Mini-Review MR-141E

### **LAND MINES**

Michael Dewing Wolfgang Koerner Political and Social Affairs Division

23 September 1996 Revised 25 September 2003



Library of Parliament Bibliothèque du Parlement Parliamentary Research Branch The Parliamentary Research Branch of the Library of Parliament works exclusively for Parliament, conducting research and providing information for Committees and Members of the Senate and the House of Commons. This service is extended without partisan bias in such forms as Reports, Background Papers and Issue Reviews. Analysts in the Branch are also available for personal consultation in their respective fields of expertise.

CE DOCUMENT EST AUSSI PUBLIÉ EN FRANÇAIS

## TABLE OF CONTENTS

	Page
INTRODUCTION	. 1
TYPES OF MINES	. 2
DEPLOYMENT AND CLEARANCE	. 3
TOWARD A GLOBAL BAN	. 3
THE OTTAWA CONVENTION	. 5
PROGRESS SINCE THE SIGNING OF THE OTTAWA CONVENTION	. 6



# LIBRARY OF PARLIAMENT BIBLIOTHÈQUE DU PARLEMENT

#### LAND MINES

#### INTRODUCTION

Perhaps the greatest irony of modern weapons systems is that the most sustained suffering has been caused by the smallest and cheapest weapon – the anti-personnel mine. Despite international efforts to rid the world of these devices, there are as many as 45-50 million anti-personnel landmines scattered in 82 countries, and they kill or maim an estimated 300-400 people – mostly civilians – every week. Some 20 countries are especially affected by landmines or unexploded ordnance, including Afghanistan, Angola, Croatia, Egypt, and Cambodia. As well, 200 million mines are believed to be stockpiled worldwide.

The problem of landmines is further compounded by the fact that it would cost \$200 to \$300 billion to clear all mines worldwide. Mines that cost as little as \$3 on the open market can cost as much as \$1,000 each to clear. If not cleared, mines can continue to cause injury long after they have been deployed. Given the nature of injuries sustained, the economic and human costs can be staggering. In Afghanistan, for example, it is estimated that \$9,000 is required for the treatment and rehabilitation of every survivor. The fragile economies of many mine-plagued countries cannot support the cost of either mine clearance or victim rehabilitation.

In 1997, international awareness of the problem led to the signing of the Ottawa Convention banning the use and production of anti-personnel mines. Since then, with 134 countries having ratified the Convention, fewer countries are producing mines, world stockpiles have been reduced, and fewer people are being killed and maimed. Still, as pointed out by the RAND Science and Technology Policy Institute, if the current slow pace of detection and removal continues, it would take about 450 years to remove all the landmines that are now in the ground worldwide – assuming no more are laid. The challenge, therefore, is to build on the progress that has been made in banning mines and clearing minefields.

#### **TYPES OF MINES**

In all, there are over 700 different types of landmines, divided into two basic kinds: anti-tank (or anti-vehicle) and anti-personnel. They range from a crude wooden box loaded with dynamite to sophisticated "magnet-sensitive" mines that can be calibrated to explode under the weakest part of a vehicle. Mines are designed to be hand-buried, dropped from aircraft, or fired from a cannon-like "mine projector," which can hurl mines up to 36 metres.

Anti-personnel mines can be further divided into two types, based on the kinds of injury they inflict: blast and fragmentation. Blast mines wound with a single upward explosion that destroys part of a leg and drives dirt and debris into the wound; the resulting progression of infection after the initial dismemberment often requires progressive amputations of the leg over a period of time. Some of the common types of these mines include the M-14, a U.S. mine with a plastic casing, and the Soviet PMN mine, the mines of choice in Cambodia that cannot be disarmed.

Fragmentation mines are detonated either by exerted pressure or by tripwire. Metal or plastic projectiles shoot out over a "killing radius." Trauma, loss of limbs and slow or quick death can follow, depending on the power of the mine and the proximity of the victim. Types of fragmentation mines include the Soviet model POMZ-2, the U.S. M-18 Claymore, and the Valmara 69 mine, produced in Singapore. The Claymore has a killing radius of 50 metres, and the Valmara shoots more than 1,000 metal fragments over a 25-metre radius. "Bounding mines," those that spring upward, include the OZM-3, a Soviet model with a killing radius of 25 metres, and the M-16 mine, which is manufactured in the United States.

Anti-tank mines, of course, are larger and have more powerful charges – up to 10 kilograms of explosives, compared to the few grams of explosive material found in most anti-personnel mines. An anti-tank mine can weigh up to 15 kilograms. It is the anti-personnel mine, however, that causes most harm to civilian populations.

3

#### **DEPLOYMENT AND CLEARANCE**

The strategic deployment of landmines can help effectively to protect military bases and key installations. Landmines are used to protect open flanks, deny routes and strategic positions, restrict the ability of opponents to manoeuvre and force enemy units to deploy in areas where they are most vulnerable. Mines can also be used as part of the support system for heavy artillery.

However, while landmines may have readily identifiable military applications, the nature, design, and deployment of large numbers of mines will necessarily lead to civilian casualties. Particularly in cases of counter-insurgency, where ground may shift frequently, the deployment of mines will have consequences long after hostilities cease. Civilians become inevitable and not coincidental casualties.

The neutralization of mines requires specialized training and remains a tedious and dangerous process. Mines are often designed and deployed in order to make their detection as difficult as possible. Furthermore, advances in technology are exacerbating the problem because most modern mines are now made with plastics and may contain only traces of metal, if any. Newer models may also contain sophisticated electronic fuses that make them more hazardous to remove.

#### TOWARD A GLOBAL BAN

During the 1990s, given the scope of the international landmines problem, a consensus slowly emerged on the need to ban anti-personnel mines. Canada agreed to a ban on both their production and export. In 1992, the United States passed legislation imposing a one-year moratorium on the sale, export or transfer of anti-personnel mines. The moratorium was subsequently extended for an additional four years. In September 1994, President Bill Clinton endorsed the "eventual elimination" of anti-personnel mines and, that same year, the United States sponsored a United Nations General Assembly resolution calling for the same thing. The resolution was adopted by consensus in December 1994.

#### LIBRARY OF PARLIAMENT BIBLIOTHÈQUE DU PARLEMENT

4

On 3 May 1996, negotiators at the first review conference for the Convention on Conventional Weapons (CCW) approved a revised landmine protocol (Protocol II) that places new limits on the use, production and transfer of anti-personnel mines. Parties to the CCW protocol are required to incorporate both self-destruct and self-deactivation features on anti-personnel mines used outside perimeter-marked areas that are monitored by military personnel and protected by fencing, as well as on those that are remotely delivered. The new protocol also requires that all anti-personnel landmines produced after 1 January 1997 contain materials or devices to make them more detectable.

An immediate global ban on anti-personnel mines was not negotiated during the review process, largely because of intense opposition from a number of countries including China, Russia, India and Pakistan. Moreover, attempts to reduce the dangers of mine-clearing by banning anti-handling booby-trapped mines were defeated, largely by the argument that these devices are also on anti-personnel mines attached to anti-tank mines.

Another shortcoming of the protocol revolves around the difficulty of distinguishing between anti-tank and anti-personnel mines. While Protocol II dealt only with anti-personnel mines, technological advances are such that anti-tank mines may soon be small enough to scatter and will be triggered by less weight. These mines are being fitted with a preformed frangible case, optimized to attack personnel – that is, they are anti-personnel devices as well. Such "hybrids" led the International Committee of the Red Cross (ICRC) to question the protocol's definition of an anti-personnel mine as one that is "*primarily* designed to be exploded by the presence, proximity, or contact of a person and that will incapacitate, injure, or kill one or more persons." The ICRC argued that "if a munition is designed so as to be capable of use as an anti-personnel mine and for some other purpose, it should clearly be considered an anti-personnel mine and regulated as such."

On the positive side, Protocol II:

- Makes it a war crime to use mines against its rules in a way intended to kill civilians. The old protocol was silent on this issue. Under the new regime, individuals (including those in government) will be accountable for their actions and criminally liable for violations.
- Places responsibility for maintenance or clearance of minefields squarely on the party that laid the mines. The state that lays the mines must clear them, safeguard them or, if the situation requires it, help another state do the same.
- Provides specific protections for international forces and missions, giving peacekeepers added security against the threat of mines through reporting and mine-removal requirements.

- Toughens the requirements for recording and marking minefields, improving the odds that civilians will be protected from landmines.
- Establishes annual international meetings that will focus only on the landmine protocol, thereby keeping the issue at the top of the global humanitarian agenda.

Further efforts to deal with the landmines problem included a Canadian initiative to move international thinking on anti-personnel mines beyond the Convention on Conventional Weapons framework and towards a global ban on these types of weapons. In pursuit of this objective, the Canadian government hosted an International Strategy Conference in October 1996. More than 50 countries participated, and they issued a declaration calling for "the earliest possible conclusion" of a treaty banning anti-personnel landmines. Canada's Minister of Foreign Affairs at that time, Lloyd Axworthy, further challenged those present to return to Canada in December 1997, to negotiate and sign a treaty.

#### THE OTTAWA CONVENTION

Under what became known as the "Ottawa Process," there followed a flurry of diplomatic meetings that involved not only governments, but also international and non-governmental organizations — including the coalition known as the International Campaign to Ban Landmines (ICBL). The meetings included a session in Vienna in February 1997 to discuss a draft convention, a follow-up meeting in Brussels in June, and three weeks of negotiations in Oslo in September. The new Ottawa Convention, formally entitled the *Convention on the Prohibition of the Use, Stockpiling, Production and Transfer of Anti-Personnel Mines and on their Destruction*, was opened for signature in December 1997 at a conference in Ottawa, where it was signed by 122 countries. The following week, the ICBL and its former coordinator, Jody Williams, were awarded the Nobel Peace Prize.

Less than nine months after the Ottawa conference, 40 states had either ratified or acceded to the Convention – the number required for it to enter into force. Since entering into force on 1 March 1999, the Convention has been signed by many more states: by 31 July 2003, 146 states had signed and 134 had ratified or acceded to it. It is important to note, however, that several major countries have not signed the Convention, including the United States, Russia, China, India, and Pakistan.

6

#### The Convention commits states that have ratified it to:

- Never use, develop, produce, stockpile, or transfer anti-personnel landmines, or assist any other party to conduct these activities;
- Destroy all stockpiled anti-personnel landmines within four years of the Convention's entry into force;
- Clear all laid landmines within ten years of the Convention's entry into force;
- When it is within their means, provide assistance to mine clearance, mine awareness, stockpile destruction, and victim assistance activities worldwide.

The Convention also includes reporting obligations and provides for annual meetings to examine its status.

Canada was the first country to ratify the Ottawa Convention. Prior to ratifying, it had destroyed its stockpile of anti-personnel mines. In addition, Canada has provided over \$100 million, through the Canadian Landmine Fund, to support mine action programs in over 25 countries.

#### PROGRESS SINCE THE SIGNING OF THE OTTAWA CONVENTION

In its 2003 *Landmine Monitor Report*,<sup>(1)</sup> the ICBL noted that, although 134 countries had become parties to the Ottawa Convention, 47 countries remained outside it. These included three of the five permanent members of the UN Security Council – China, Russia, and the United States – most of the Middle East, most of the former Soviet republics, and many Asian states. Their stockpiles contained a total of some 200 million anti-personnel mines.

Despite the holdouts, there has been substantial progress in reducing the use of landmines. The ICBL report stated that, between May 2002 and May 2003, fewer governments and fewer non-state entities (such as rebel groups) had used anti-personnel mines than during the previous year, production had decreased, and millions of stockpiled anti-personnel mines had been destroyed. At the same time, however, 82 countries were still affected to some degree by landmines and/or unexploded ordnance and, although the reported landmines casualty rate had declined, it was still between 15,000 and 20,000 annually.

<sup>(1)</sup> International Campaign to Ban Landmines, *Landmine Monitor Report 2003: Toward a Mine-Free World*, <a href="http://www.icbl.org/lm/2003/">http://www.icbl.org/lm/2003/</a>.

#### LIBRARY OF PARLIAMENT BIBLIOTHÈQUE DU PARLEMENT

7

Canada continues to play a leadership role in promoting the Ottawa Convention. Canada has an ambassador for mine action, who serves as Canada's international focal point on all matters pertaining to the implementation of the Convention. In 2002, Ross Hynes was appointed Ambassador for Mine Action.

In November 2002, Foreign Affairs Minister Bill Graham announced an additional \$72 million for the Canadian Landmine Fund. The new funding, to be disbursed over a five-year period that began in April 2003, supports global mine action activities, including mine-clearing projects, assistance to landmine victims and their communities, mine risk education, and the destruction of stockpiled mines. The fund is also used to promote universal adherence to the Convention and to support the development of Canadian-made mine action technologies.

Since the signing of the Ottawa Convention in 1997, there have been five meetings of the parties to the Convention. The first review conference will be held from 29 November to 3 December 2004, at which time it is hoped that governments will reconfirm their commitment to the Convention's goals.