sniffed out explosives. We do the same in the field,” says Chicohe.

In 2006 Apopo put the rats into action in Mozambique, where the NGO has been the sole operator in the Gaza province since 2008. After clearing relatively densely populated districts near the coast, Apopo moved to more deserted regions in the area.

“You can say that we have reached the last chapter regarding mine clearance in Gaza. Last time somebody got killed by a mine in Mabalane was in May 2009. Still, even though accidents are rare and only few people live here, we have to get rid of the mines to secure the local people. They use this land for collecting firewood and cattle grazing and have helped us in identifying the contaminated areas,” says Chicohe.

One of those areas is the Pfukwe Corridor, a stretch of land 25km long and 75m wide.

“Government forces put the mines here in 1986 to protect the railway that links Maputo with Zimbabwe from sabotage by Renamo. The mines were laid in very uneven patterns, meaning that some parts of the corridor contain many mines while others are empty,” says Chicohe.

So far, he and his staff of 22 men — with their worker rats — have found and destroyed 193 mines on 130 000m² of land that was cleared by bulldozers. The area corresponds to roughly a tenth of the total area that must be cleared before 2013, the year Apopo hopes the region will be landmine-free.

Until then the MDRs will be put in a harness, attached to a line and run back and forth between two “handlers” on a cleared area that contains mines. When a rat finds explosives, it starts sniffing and digging. Weighing just 1.5kg, the 75cm-long rodent will not make the mine explode. The handlers then mark the location of the mine with poles, after which technicians remove it and either detonate it or release its safety catch. Letting the mine explode on the field spreads TNT and confuses the rats when they are on duty.

A threat against the MDRs’ success rate is the soaring heat. Temperatures above 40°C are not uncommon in the area, meaning the rats are able to work only from 6am to 9am. According to Chicohe, even though the rats are indigenous to Africa and are used to high tem-

peratures, they will dig themselves down into the ground if it gets too hot.

At Apopo’s Mozambican headquarters in Chókwè, a dusty provincial dump an hour’s drive from the Pfukwe Corridor, programme manager Andrew Sulley is well aware of this limitation.

“Apart from the heat problem, the rats also require handlers to get rid of the mines. That is why Apopo also uses human deminers and why rats should not be considered the ultimate solution in demining — but as another important tool in the toolbox alongside humans, dogs and machines,” he says.

Back at the minefield, 30-year-old Saide Mshana has just put his rat back in its cage, where it immediately collapses with its legs in the air. “His name is Robinho,” says Saide. “They all have names. As a handler you cannot help developing a relationship with the rats. You quickly learn to tell the difference between them. They have different colours, markings and sizes. The rats are easy to handle and calm so, in many ways, it is like having a cat or a dog.” — *Henrik Lomholt Rasmussen*

landmine-free future

this a mined area, or where mines might be. This means that they are highly exposed to stepping on a landmine."

Clearing the way

Since Mathiesen and his staff began working in the area they have cleared 70 pylons.

It's a time-consuming process. After cutting away the densest grass and twigs with a clipper, the deminer, equipped with a blast-proof visor and a heavy safety vest, swipes a metal detector repeatedly over a small area — about 35 times a square metre — before cutting away the rest of the vegetation. If a mine is detected, it is either detonated on the spot or taken away and detonated or defused. A deminer can cover roughly 40m² a day.

The total area that needs to be cleared around pylons in Benfica and nearby Matola is an estimated 359 620m² — roughly the size of 72 football fields.

"It takes about a week to clear the ground around a pylon.

"Since 2007 we have destroyed 1 109 anti-personnel mines, two anti-tank mines and 111 UXDs, mainly near the South African border," Mathiesen says.

"[But] our work is complicated by the fact that EDM, the Mozambican electricity provider, bulldozed their way through the minefields to get access to the pylons after the war. This means that the mines were spread over a larger area and hidden in the dunes created by the bulldozers. So apart from doing manual demining around the pylons we must dig into the dunes with an excavator and sieve the soil for mines."

It's not just mine clearing that NGOs are dealing with. Halo Trust employees also run awareness campaigns to alert people about the mined areas and to keep them away from them. It is almost as challenging as demining itself.

"About 1 500 people live around the minefields where we operate ... and we estimate that more than 3 000 people are circulating here. I have seen a man fetching water in a pond with an undetonated mine lying right next to him," says Mathiesen.

Landmine free by 2014?

According to the Mine Ban Treaty, signed by Mozambique, the country

should have been free of mines last year. But the deadline wasn't met. Most people point to donors, who, by the middle of the past decade, have become increasingly tired of funding demining in Mozambique.

Finally, the government responded by taking political and financial ownership of the problem. A new director of Mozambique's National Demining Institute was appointed in 2007. In October the same year Halo Trust did a baseline survey of the situation in the south and confirmed the existence of 450 minefields — a lot more than expected.

The new institute leadership worked out a plan for demining the south and, promising to rid the country of the last of the mines by 2014, was granted a five-year extension.

The plan divides the six remaining mined provinces among three demining operators: Halo Trust in Maputo, Tete and Manica; Handicap International in Sofala and Inhambane; and Apopo, sponsored by the Belgian and Flemish governments and the United Nations, in Gaza.

What this means on the ground is clarity about who's doing what and where.

"It makes it easier for both the donors and us," says Andrew Sulley, Apopo programme manager in



Slow and steady: A deminer can cover about 40m² in a day's work, leaving the three NGOs working in mine-clearing operations in Mozambique with a lot of ground to cover. Photo: Howard Burditt/Reuters

Mozambique. "The risk of overlapping one another's efforts is eliminated. And we do not have to compete for money as donors have no problem in seeing who they are supporting."

Dr Fernando Mulima Vicente, the institute's head of planning and information, is optimistic about the 2014 pledge.

"We have clear goals laid out and better techniques regarding map-

ping the mined areas and clearing them. Furthermore, our budget of \$9.3-million dollars for 2010 is almost assured," he says.

Coming to an end

Apart from the areas around the pylons near Maputo, Halo Trust is demining areas around 32 pylon bases of a deactive power line. Four cows were recently blown up at one of them.

"When the carcasses were removed," says Mathiesen, "our deminers found the skeletons of two human beings, most likely landmine victims. It is almost an endless process. Even though we keep on forbidding people to walk in these areas, they keep on doing it."

Mathiesen is determined to complete the task along both the existing and the closed-down lines by the end of 2010.

At Apopo's Mozambican headquarters in the town of Chókwe in Gaza, Sulley keeps his fingers crossed.

"We are in a fantastic position. Having a near and concrete date ... for a Mozambique free of landmines must be an extra motivation for the donors," he says. "They can see that we are so close to the end of the tunnel."

An explosive career

Landmines can be a career opportunity. Just ask Domingas Bias, a 30-year-old woman from Maputo.

"In late 2007 I saw an ad in a Mozambican newspaper from Halo Trust (a US-based mine-clearing organisation) that was looking for mine clearers. I did not have a steady job and thought: 'Why not? It could be interesting', and signed up for a demining course," she says.

She clearly remembers the first time she found a landmine. "There it was, lying in the ground a few metres below the surface. I was frightened, but also a bit proud," says Bias.

She was quickly promoted from deminer to paramedic. Now she is the supervisor of a mine-clearing



Domingas Bias

squad for Halo Trust that is clearing minefields between Maputo and South Africa. Her two teammates are also women. Being a female deminer, she gets a lot of flak from men.

"Women cannot clear mines. It is too tough. They ought to take care

of the kids and the house' — [these] are things I have often been told by my male colleagues. I don't care. In fact, it just motivates me more. But being a big-city girl, I have to admit that it was hard getting used to living in a tent throughout the week. And working directly in the sun without any shade can be extremely hot," says Bias, who always wears a thick safety vest, a helmet with a big visor, plus boots and a uniform when on duty.

During her career, she has found 15 land mines.

"It might not seem a lot. But each of them can kill a human being. So no matter how few mines there might be, they have to be cleared," she says. — *Henrik Lomholt Rasmussen*

Hoping for a better future?



Build new partnerships!

The Luanda Urban Poverty Programme (LUPP) built a whole new approach to policy change and service delivery to overcome poverty in Angola. It successfully laid the foundation for citizens, especially the poor majority, to become active in shaping their future at municipal, provincial and national levels in post-conflict Angola.

LUPP was named the 2009 Driver of Change in the civil society category for building fresh partnerships that bring together the government, communities and independent development organisations to work together in addressing poverty. It benefits over 400,000 of Luanda's poorest men, women and children through building participatory governance and effective delivery of housing and basic services such as water.

Nominations for the 2010 southern Africa Drivers of Change awards are now open. Nominate individuals, organisations, businesses, or government agencies that demonstrate innovation and leadership to overcome poverty in the region. This includes you!

Entries close on 30 July 2010. Winners will be announced on 28 October 2010 at a gala event in Johannesburg. Please contact Sudley Adams at the Mail & Guardian on +27 11 250 7300 or +27 82 900 0776, or go to www.southernafriatrust.org for more details and entry forms.

