# The land-mine disaster: an epidemic of mutilation

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The world's tolerance for horror, as judged by television in particular, appears to be boundless. Even ing in so many not-so-distant lands. This revulsion when the ingredients are laced with the vivid spectacle of, for example, children dying in abject starvation, their bellies bloated to bursting, their spider-thin limbs encrusted with sores on which the desert flies feed, we experience at worst a twinge of nausea, or turn the set off.

There are those, of course, though comparatively few in number, who cannot stand the pain and try to do something. One such individual is Professor Kevin Cahill, who with a few colleagues, has founded the Center for International Health and Cooperation (CIHC), based in New York and Geneva. In its short existence, this remarkable body has established imaginative programmes for providing medical relief, facilitating prisoner release, organising legal assistance, and sponsoring the placement of orphans in former Yugoslavia. At the same time it is also reaching into the heartland of war-torn Somalia with a programme - Somali Lifeline - aimed at re-establishing basic civil, educational and health services amidst the chaos of that unfortunate land.

In 1992, Dr. Cahill, enunciating a philosophy bred from many years travel in the Third World, namely the belief that doctors were in a privileged position to influence international politics for the common good, organised a symposium aimed at concentrating the attention of political, legal, medical and voluntary organisations on the humanitarian crises affecting so many parts of the globe. The proceedings of this gathering, published under the title A Framework for Survival: Health, Human Rights and Humanitarian Assistance in Conflicts and Disasters,1 when reviewed in Lancet was described as a deeply disturbing book of great humanity, edited by 'one of this century's great physicians.' Now, scarcely three years later, Kevin Cahill has published the proceedings of another symposium held in New York in 1994. Entitled Clearing the Fields: Solutions to the Global Land Mines Crisis,<sup>3</sup> this book is influencing discussions presently taking place in many nations and organisations, such as the United Nations (UN). More recently, a vivid photographic portrayal of the horrors of limb replacement for amputee victims of land mines, entitled Silent Witnesses, based on a photographic exhibition, now touring the world has been published in an issue of 45,000 copies which have been distributed world-wide.4 Those who read these books cannot but feel an overwhelming sense of disgust at what is happenarises, not only from our sensitivities for the victims of an awesome massacre but from the daunting realisation that we are each guilty of permitting the elected representatives of our democracies to perpetrate the tragedy. Let me distil some of the harrowing facts that make the land-mine epidemic the greatest man-made disaster of all-time and one that is becoming increasingly worse.

What happens when a farmer tilling his field steps on a mine or a child scoops the clay to grasp the brightly coloured plastic that beckons from the soil? The short answer is that the victim is left not simply without an arm or leg, or frequently both legs and arms, but also with a wound that is a challenge to the skilled surgeon operating with first-class facilities. Most mine injuries take place in farming communities far from medical expertise in impoverished countries, however, and the suffering induced by pain, infection and mismanagement is unimaginable. The blast of the mine ensures that soil and bacteria contaminate and infect the wound while at the same time burning and coagulating the tissues at the site of injury and driving soil, grass, metal or plastic fragments between the tissue planes and causing severe secondary infection. Multiple operations are required to save the victim and to provide a stump capable of sustaining an artificial limb. For every hundred persons wounded in war, 45 units of blood are required, whereas for every hundred mine injuries, over 100 units of blood are needed. Children face particular problems. As a child ages, the bone of the amputation stump will grow more rapidly than the surrounding skin and soft tissues. The child may need multiple re-amputations as the bone grows out through the soft tissues, causing pain and infection in an amputation stump that cannot support an artificial limb. A 10-year-old child with a life expectancy of another 40 years may need 25 prostheses in his or her lifetime.

Much can be done to alleviate the personal suffering of the unfortunate victims of land-mine injuries. A glowing example of such an endeavour is the amputation programme set up by the CIHC in Hargesia, the capital of Somaliland, a country in which over one million land-mines have been laid. The programme has operated under the principle incorporated in the local motto: 'Help the Somalis to help themselves'. The rehabilitation centre is run by Somalis, and for the construction of the centre skilled and non-skilled labour were recruited from the ranks of the disabled. In this fertile land, mothers now tie their toddlers to trees, the fields are littered with camel carcasses and stone cairns mark the graves of their herders. The centre's first patient was a six-year-old girl whose parents had been killed during the war. Six months before the centre opened she had had both her legs blown off while playing near her aunt's house. She could only move around on her buttocks. Within one month of receiving her new legs she was walking and playing again with her friends. One thousand amputees attended the centre each month during its first four months of operation. In the words of Dr. Cahill, the Somali experience has allowed for the development of 'a public health model that can be replicated in other war-torn areas'.

### The current problem

The devastation caused by mines is so widespread as to demand urgent international action. More than 100 million land-mines have been scattered wantonly across the fields, mountains and roads of some 60 countries. According to UNICEF, there is already one land-mine for every 20 children in the world. Afghanistan and Cambodia are the most mine-infested countries in the world. Africa is the most heavily mined continent with some 18-30 million mines in 18 countries. Even in Europe, World War II mines continue to take their toll in Poland and Russia, and in Holland twelve people are still injured each year from such mines. Since 1989 four to six million mines have been sown without markers or maps among the citizenry of former Yugoslavia, and 50,000 mines were being sown each week at a rate faster than anywhere else in the world. These weapons will, no doubt, inflict much suffering on the NATO peaceforce.

The scale of human suffering caused by this indiscriminate pollution of the earth is unquantifiable, but such statistics as are available are daunting. Over 15,000 people are maimed by land-mines annually, mostly civilians, and 800 are killed monthly. In Cambodia, one in every 236 citizens is a land-mine amputee; in Angola, where there are 30,000 amputees; one in 470 of the population is an amputee, and in northern Somalia, the figure is one in 1,000. In Vietnam, over 7,000 American soldiers were killed by mines.

About 250 million land-mines have been manufactured in the past 25 years and over 700 varieties are produced at a rate of 10 million per year by more than 60 companies and government agencies in 40 countries, netting an annual income to the arms industry of \$100-\$200 million.

Most of the more seriously mine-infested countries do not produce their own mines but rely on imports from other nations. China, Italy and the former Soviet Union have been the largest producers and exporters in recent years, but other large exporters have included Belgium, Bulgaria, former Czechoslovakia, France, Hungary, the United Kingdom and former Yugoslavia, with Egypt, Israel, Pakistan, and Singapore being newcomers to the market. Some countries, such as the United States of America (US) and South Africa, are large producers but ban exports, except of course, for the purpose of war, such as in the Gulf War. In Europe, Belgium has stopped all production and France, Greece and Germany have banned the export of mines. The European Community has passed a resolution for a five-year moratorium on the export of mines and training facilities to place them. The recent failure of the Vienna meeting on land-mines to reach agreement on the implementation of a total ban is a sad indictment of our political leaders.

Mines are as attractive to the military leaders of developed democracies as to insurgent commanders engaged in civil war in poor developing nations, because destruction can be wreaked on large areas quickly, cheaply (a mine can be purchased for less than \$3) and effectively. What is not taken into account is the legacy of destruction and tragedy they bequeath to generations of civilians. Conventional minefields of past eras were laid by hand and marked to prevent friendly forces entering them. Not so the 'scatterable' mine which can be delivered by air, artillery or ground launch with an electronic fuse activated only after the mine has been dispensed. Any mapping remains in the hands of the dispensing force and may not be accurate. The Gulf War offers a salutary example. The allied forces rocketed one mine for every Iraqi man, woman and child into the civilian lands far from the battlefield. Recall the hypocritical concern expressed by military commentators on television as they allayed international anxiety by demonstrating that allied rockets struck military rather than civilian targets! We were told nothing about the mine assault on civilian lands, an action that contravened the basic ethic of war prohibiting direct attacks on civilian populations. And now when the war is ended, the mines go on killing and maiming in Iraq and Kuwait.

#### The economics of mines

To continue the obscene agrarian analogy, the cost of reaping a minefield is at least one hundred times that of sowing it, with many reapers destined to die or lose a limb. In Kuwait, the number of deminers killed since the Gulf War exceeds that of US combatants killed during the conflict. The cost of clearing mines would most likely equal the full development budgets of some of the poorest mine-infested countries. It costs between \$300 and \$1,000 to clear one mine. The estimated cost of clearing the world's mines is \$30-\$85 billion. The United Nations funds most mine-clearing programmes. In 1993, it funded clearance of about 80,000 mines, a tiny fraction of the 2-3 million mines laid every year. In Afghanistan, the UN estimates that it would take 15 years for 27 mineclearing teams to demine designated priority

zones. A 50-fold increase is needed just to stabilise the situation and this would involve training and deploying about 200,000 mine clearers worldwide, of whom about 2,000 would be injured or killed annually. Mines used to contain metal, making detection easy, but now many are virtually undetectable. More sophisticated fuses can, after a given period of time, self-destruct or self-neutralise, but the majority do not have this facility and of those that do, 10 per cent fail to function, thereby offering no advantage as the minefields remain active and have to be cleared.

#### A plea for a ban

Given the horror of mines, why are they still produced? The answer lies simply with the military whose experts claim that antipersonnel mines are the 'most cost-effective system available to the military' and that 'no alternative fulfils the military requirement'. Another emotive argument put forward by the Clinton administration is that the banning of mines cannot be considered simply because it 'increases the risk to our uniformed men and women'. What about the ununiformed, often unclothed civilians in the lands the US devastates? We need to differentiate between the so-called 'military requirement' and the humanitarian issues which military leaders are notorious for disregarding. Why we might ask, in a democratic society, are politicians so ready to relegate the ethic of humanitarian behaviour to the military? The US takes the view that if mines are not exported, if they are denied to irresponsible users, if they are self-destructable and if stockpiling is controlled, the problem will be solved. The military expedient is evident again - fudge the issues and keep on making mines. This argument also ignores the fact that it is the so-called responsible nations that export mines to the irresponsible nations and that it is the technology of these 'responsible' nations that has developed the undetectable mine. It is time for the military organisations and their political advisors to realise how short-sighted their policies on land-mines are.

In Clearing the Fields, support for a total ban comes from nine of the eleven authors, including Cyrus Vance and Boutros Boutros-Ghali. Also, the non-governmental organisations, most notably Human Rights Watch in Landmines: A deadly Legacy<sup>5</sup> and the International Red Cross have produced compelling statistics supporting a total ban on mines. Discussion may commence with the humanitarian issue that underlies the ethic of a 'just war', namely, the fundamental principle that prohibits superfluous or unnecessary suffering. This has led to the banning of chemicals and gases as legitimate instruments of war. Why not also mines? International law prohibits the use of any weapon against individual civilians not taking part in the hostilities or the civilian population. A major problem is that land-mines, particularly the cheapest and therefore, most deadly, are used in civil wars when considerations for the civilian population are disregarded.

The ultimate achievement of a total ban on mines, while depending on the influence that individual politicians, non-governmental organisations and the medical profession can bring to bear on the military, rests with the public, who if sufficiently strident can do more to support those politicians whose remit is for the future rather than for the expediency that seems to solve the problem of the moment. Kevin Cahill and the CIHC have done much to give us, the public, the facts. It is now over to us to give the movement for a total ban on mines the impetus that is so urgently needed.

#### References

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- <sup>4</sup> Cahill, K., Roma, T. Silent Witnesses. Harper Collins. US. 1995. Pp. 96.
  <sup>5</sup> Landmines: A Deadly Legacy. Human Rights Watch, Physicians for Human Rights. New York. 1993.

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