



Seeds of Terror **Seeds of Hope**



*1998-1999 Report on the
Canadian Landmine Fund*



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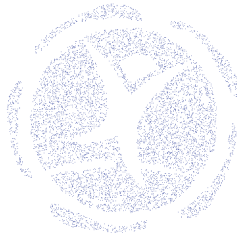
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Seeds of Terror Seeds of Hope

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For a vast number of countries where the Canadian International Development Agency (CIDA) is involved, the presence of landmines is a serious obstacle to sustainable development.

These weapons, which cannot tell the difference between a soldier or a child, create psychological, social and economic devastation in countless communities.

The presence of landmines affects all elements of development and peace-building. Refugees and internally displaced people often cannot return safely to their homes because of land contaminated by mines. Timely delivery of critical humanitarian aid may be jeopardized, the resumption of positive economic activities is stalled and the health and well being of populations, particularly women and children, are threatened even further.

In supporting humanitarian mine clearance operations, mine awareness education, victim assistance and socio-economic rehabilitation, CIDA helps to create an environment conducive to development and the reduction of poverty. This report provides a summary of the many initiatives CIDA has supported in the first year of the Canadian Landmine Fund. It also shows the impressive results that can be achieved when CIDA, other government departments and partner organizations coordinate their efforts to combat these deadly weapons.

Maria Minna
Minister of International Cooperation



Industry Canada has had the honour of participating in the Canadian Landmine Fund in its inaugural year 1998-99. It has worked in cooperation with the Department of National Defence in the establishment of the Canadian Centre for Mine Action Technologies and has provided support to the private sector to commercialize existing technologies and equipment and refocus current applications which will be useful in eliminating anti-personnel landmines and assisting victims.

Through the Technology Partnerships Canada Program, Industry Canada is examining proposals for funding technologies to help eliminate the terrible impact of anti-personnel landmines. Current projects that are nearing the funding stage include a bush cutter that would facilitate mine clearance and a special mine prodding device that would assist in identifying an object in the ground as a mine or other material.

The global elimination of anti-personnel landmines is a major challenge as we enter the 21st century. I strongly believe that Industry Canada is making an important contribution to addressing this need by working with the private sector to develop equipment and technologies which will lead both to the elimination of anti-personnel landmines and to provision of effective assistance to landmine victims.

John Manley
Minister of Industry



The Canadian Forces' experience with landmines has shown that appropriate technology and techniques are vital for safe and efficient demining projects. The establishment of the Centre for Mine Action Technologies in Suffield, Alberta is an important step that will contribute to the elimination of the menace posed by anti-personnel mines and save the lives and limbs of deminers and mine-affected populations. The Canadian Forces also provide valuable technical expertise to a number of demining and stockpile destruction projects through the Canadian Landmine Fund.

Art Eggleton
Minister of National Defence

Executive summary

Toward a landscape of hope

Two years ago, I had the honour of hosting representatives of 121 nations who came to Canada to join us in signing an historic treaty banning the use, production and export of anti-personnel landmines. It was, I believe, a proud moment for our nation, the crowning achievement of a long and challenging diplomatic effort by Canada and its partners.

The Anti-Personnel Mine Ban Convention brought the first ray of hope to millions around the world that we would one day rid ourselves of these inhumane weapons. Recognizing that a treaty alone would not clear contaminated land or ease the plight of victims, our nation backed its signature with a financial commitment to support the painstaking work needed to end this global epidemic. On December 3, 1997, Prime Minister Jean Chrétien announced the creation of a five-year, \$100 million Canadian Landmine Fund.

This 1998-99 annual report documents the combined efforts of four government departments during the first year of the Canadian Landmine Fund. It reports on our first steps toward an integrated mine action agenda and portrays the range of programming undertaken to meet our goals of clearing land, ending casualties and assisting victims.

In addition to the field projects supported by the Canadian Landmine Fund, Canada has maintained diplomatic leadership on this issue. We have been at the forefront of efforts to increase support for the Convention, and to ensure that action on landmines remains a priority. The leadership shown by Canada and our partners has resulted in dramatic growth of support for this convention, which has now been signed or acceded to by 136 countries and ratified by 89.

This year also saw the establishment of the Canadian Landmine Foundation, a private sector organization committed to raising money for international mine action. It will ensure that Canadians have an opportunity to participate in a meaningful way on this important issue.

Our efforts in the first year of the Canadian Landmine Fund have established a solid base for sustained action to fulfill the terms of the Convention. I look forward to reporting continued progress on this issue in coming years, so that people everywhere may walk the earth safely and with hope for the future.

Lloyd Axworthy

Minister of Foreign Affairs



The Anti-Personnel Mine Ban Convention brought the first ray of hope to millions around the world that we would one day rid ourselves of these inhumane weapons.

Introduction

Seeds of Terror

In regions touched by conflict the world over, there are those who live in fear of the very ground they walk on. They must gather firewood, farm, play or simply visit neighbours knowing that their next step might be their last. These people endure one of the cruelest legacies of modern warfare: anti-personnel (AP) landmines.

AP mines are weapons placed in or on the ground, which wound or kill when activated by the pressure of a footstep. These hidden, indiscriminate weapons cannot tell the difference between the tread of a soldier or a child. They continue to kill and maim long after wars are over.

According to the International Campaign to Ban Landmines (ICBL), more than 350 different kinds of anti-personnel mines have been produced by more than 50 countries. Used by military forces throughout the world, the low cost and easy deployment of landmines have made them a weapon of choice in the world's poorest countries. In countries such as Angola, Mozambique, Afghanistan, Cambodia and Bosnia, landmines are a terror ordinary people live with every day.

The widespread use of anti-personnel mines has created a humanitarian crisis of global proportions. While current assessments place the number of mines deployed throughout the world at somewhere between 60 and 70 million, this remains a rough estimate since few accurate records

are kept when mines are being used. In Afghanistan for example, millions of AP mines were scattered indiscriminately out of the backs of airplanes and trucks. While there is no precise estimate of the total number of AP mines in Afghanistan, the pollution is known to have affected more than 850 square kilometres of land, including 223 square kilometres of agricultural land.

While it costs between US\$3 and US\$30 to purchase an AP mine, it costs between US\$300 and US\$1000 to remove one. Numbers of landmines alone do not do justice to the issue; recent efforts to address the contamination focus instead on the extent of priority land affected to give a truer measure of the human and environmental impact of these weapons. It is generally agreed, however, that the overall cost of undoing global landmine contamination will be in the billions of dollars.

When we look at the broader effects of landmines, the long term cost of their use is even more devastating.

The International Committee of the Red Cross (ICRC) estimates that, globally, landmines take some 2000 victims a month with 800 killed and 1200 injured. Since 1975, there have been more than one million casualties- most of them civilians, many of them children. Where they do not kill immediately, landmines severely maim their victims, causing trauma, life-long pain and often social stigma. World wide there are some 250,000 landmine amputees. Survivors face terrible physical, psychological and socio-economic

difficulties. In many already economically fragile countries, the cost of providing long term support and rehabilitation is an unaffordable burden.

Beyond the direct costs of mine clearance and victim assistance are wider economic and social costs. Poor, rural, post-conflict societies are quickly overwhelmed by the challenges of repairing infrastructure and replacing lost agricultural production. Landmines also disrupt commerce and trade, producing shortages and inflation and preventing economic stabilization in post-conflict societies. In short, landmines perpetuate poverty and are a major obstacle to sustainable development.

Since 1975, there have been more than one million casualties - the majority civilians; many of them children.



This child's scars are the grim legacy of landmines.

Seeds of Hope

The Ottawa Process and the international movement to ban landmines

Revulsion at the appalling human effects of landmines was the driving force behind the launching of the Ottawa Process—an unprecedented, fast-track diplomatic initiative that, in only 14 months, negotiated the Convention on the Prohibition of the Use, Stockpiling, Production and Transfer of Anti-Personnel Mines and on Their Destruction (*the Ottawa Convention*). The Ottawa Process brought together like-minded governments, pro-ban non-governmental organizations (NGOs) and international organizations (IOs) into an effective “coalition of the willing” to push for the ban convention. Their efforts came to fruition in December 1997 when the world witnessed 122 states signing the ban convention at the Ottawa ceremony.

Foreign Affairs
Minister Lloyd
Axworthy and ICBL
Ambassador Jody
Williams in Oslo for
final negotiations
on the ban
convention text.

The Canadian commitment

In addition to its diplomatic leadership in pursuing the ban, Canada took early steps to meet its own commitments. Just a month before the treaty signing ceremony, Canada

demonstrated its support for the principles of the Convention by completing the destruction of almost all of its anti-personnel landmine stocks. As provided for by the treaty, Canada has retained a small number of AP mines solely for mine awareness and demining training purposes.

Canada was the first country to ratify the AP Mine Ban Convention, depositing its instruments of ratification with the Secretary General of the United Nations on the day the Convention was opened for signature. As part of the ratification process, Canada has passed domestic legislation which makes it illegal for any Canadian to produce, use, transfer or possess AP mines.

Canada backed its commitment to the goals of the Ottawa Convention financially in December 1997 when Prime Minister Jean Chrétien announced the establishment



Prime Minister Jean Chrétien, Foreign Affairs Minister Lloyd Axworthy, and Jody Williams of the ICBL with members of Mines Action Canada as the last of Canada's operational AP mines are destroyed on November 3, 1997.

of a five-year, \$100 million fund to continue work on universalizing the ban and achieving its objectives.

The fund is governed by an innovative collaboration among four government departments: the Department of Foreign Affairs and International Trade (DFAIT); the Canadian International Development Agency (CIDA); Industry Canada (IC) and the Department of National Defence (DND). To coordinate this effort, and to signal the priority it places on these efforts, Canada appointed an Ambassador for Mine Action, Jill Sinclair. Canada was the first government in the world to establish a dedicated Mine Action Team. Today there are counterpart teams in France, Norway, Australia, Thailand and the United States.

Among the departments, DFAIT takes the lead on initiatives involving convention universalization and ratification as well as on international coordination, setting global priorities and monitoring. DFAIT also works with DND to support landmine stockpile destruction.

CIDA leads in the areas of mine clearance, mine awareness and victim assistance, drawing on its experience in developing and funding programs in Afghanistan, Angola, Bosnia and Herzegovina, Cambodia, Central America and Laos. Since 1993 CIDA has provided more than \$12 million in mine action assistance to these countries and regions. It has also supported related initiatives of the International Committee of the Red Cross (ICRC), UN agencies and select NGOs.

DND and Industry Canada have worked jointly to establish the Canadian Centre for Mine Action Technologies (CCMAT). The Centre has a mandate to develop low cost, sustainable technology for humanitarian demining and to evaluate technologies developed through on-site research as well as those developed by Canadian industry. This is done using the facilities available through the Centre's association with Defence Research Establishment Suffield (DRES). Industry Canada has the



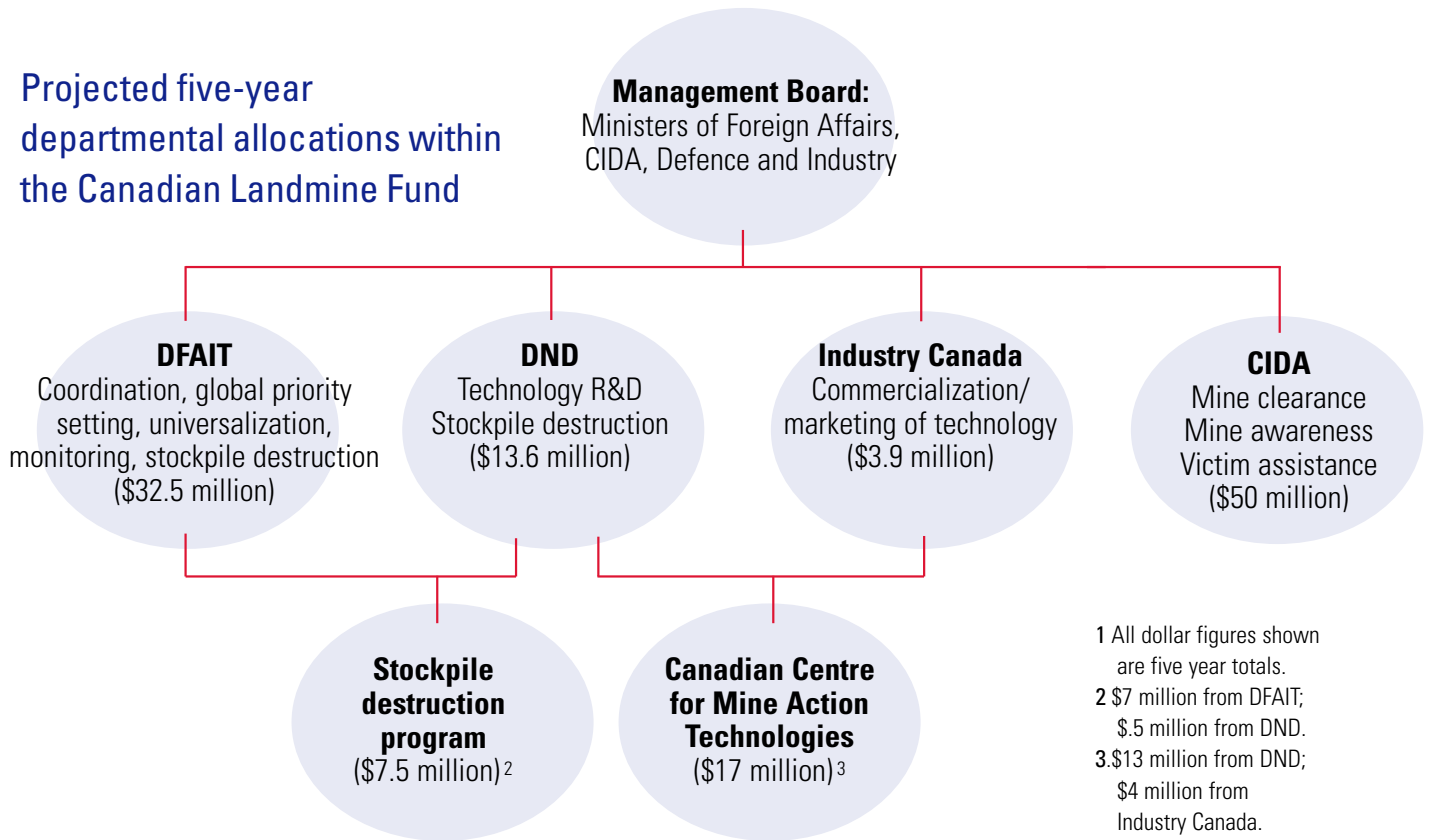
Countries that agree to be bound by the *Convention on the Prohibition of the Use, Stockpiling, Production and Transfer of Anti-Personnel Mines and on their Destruction* commit themselves to:

Committing to the convention

- banning the use, production, transfer and stockpiling of anti-personnel mines
- destroying existing stockpiles
- clearing minefields within 10 years
- providing assistance for the care and rehabilitation of mine victims
- cooperating with a compliance regime

The Canadian Landmine Fund \$100 million¹

Projected five-year departmental allocations within the Canadian Landmine Fund



1 All dollar figures shown are five year totals.
 2 \$7 million from DFAIT; \$5 million from DND.
 3 \$13 million from DND; \$4 million from Industry Canada.

lead in commercializing and marketing those technologies which show the most promise. A total of \$17 million over five years has been earmarked for the establishment and operation of CCMAT.

DND also contributes to mine action by providing technical advisors to Mine Action Centres (MACs) in affected regions.

In the first year of the \$100 million Landmine Fund, Canada made multi-year commitments to projects in many of the world's regions most seriously affected by mines, including a \$10 million program in Bosnia,

\$10.46 million for mine action in Mozambique and \$4.5 million for mine action in Central America.

Measuring progress toward a mine-free future

In the costly and painstaking fight against landmines, victory comes one small step at a time. A "safe lane" to a water source may save lives and limbs in a remote village in Mozambique. A mine awareness program may avert dozens of accidents in Bosnia. A new

The road to Ottawa

1992	1995-96	May 1996	October 1996
The International Campaign to Ban Landmines is founded.	Geneva: International negotiations over the 1980 UN Convention on Certain Conventional Weapons fail to produce progress in curbing landmines.	Geneva: Canada calls upon other nations to work together on a total ban on anti-personnel mines.	Ottawa: Canadian Foreign Affairs Minister Lloyd Axworthy challenges the international community to negotiate and sign a treaty banning anti-personnel landmines by December 1997.



limb may allow a survivor in Laos to earn an income. The incremental nature of our fight against landmines underscores the importance of developing the means to measure our progress in mine action at all levels from the local to the global. Measuring success will be critical to our efforts to learn from past activities and to improve the efficiency and effectiveness of our mine action programs.

Canada has developed its own “measures of progress in mine action” which recognize the integrated and mutually reinforcing nature of various aspects of the fight against landmines.

These measures of progress in mine action include:

- Banning the production, stockpiling, trade and use of anti-personnel mines;
- Reducing mine casualties;
- Clearing mined land;
- Providing assistance to mine victims and their communities;
- Developing mine awareness; and
- Improving mine action information and planning.

Co-recipient of the 1997 Nobel Peace Prize, Tun Channereth, distributes pro-ban literature. The tireless efforts of ICBL activists such as Channereth were critical to the momentum of the ban movement.

February 1997

Vienna: 111 states take part in first formal discussions of a draft AP mine ban convention.

June 1997

Brussels: 97 countries sign the Brussels Declaration announcing their support for a convention to ban landmines no later than December 1997.

September 1997

Oslo: Convention text is negotiated over the course of three weeks.

December 1997

Ottawa: 122 countries sign the Convention.

March 1, 1999

The Convention enters into force.

Delivering on hope

The challenges of meeting the goals of the Ottawa Convention are formidable: its aims are nothing short of the eradication of these weapons and the rebuilding of lives and communities shattered by their use. Yet the AP Mine Ban Convention, and the cooperative action of all its signatories, represent the best hope yet of dealing comprehensively with this crisis and delivering a new measure of security to the lives of millions.

The benchmarks described above are


essential to achieving the goals set out in the AP Mine Ban Convention and serve as the framework for this report. The range of Canadian programming in the first year of the Landmine Fund is reported in relation to how each initiative contributes to the realization of these objectives. As Canada's efforts are intrinsically linked to the coordinated global struggle against landmines, each section begins with a perspective on global progress by these measures and situates Canada's contributions in the international context.

Working the fields in Battambang province, Cambodia. This land, recently reclaimed, lies near an existing minefield.

Nic Dunlop/OSAIT



Banning the use, production, export and stockpiling of AP mines

 *he speed with which the Ottawa Convention has gained support has been remarkable. From the time it was signed by 122 nations in December 1997, it took only nine months to reach the required 40 ratifications to start the countdown to treaty entry-into-force. It subsequently passed into international law on March 1, 1999, making it the most rapidly ratified multilateral disarmament treaty in history. By the end of March 1999, the Ottawa Convention had been signed or acceded to by 135 countries and ratified by 71, including some of the world's most heavily mined states. More than two-thirds of the world's nations have now made the decision to ban this weapon.*

The impact of the Convention extends beyond its signatory list. A powerful, moral norm against the use of landmines has been established and is now an influence on the behaviour of all countries, even non-signatories.

The once-flourishing legal trade in mines has all but vanished - almost all traditional exporters have ceased these activities. Since

World War II, more than 50 countries have produced AP mines. Today, fewer than one-third of these countries continue to produce mines and only a handful of states have yet to announce a halt to the export of mines they produce.

Efforts in stockpile destruction have also been significant. A number of states, including Canada, Germany, Ireland, Norway and

UN Secretary General Kofi Annan, Prime Minister Jean Chrétien and Foreign Affairs Minister Lloyd Axworthy at the signing of the Convention.



Ottawa Citizen

The first Landmine Monitor Report, launched at the First Meeting of States Parties to the Mine Ban Convention in May 1999.



cover photo: Nic Dunlop, courtesy: Human Rights Watch

Since the beginning of the Ottawa Process in 1996, 20 countries have destroyed over 14 million stockpiled mines. These weapons will never take a life or limb.

Switzerland have already completely destroyed their mines. Others, such as the Czech Republic, Denmark, France, Mozambique, Spain, Sweden, Ukraine and the United Kingdom are actively involved in stockpile destruction programs. Even non-signatory states like Russia and the United States have begun to destroy mines.

Canada has been active in promoting treaty universalization and adherence, and has contributed through a number of innovative and collaborative programs.

Working in partnership

Much of the success in extending the treaty's reach can be attributed to the tremendous work done by the International Committee of the Red Cross (ICRC) and non-governmental organizations (NGOs) led by the International Campaign to Ban Landmines (ICBL). The unique partnership between these organiza-

tions and a community of like-minded governments was the cornerstone of the Ottawa Process and remains integral to ongoing work to implement the Convention.

In recognition of the NGOs' effective work, DFAIT established the Mine Action Partnership Program (MAPP) as a means to contribute to the core funding of key domestic and international NGOs. A total of \$761,000 was disbursed through this program in fiscal year 1998-99 to support three key NGOs.

Mines Action Canada (MAC) was allocated \$300,000 to help its universalization, ratification and implementation activities and to assist its work with pro-ban civil society organizations in Latin America, Africa and Eastern Europe. This funding also supported MAC's collaboration with DFAIT in the development of a multi-media/multi-sectoral mine action outreach program in Canada. Partnership funding also assisted MAC to cultivate private sector and civil society support for mine action programs.

The International Campaign to Ban Landmines (ICBL) received \$400,000 to continue work in support of rapid ratification and universalization in regions such as the Middle East, South East Asia and former Soviet republics where ban support is nascent. The funding will also assist the ICBL in advocacy and mine action policy development. Finally, funding for the ICBL will help it cultivate the capacities of pro-ban civil society organizations in developing countries so they are able to communicate effectively and efficiently with ban movement members.

The International Physicians for the Prevention of Nuclear War (IPPNW) was allocated \$61,000 to build its capacity to push for the ratification, universalization and implementation of the Ottawa Convention. In particular, this funding assisted the IPPNW in helping build the capacities of civil society organizations in the former Soviet Union so they may participate fully in the ban movement and push governments in the region to sign, ratify and implement the Convention.

Encouraging universalization

In some instances, small targeted initiatives can make the difference in dispelling reservations about adopting the ban or in persuading willing states that they can comply with their treaty obligations. To support national, regional and global initiatives that strengthen the political will for the Ottawa Convention, DFAIT launched a five-year, Mine Ban Initiatives Program (MBIP)—a flexible mechanism designed to fund small, regional mine action projects which may encourage signatories and ratifications. In 1998-99, the MBIP disbursed just over \$1.8 million, much of it in support of international conferences and workshops that promoted the Convention and worked to build capacity for compliance.

The MBIP supported conferences in Jordan, Thailand, Burkina Faso, Lebanon, Mexico and Russia. Each of these conferences

produced positive results for the Ottawa Convention. In Amman, Jordan announced its signature to the Ottawa Convention. Shortly after the Burkina Faso conference, this country became the 40th signatory to ratify the Ottawa Convention which set the date for its formal entry-into-force on March 1, 1999. At the Moscow conference, the Russian government announced a further three-year moratorium on the export of landmines and a halt to the production of blast AP mines.

The MBIP has supported the establishment of new ICBL offices in Ukraine and Georgia and bolstered ICBL campaigns in Nepal and Yugoslavia. The program has also allowed Canada to fund a range of small-scale mine action programs which assist states in meeting treaty obligations. These include a number of land clearance and victim assistance projects which are reported on more fully below.

Regional seminars and conferences have been a catalyst in the steady increase in ratifications.

Jody Williams, George Alleyne, Director General of the Pan American Health Organization, and Minister Lloyd Axworthy at a Canada-Mexico co-sponsored regional seminar on anti-personnel mines in January 1999.



Ensuring treaty compliance

Effective implementation and full compliance with the Convention are essential to maintaining its moral force, credibility and visibility. This is why DFAIT initiated the Mine Monitoring Program (MMP) to build civil society capacity to monitor the implementation of the Ottawa Convention.

This year DFAIT disbursed \$450,000 to support Landmine Monitor, a civil society-based monitoring system coordinated by the ICBL. Landmine Monitor's research capacity includes over 70 researchers from all over the globe. DFAIT funding contributed to the preparation of the first Landmine Monitor Report, released at the First Meeting of States Parties in Maputo, Mozambique in May 1999.

Reducing stockpiles

Clearing a single mine in the ground costs up to US\$1000 and can be a deadly job. Destroying a stockpiled mine can cost as little as US\$3 and is both faster and safer. But not all states have the technical or financial capacity to destroy landmine stockpiles safely and effectively. Difficulty in destroying stockpiles

can prevent countries from signing and ratifying the Ottawa Convention because it has a four-year deadline for complete stockpile destruction. The Stockpile Destruction Program, managed jointly by DFAIT and DND, facilitates adherence to the Convention by providing states with the financial and technical assistance needed to destroy their stocks.

In 1998-99, \$172,000 was dedicated to the Stockpile Destruction Program. A key diplomatic breakthrough this year was the signing of a memorandum of understanding between Canada and the Ukraine. As a direct result, Ukraine signed the Convention just before it entered into force on March 1. Ukraine is burdened by an economic crisis and the legacy of a Soviet-era stockpile of 10 million mines, including some of the world's most toxic. This makes international assistance vital if Ukraine is to meet its treaty commitments. Under the memorandum Canada committed to provide technical and financial assistance for stockpile destruction. In cooperation with an international consortium of donors, Canada will help the Ukraine purchase an incineration facility to dispose of the stockpiles.

Former Minister of International Trade Sergio Marchi and Ukrainian Foreign Minister Borys Tarasiuk at the signing of a series of agreements between the two countries, including a memorandum of understanding on stockpile destruction.



Jean-Marc Carrière/PVO

Reducing mine casualties

Reducing - and ultimately eliminating - landmine casualties is one of the primary aims of the global effort to ban and remove these weapons. However measuring progress against this benchmark remains a tremendous challenge because of the difficulty gathering reliable data on victims. Many of those who encounter landmines never make it to hospitals or field clinics, they die on impact. Their families may or may not report the incidents to authorities. Even when survivors do find their way to medical help, there is no guarantee that their injuries will be recorded in a systematic registry of data on landmine incidents.

But where credible data does exist, there is room for guarded optimism. The incident rates in several regions severely affected by landmines appear to be decreasing. Casualty rates in both Afghanistan and Cambodia fell by almost half between 1993 and 1998. In Bosnia, the International Committee of the Red Cross (ICRC) recorded a huge drop in the casualty rates, from 56 victims per month in 1995 to 5.5 per month at end of 1998. In Mozambique over the same period, the monthly incident rate dropped from approximately 55 to fewer than 7.

More study is needed before firm conclusions may be drawn about the causes for these improvements. Ultimately, casualties diminish as the threat of landmines is removed and, in the short term, as people become more aware of the dangers and find safe alternative routes. Canada contributes to reducing casualties through its efforts in banning the use, production and trade of landmines, aiding in land clearance and stockpile destruction and supporting mine awareness training programs.

With sustained efforts to ban the use of AP mines, clear land and train affected populations to recognise and avoid these weapons, there is hope for an end to such tragic injuries.




John Rodsted



DFAIT

Clearing priority land

learing mined land and returning it to safe and productive use is fundamental. The 10-year time frame written into the Convention is ambitious and sets a target which will require mass mobilization of resources, ingenuity and political will. One of the first challenges is the establishment of credible baseline data on existing mine contamination and setting priorities for clearance on the basis of greatest humanitarian need.

Mine clearance has undergone a revolution in both theory and practice over the past few years. There has been a shift from a numbers-based model of mine clearance to a more community-oriented, impact-based model. Success in older mine clearance programs was often measured by the number of mines detected and destroyed rather than by the amount of productive land cleared or related reductions in the social and economic impact of mines on communities.

Newer approaches use community consultation and impact surveys to locate both high risk and high priority areas, such as roads, fields and sources of water and wood that must be cleared first. In some instances “area reduction” techniques, such as using specially trained mine detection dogs, have dramatically increased the speed with which significant amounts of land can be returned to productive use.



John Rosted

Success in demining must be measured in terms of land returned to productive use.



Nic Dunlop/FAT



Carol Hart/CIDA

Unfortunately, a lack of comparable data makes it difficult to provide a detailed portrait of global progress in demining. But available figures leave room for optimism:

- In Afghanistan, approximately 64% of mined residential areas and irrigation systems and 33% of all mined roads were cleared between 1993 and 1998. Approximately 93% of cleared land is under productive use.
- In Cambodia, 23% of suspect land has been cleared or declared mine-free.
- In Croatia, 50% of all mined roads, infrastructure and inhabited areas have been cleared in spite of the fact that only 5% of suspect areas have been demined.
- In Mozambique, approximately 7400 kilometres of road have been made safe for productive use after being cleared of mines.
- In Nicaragua, almost 40% of suspected mines were removed in only four years of intensive operations.

Canada's contributions to land clearance are extensive and encompass the entire range of activities necessary to create the right pre-

conditions for demining: building local capacity; supporting survey and mapping work; providing protective gear and technical advice; providing mine detection dogs and other detective equipment; and engaging in research on, and testing and marketing of, new technologies for humanitarian mine clearance.

Bosnia and Herzegovina

Part of the legacy of the disintegration of Yugoslavia is severe landmine infestation in Bosnia and Herzegovina. There are an estimated 30,000 minefields and a total of approximately 750,000 to 1 million mines in the ground according to the Bosnia-Herzegovina Mine Action Centre (BHMIC). To respond to this humanitarian crisis, Canada has earmarked \$10 million in assistance over a five-year period.

Bosnia has a significant indigenous capacity for mine action. Approximately 650 civilian deminers are trained in humanitarian mine clearance. In addition, the armies of the former warring factions (entity armed forces) have approximately 500 deminers in their

Canadian support is helping to build local capacity in demining prime land such as this in Bosnia.

Simply by co-financing insurance costs, Canada and Norway effectively doubled the number of deminers deployed in Bosnia and Herzegovina.

ranks, and have signed a memorandum of understanding with the BHMIC to undertake humanitarian mine clearance operations to UN standards in areas designated as priority land by BHMIC.

The presence of numerous international civilian and military organizations, including the UN Stabilisation Force (SFOR), the ICRC, various UN agencies, the Office of the High Representative, key international mine action NGOs and the World Bank, offers further support for mine action.

Canada's program for the fiscal year 1998-99 focussed on two key elements: institution building and humanitarian mine clearance. Though it is impossible to estimate the amount of land that will be cleared as a result of this program, Canada is increasing the number of deminers by 450 through co-financing (with Norway) of the SFOR-Entity Armed Forces (EAF) insurance scheme and is supporting many mine clearance teams through NGOs. A victim assistance component will become an integral part of the program later in 1999.

In addition to a \$500,000 contribution to build capacity in the indigenous civilian and military Mine Action Centres, Canada provided the following support to demining operations in the region:

- \$800,000 for the SFOR-EAF demining program. These funds went towards the purchase of brush-cutting equipment and insurance for deminers. Canadian-Norwegian co-financing of this insurance doubled the number of deminers involved in clearing land. (Implementing agency: UNDP)

- \$450,000 in support of the demining operations of the Bosnian NGO Akcija Protiv Mina (Implementing agency: Handicap International)
- \$460,000 for demining operations in the Sarajevo Canton. Areas returned to civilian use this year included the Sarajevo Cemetery. (Implementing agency: Norwegian People's Aid)
- \$110,000 to train and deploy mine detection dogs. (Implementing agency: Canadian International Demining Centre)
- \$150,000 to provide five Canadian Forces technical advisors to BHMIC.

In November 1998, Canada also announced a commitment of \$1 million to the Slovenian Trust Fund for Demining and Victim Assistance in the region. This contribution will be made in the fiscal year 1999/2000.

Cambodia

Cambodia easily ranks as one of the most mine-infested states in the world, with an estimated 4 to 6 million landmines left in the wake of 30 years of international and civil conflict. Cambodia is now an extremely poor country and reliant on international aid as it tries to stabilize its economy and deal with the legacy of conflict. To respond to the landmine problem in Cambodia, DND, CIDA, and DFAIT officials sent a mission to Cambodia in May 1998 and have developed a multi-year mine action program based on its findings.

The broad objectives of this funding program are to provide humanitarian demining assistance; increase access to cleared land; strengthen Cambodia's growing indigenous capacity for mine action; and help re-educate victims of landmine accidents. In 1998-99 this program allocated \$100,000 to provide management training for managers and sen-

Carol Hart/CIDA



Handicap international and Akcija Protiv Mina deminers inspect AP mine typical of those which litter post-conflict Bosnia.



DFAIT

ior officials of the Cambodian Mine Action Centre (CMAC). This training was provided by DND in Cambodia and Canada.

Canada also supports CMAC through the provision of technical advisors. A total of \$500,000 went through the auspices of the United Nations Development Program (UNDP) Trust Fund to cover the cost of posting seven Canadian Forces personnel in Cambodia in an advisory capacity. These seven advisors will remain in Cambodia through 1999/2000. The level of support is expected to drop to five CF personnel in 2000/2002.

Mozambique

More than 30 years of civil war have left an estimated 250,000 to 500,000 anti-personnel mines in Mozambican soil. With the end of conflict in 1992, mine clearance became a priority. However, Mozambique's limited financial resources were over-burdened by the need to provide substantial victim assistance and by the paucity of arable land available for agriculture. The dire situation of Mozambique made it a priority for funding assistance from the Canadian Landmine Fund.

A study by the UN determined that one of the main reasons for Mozambique's slow

Canadian Forces technical advisors to the Cambodia Mine Action Centre receiving UN Special Services award.

Mozambican trainees attend session in preparation for carrying out a level one survey. This project, implemented by the Canadian International Demining Centre, will provide essential information for land clearance while building indigenous mine action capacity.



David Horton/CIDC



SVO

Med-Eng protective demining gear at work in Peru. Similar suits were purchased by Canada for use in Yemen and Jordan.

Canada is also providing technical assistance to the United Nations Development Program's Accelerated Demining Program (UNDP/ADP). Three DND technical advisors are helping to build local capacity through survey and database training of indigenous staff. A total of \$275,000 was disbursed to the UNDP/ADP to purchase equipment. The training component of Canada's contribution is particularly critical to ensuring long-term sustainability of the mine action program.

Peru-Ecuador

A commitment to mine clearance along a disputed border between Peru and

progress in demining was the lack of a sound level one national survey to help it set priorities for national mine action. To address this need, CIDA is funding a five-year, \$10.46 million Integrated Country Program in Mozambique which will provide a national level one survey, survey equipment and geospatial mapping. An assessment mission completed in September 1998 confirmed the need for a program encompassing a full range of training and institutional and technical support, as well as the core survey and mapping work.

In fiscal year 1998-99, CIDA allocated \$425,000 for the Mozambique mine action program. The Sydney, Nova Scotia-based Canadian International Demining Centre (CIDC) was contracted to carry out the level one survey and deployment began in March, 1998.

Ecuador is one of the cornerstones of a series of peace agreements signed between the former adversaries in October 1998. Canada and the Organization of American States (OAS) are eager to assist these efforts to permit demarcation of agreed-upon boundaries as a way of encouraging stability in the region.

Peru and Ecuador each received \$50,000 to support Phase I of a demining plan for their shared border. This money was used to purchase demining protective gear produced in Canada by Med-Eng Systems. Canada continues to work through the OAS to support the implementation of a Phase II plan for border mine clearance, and in the spring of 1999, contributed \$300,000 in seed money to a newly-created OAS trust fund dedicated to raising funds within this hemisphere to clear mines along the Peru-Ecuador border.

Nicaragua

In the wake of Hurricane Mitch last November, Nicaragua saw years of painstaking work in clearing landmines washed away as flooding and mudslides displaced previously located and marked minefields.

Canada contributed \$100,000 to enable the OAS to conduct the first assessment of Mitch's impact on landmine clearance work. This funding also contributed to replacing essential surveying and demining equipment lost during the disaster.

To address the broader demining needs along the Nicaragua-Honduras border, Canada announced a two-year contribution of \$1 million. Norway is also contributing \$1 million to the project, which is being managed by the OAS. Canadian funding for this work is being released over two years from 1999 to 2001.

Jordan

In response to Jordan's decision to sign the Ottawa Convention, Israel, Jordan, Canada and Norway agreed to implement a four-party mine action assistance program. Canada participated in a joint exploratory mission in July 1998 and provided \$285,000 in equipment and training for the project.

Canada is contributing to renewed mapping and demining work in Nicaragua, essential in the aftermath of Hurricane Mitch.

Yemen

To assist in Yemen's demining efforts, CIDA released \$1.5 million to the UN Mine Action Service (UNMAS). This funding enabled UNMAS to carry out a national level one survey. The results of this survey are helping Yemen set national priorities for land clearance. DFAIT's Mine Ban Initiatives Program (MBIP) also provided Yemen with \$107,000 to procure demining protective gear. The Canadian NGO ADRA/Canada is the agency purchasing the equipment.

Chad

In Chad, our contribution of \$100,000 to the newly-established Mine Action Centre provided database equipment and the staff to operate it. This will permit Chad to conduct a national level one survey of its mine problem, develop maps and set priorities for mine clearance.

Croatia

Canada's contribution of \$100,000 to the Croatian Mine Action Centre will assist in the important task of quality control, ensuring that cleared land meets the UN humanitarian demining standard of 99.6%. Specially trained dogs are used in mine detection in Croatia, and Canada's support will be used to maintain dogs and handlers.



Demining research and development



The Canadian Centre for Mine Action Technologies

Since World War II, most research into demining technology has been aimed at expanding the speed and effectiveness of military mine clearance. Military forces aim to clear safe passage for the transport of troops and heavy military equipment through minefields. However military demining technology has not always been effective in humanitarian demining because the latter requires clearance of much larger areas and clearance rates approaching 100%.

To expand research and development of humanitarian demining technology, in 1998 Canada created the Canadian Centre for Mine Action Technologies (CCMAT), now located at the Defence Research Establishment Suffield (DRES) in Alberta. This initiative pairs the military expertise and facilities of the Department of National Defence (DND) with Industry Canada's (IC) ability to engage Canadian industry's entrepreneurship and innovation.

The Centre's proximity to DRES provides access to sophisticated test-and-evaluation facilities on the Experimental Proving Ground at Suffield and capitalizes on the research establishment's internationally recognized program in military countermine research and development.

Industry Canada has the lead in commercializing and marketing existing Canadian technologies. Through the involvement of IC's Technology Partnerships Canada Program, companies with promising new technologies for humanitarian demining may obtain assistance to bring their products to market.

CCMAT's mandate is to help make humanitarian mine clearance technology faster, cheaper and more effective. To implement this mandate, the Centre will focus on the following core activities:

- Conducting research and development (R & D)
- Adapting military equipment
- Acquiring and disseminating technical information
- Performing tests and evaluations
- Investigating alternatives to anti-personnel landmine capabilities
- Commercializing appropriate technologies

Total spending for CCMAT start-up and operation in the first year of the Landmine Fund was \$1.1 million with the following work being carried out in the areas outlined above:

Research and development

A scoping study was undertaken this year to provide a blueprint for the Centre's research and development program. The report reviewed the spectrum of applicable technologies and recommended that research focus on finding more effective methods for detecting and neutralizing mines and providing protection for deminers. Projects include:

- acquisition of technology for the study of

tissue injury from mine blasts. It is anticipated that this technology will be installed, and preliminary testing of mine blast effects will be completed, by the end of next fiscal year.

- development of a series of surrogate mechanical mines which can be used to evaluate mechanical devices – such as flails – for preconditioning ground and destroying mines in older, overgrown minefields.
- development of plans for a trial of an instrumented mine prodder at the Cambodian Mine Action Centre.
- testing of a prototype foot protection system being developed by a Canadian company.
- development of plans to test a new explosive technique for neutralizing landmines. This new technique would increase safety in the transport of neutralizing materials, as it may be assembled in the field from two precursor substances which are non-explosive until combined.
- participation in a major international trial of hand-held detection systems. Over the course of the trial, approxi-

mately 25 metal detection systems are expected to be evaluated.

Adapting military equipment

Through its association with DRES, the Centre will investigate the possibility of transferring military mine clearance technology to civilian use. One example is an instrumented mine prodder that uses signal processing to distinguish between plastics, metals and rocks. The concept for the device originated at DRES and is now being developed commercially by Canadian industry.

Acquiring and disseminating technical information

This function will be carried out, in large part, through the Information Forum established by Canada and the European Commission. The Forum welcomes countries with an ongoing R & D program and will create an electronic journal of mine action technology. The Director of CCMAT will be a co-editor of the journal. Other avenues for information exchange include technical workshops and symposia.

To engage Canadian industry in the demining challenge and inform potential applicants of CCMAT's mandate and available resources, the Centre ran a workshop involving more than 70 industry, government and demining participants. This resulted in the submission of more than 30 proposals which are now being assessed.

CCMAT is investigating technologies to make humanitarian mine action faster, safer, cheaper and more effective.

CCMAT contributes to the field testing of technologies with the potential to improve current practices in demining. This new prodder underwent testing in Cambodia.



CCMAT



Performing tests and evaluations

The unique facilities available through DRES permit Canada to be an active participant in the International Test and Evaluation Program which is aimed at providing global standardized testing of new demining technologies. CCMAT uses these test facilities in its role as an assessment agency. A comprehensive evaluation by CCMAT helps Industry Canada commercialize and market demining technology.

Investigating alternatives to anti-personnel mine capabilities

Objections by some states to adopting the AP Mine Ban Convention on the grounds that these weapons are a useful and cost-effective military option remain one of the most serious obstacles to the universalization of the treaty. That is why Canada is committed to investigating alternatives. It is hoped that credible research into the impacts of removing these weapons systems from military force structures will have a positive influence on hold-out states.

In this context, an operational research

study of the role of the AP mine in warfare is underway. This study will determine the impact of removing AP mines from land force operations, and investigate what, if any, replacement technologies are necessary. Once the study is completed, CCMAT will investigate alternatives that provide the security advantages of landmines without leaving their deadly legacy.

Commercialization

Within CCMAT, Industry Canada is helping commercialize appropriate technologies and innovations for humanitarian demining and victim assistance. One technology being advanced is a brush cutter which may significantly increase the effectiveness of demining operations.

To inform Canadian companies of the assistance available to them, Industry Canada has developed a Web site listing the opportunities for commercialization of current products. Through *Strategis*, Industry Canada's flagship Internet tool for business information, companies are encouraged to register themselves and their products with the on-line directory.

Right: This structure measures the blast effects of charge sizes up to 2 kg.



Below: This blast tube is used in evaluating protective equipment and investigating blast effects on the human body, using dummies. Explosive force of up to 100 pounds-per-square-inch can be simulated in the tube.



Assisting victims and their communities

A recent British Medical Journal study reported that in four of the most mine-infested countries (Afghanistan, Bosnia, Cambodia and Mozambique) an average of one household in 20 included a landmine victim. One in 10 of the 2100 landmine victims encountered by the medical researchers was a child. The researchers also found that households with landmine victims were 40% more likely to have difficulty providing food for the family. Statistics like these, and the poignant stories of personal tragedy that accompany them, have made victim assistance one of Canada's most urgent mine action priorities.

The needs of landmine survivors are much more than physical: Integrated programs must also address the economic, social and psychological impacts of trauma and loss of limbs and sensory abilities.

Globally, the nature of mine victim assistance is undergoing dramatic changes similar to those seen in mine clearance. In the past, victim assistance was largely limited to acute care and fitting prostheses. The psychological, social and employment needs of mine victims were rarely addressed and victims often faced social marginalization.

The mine action community is now recognizing that victim assistance has to meet a mine victim's broader needs, encompassing all aspects from initial emergency treatment to long-term social and economic rehabilitation. Many victim assistance programs are now offering employment opportunities to victims, often in the area of prostheses production and victim rehabilitation.

Measuring progress in delivering assistance to mine victims is difficult, since many donors and implementing agencies are reluctant to single out mine victims for support in countries with many other victims of war and disease. But we can point to some significant steps forward in this area:

- Since 1995, Mozambique has added three more orthotic centres to the six already in existence. Two more are planned for the near future.
- In Bosnia, 38 clinics have been set up as part of the World Bank War Rehabilitation Project Victims Fund, providing a full range of services to landmine victims.
- In 1998, Jordan introduced a Bill of Rights



John Rodsted

for Landmine Survivors which recognizes a victim's right to comprehensive rehabilitation, education, employment and social support.

Canada's efforts in this area support the full range of survivor needs, from initial treatment to long term care and rehabilitation. Many of Canada's contributions to victim assistance in 1998-99 were funded through CIDA's Tapping Canadian Creativity Program (TCCP), which supports partnerships between Canadian and overseas NGOs delivering projects adapted to local needs.

Afghanistan

Continuous conflict since the mid 1970s has left Afghanistan one of the countries most seriously affected by mines. No precise number

can be placed on the extent of contamination because the use of landmines has been so pervasive and indiscriminate. Estimates range from 5 to 10 million implanted mines, with devastating effects on a society already exhausted by years of strife. Mine incidents are extremely common, involving one adult male in 10.

In 1998-99 CIDA responded by funding two initiatives in Afghanistan that focus on victim assistance. A total of \$108,000 was allocated to support national capacity for victim assistance through a program implemented by the Afghan agency, Comprehensive Disabled Afghans Program (CDAP). This program trains field workers in basic rehabilitation skills and supports community-based management of the program. This funding will also assist in the socio-economic integration of vulnerable groups and support advocacy for the rights of the disabled.

Another CIDA-funded victim assistance project in Afghanistan provided \$92,000 for the Afghan non-governmental Guardian Institute of Orthopaedics in Kandahar. This new program aims to provide the disabled with orthopaedic appliances and prostheses, walking aids and wheel chairs. It also seeks to ensure proper physiotherapy for mine victims.

As in most CIDA projects, developing indigenous capacity is important. It is provided here by training technicians in prostheses, orthotics and language skills and through development of a female orthopaedic section that advances self-reliance of female technicians. Finally, the project seeks to establish a referral system in the Kandahar area since many mine victims do not receive help because they are not aware it is available.

With support from the Canadian Landmine Fund, World Vision is helping the landmine-disabled acquire new skills and means of income through the Vocational Skills Training Centre in Battambang, Cambodia. Students are taught welding along with radio, television and motorcycle engine repair. Program graduates may also apply for low-interest credit to set up businesses.



Cambodia

In 1998, the Cambodia Mine Incident Report, which pools data from UNICEF, the Red Cross and NGOs working in the region, reported 1249 confirmed new landmine casualties. Most directly affected are those living along the Thai-Cambodian border. With limited land available for resettlement of those displaced by conflict, there is extreme pressure to utilize all available land, even in regions heavily contaminated by landmines and other explosives.

Through TCCP, CIDA is supporting two projects to assist Cambodian landmine survivors, both currently in start-up mode. World Vision Canada received \$250,000 to work with local partners to expand vocational rehabilitation options in rural communities, with a particular focus on women survivors. The project also supports a vocational rehabilitation training centre to help victims develop the technical skills they need to find a new livelihood.

The Council of Canadians with Disabilities (CCD) received \$90,000 for a project aimed at developing locally-based peer counselling programs to support reintegration of landmine survivors into the community. This funding will also contribute to the development of legislative guidelines covering disabled access to public buildings and programs in Cambodia.

Central America

In an effort to support the peace process in Central America and aid in post-conflict reconstruction, the Canadian government worked with Mexico and the Pan American Health Organization (PAHO) to develop a program of landmine victim assistance for Nicaragua, Honduras and El Salvador. CIDA has allocated \$3.5 million over five years for this project, of which \$500,000 was disbursed in 1998-99. The program will help build sustainable, indigenous, rural rehabilitation services and aid prosthetic/orthotic development in regional centres. It will also develop a socio-economic reintegration program for victims.

In 1998-99, negotiations between Canada,



Kol Ly, 17, lost one of her legs in a landmine accident in 1995 while collecting firewood near her home. Through a World Vision program now supported by the Canadian Landmine Fund, Kol Ly received a prosthetic leg, rehabilitation therapy, sewing skills training, and a small business loan. She now makes and sells clothing to local people.

Phillip Mahner/World Vision Canada

Mexico and PAHO resulted in an agreement to ensure field coordination of the program which will include using the services of the Queen's University International Centre for Advanced Community-Based Rehabilitation (ICACBR) as the Canadian implementing agency. The effects of Hurricane Mitch delayed the start of this project, however, project planning did begin in January 1999.

To aid the peace-building process in Guatemala, Canada and Israel have undertaken an initiative that will focus on community rehabilitation of landmine victims. Canada is providing support, mainly for victims' physical and social needs, through the Canadian implementing agency, Queen's University's ICACBR. The Israeli partner, the Development Study Centre, is focussing primarily on economic and vocational rehabilitation of the disabled. A joint assessment mission to the region in

December 1998 led to the approval of a \$400,000 Canadian contribution towards a two-year project, which will begin in fiscal year 1999/2000. In addition, Canada provided \$100,000 in start-up funding in 1998-99. Israel will be providing matching funds for this initiative, and members of the Israeli community in Canada are also considering support for the project.

Through CIDA's Tapping Canadian Creativity Program (TCCP), Canada is supporting victim assistance in El Salvador and Nicaragua. A total of \$200,000 was provided to the Sierra Club of British Columbia for a project in El Salvador which combines vocational training for landmine survivors with the production of sustainable energy technologies. New Brunswick's Fallsbrook Centre was awarded \$106,000 to work with communities in the east and west Rio Coco region of Nicaragua on a combined mine awareness-victim assistance project. Landmine survivors will be trained in solar electrification so that they can manage the distribution and maintenance of village-level solar energy systems.

These rudimentary wheelchairs built from locally available materials were produced at a workshop in Nampula province, Mozambique. CIDA and the Canadian Auto Workers are providing matching funds for upgrades to this workshop and to rehabilitation services for victims.

Mozambique

Through TCCP, CIDA is also funding an innovative, integrated project in Mozambique developed by the Canadian Auto Workers (CAW) in partnership with CUSO, Handicap International (HI) and COCAMO (Co-operation Canada-Mozambique). The CAW contributed \$200,000 toward this program in 1998-99 and this funding was matched by an equal contribution from CIDA. The victim assistance component of this project includes support to transit centres in Nampula and Inhambane provinces which provide prostheses and on-going support for survivors.

Uganda

Through TCCP, CIDA provided \$125,000 in support for a landmine survivors' health care program being implemented by the Canadian Network for International Surgery. This initiative aims to expand information on the health consequences of landmines at the hospital and community level through development of a database for program planning.

Yemen

Two victim assistance projects focussed on rehabilitation in Yemen are also being supported through the TCCP. ADRA Canada received \$150,000 to provide community-based rehabilitation services to the severely disabled. The project also aims to provide vocational assistance so that landmine survivors and their families can earn an income.

The Canadian NGO Alternatives received \$100,000 towards a combined mine awareness, victim assistance and rehabilitation project working in cooperation with local NGO partners and the National Mine Awareness Committee.



Carol Phillips/CAW

Creating mine awareness

Mine awareness programs are critical to preventing new landmine accidents.

In the past, progress in this area was measured by the number of people reached by mine awareness programs rather than by the degree to which behaviours changed. Experts have begun to recognize that some groups will continue to take risks simply because they have no other choice than to seek water, food or fuel in mined areas.

UNICEF is attempting to address some of these problems by developing and disseminating new guidelines for mine awareness training. Mine awareness programming has begun to move beyond the old lecture-style presentations and literature that often lacked sensitivity to culture, age and literacy levels. New mine awareness programs display more creativity and sensitivity to community needs and context. Today's mine awareness educators often rely on popular education techniques such as mime, story telling, music, comic books and even soap operas to get the message out.

Messages must be visual and direct to convey the dangers to those most vulnerable.



This Mozambican troupe uses popular theatre techniques to deliver a mine awareness message at the village level.

Mine awareness was a component of several integrated programs funded by Canada this year, including the CIDA-CAW co-funded mine action program in Mozambique and other projects funded through CIDA's Tapping Canadian Creativity Program (TCCP). TCCP provided \$250,000 for mine awareness in Laos and the same amount for Angola through UNICEF Canada. The Mines Advisory Group received \$46,400 for teacher-training and child-to-child mine awareness training in Iraq.

CIDA also provided \$300,000 for a radio

education initiative for children in Afghanistan that raises awareness of the dangers of land-mines. Surveys done in Afghanistan have demonstrated the enormous reach and effectiveness of radio in reaching isolated segments of the population such as women and children, who may be excluded from more formal training sessions. The European Union is co-funding this initiative, delivered through the International Centre for Humanitarian Reporting.



Carol Phillips/CAW

Improving mine action information

One of the greatest challenges to improving the efficiency and effectiveness of mine action programs is the lack of reliable information on the nature of the landmine problem. Over the past two years significant improvements in the quality and quantity of this information have prompted a shift away from focussing on the number of mines in an area to addressing the social and economic impact of the mines. This conceptual shift - and the new information it is generating - are enabling a growing number of national and international mine action institutions to plan and program in a more coordinated, purposeful and systematic way.



At the global level, the United Nations system has transformed its approach to mine action over the past 18 months. Today the UN Mine Action Service (UNMAS) acts as the focal point within the UN system for all mine-related activities and works closely with organizations such as, the United Nations Development Program (UNDP), the United Nations Office for Project Services (UNOPS), UNICEF, the United Nations High Commissioner for Refugees, the World Food Program, the World Health Organization and the Department of Disarmament Affairs to support specific mine action initiatives and programs. UNMAS also coordinates the collection, analysis and dissemination of mine action information and has taken the lead in working with members of the New York-based Mine Action Support Group to improve donor coordination.

Another significant global development has been the emergence of the Survey Contact Group - an NGO coalition working with UNMAS and key donors to facilitate the implementation of national level one surveys aimed at producing high quality, standardized data on the socio-economic impact of AP mines. Since 1997, level one surveys and/or in-depth assess-

ments have commenced or been completed in Bosnia, Cambodia, Chad, Jordan, Lebanon, Mozambique, Thailand and Yemen.

To enhance the coordination of global mine action, DFAIT granted a one-time contribution of \$500,000 to UNMAS in 1998-99. This funding will help to ensure global resources are used effectively and efficiently.

Canada also developed the Multilateral Institutions Program to support mine action initiatives undertaken by multilateral agencies such as the UN and ICRC. This program will fund a total of \$10.5 million of initiatives over five years and this year disbursed just over \$2.8 million through these international bodies, including \$1.5 million for the national level one survey in Yemen described above; a further \$205,000 directed to the UNDP Trust Fund for Laos; \$500,000 to the UNDP Trust Fund for Cambodia; \$300,000 to the OAS Trust Fund for demining along the Peru-Ecuador border; and a \$300,000 contribution to mine awareness training in Afghanistan.

As well, much of Canada's work in Mozambique consists of a multi-year program to improve the information on that country's mine situation by supporting a national level

Improved information on the mine problem is critical to the efficient and effective use of limited mine action resources.

one survey and geo-spatial mapping and providing survey equipment.

In southern Africa, the International Development Research Centre is building regional research capacity on mine action with \$95,000 in funding from Canada.

Globally, additional high-quality mine action information will be provided by the Landmine Monitor initiative, a civil society-based global reporting network which monitors the implementation of the AP Mine Ban Convention as well as progress in mine action generally. Canada supports Landmine Monitor through its Mine Monitoring Program, as described above.

Improvements in mine action information

also stem from the rapid growth in the number of mine action institutions dedicated to the management of national mine action activities. As of May 1999, there were Mine Action Centres (MACs) in Afghanistan, Bosnia, Cambodia, Croatia, Somalia and Thailand. There are a further 11 significant national demining programs in Angola, Azerbaijan, Chad, Guatemala, Jordan, Laos, Lebanon, Mozambique, Namibia, Nicaragua and Yemen. In 1998-99, Canada provided core-funding to the Bosnia-Herzegovina Mine Action Centre, funding for management training and technical advisors at the Cambodia Mine Action Centre, and support for a level one survey by Chad's national demining centre.



UNMAS



The Mine Action Investments database, to be Internet accessible in late 1999, is the result of collaboration between Canada and UNMAS to improve information sharing on mine action donor activities. This database will assist UNMAS in its important coordination role and provide fast and public access to mine action information.

Sustaining the Canadian effort

As the struggle shifts from the achievement of a comprehensive ban on landmines to universalizing and implementing the ban, efforts to maintain public support and momentum remain crucial. To promote domestic and international public awareness of the landmines issue and to encourage long-term sustainable funding, DFAIT developed the Outreach and Sustainability Program (OSP).

In 1998-99, this program spent \$937,000 to support the development of innovative outreach tools and programming, and fundraising efforts among individuals, the private sector and NGOs.

The outreach tools included several audio-visual products, among them a CD ROM entitled Ban Landmines which has won a number of awards for multimedia excellence in both Canada and the United States. Over 10,000 copies of this CD have been distributed to schools and public libraries across Canada,

while approximately 1000 copies have been sent to diplomatic missions and NGOs for use internationally.

An award-winning broadcast documentary, *One Step at a Time*, was also developed with funding from OSP. This program, available in Spanish, English, French and Russian, has been broadcast in 26 countries. A shorter video format version, *In Years Not Decades*, has been distributed in French, English and Arabic. At year end, plans were underway for its translation into Portuguese for distribution at the First Meeting of States Parties in Mozambique.

Both the video and CD ROM feature in an interactive exhibit on landmines which has

This interactive display has helped to raise public awareness of the landmine issue in cities across Canada.

DFAIT





Youth Mine Action Ambassadors are actively engaging young Canadians in the global movement to end the use of AP mines.

Dennis Dreaver/DFAIT

travelled across the country from Penticton, British Columbia to St. John, New Brunswick.

OSP also funded the redesign and re-launch of DFAT's landmines web site "Safelane" to update its contents and improve its visual appeal and navigability. The Outreach Program produces a quarterly landmine ban update in magazine format, also entitled *Safelane*, which is distributed domestically and internationally to NGOs, parliamentarians, diplomatic missions and the general public. This annual report to Parliament on Canada's mine action activities also falls within the mandate of the OSP.

Another Canadian innovation launched under the OSP is the Youth Mine Action Ambassador Program (YMAAP), an initiative which draws upon the talents and energies of recent university graduates to educate and mobilize other Canadian youth. This year, five Ambassadors were engaged under the Youth International Internship Program and worked from the offices of non-governmental hosts in

Barbara Klunder/Joss MacLennan for DFAT

Dance without Fear is a nation wide event that involves youth in raising awareness and funds for the Canadian Landmine Action Fund.





Print and multimedia information on landmines and the ban available through DFAIT.

five Canadian cities: St. John, Montreal, Ottawa, Winnipeg and Vancouver.

This program was launched by DFAIT in September 1998 and is steered jointly with our partners in Mines Action Canada and the Canadian Red Cross. Through this program, thousands of young Canadians have learned about the landmines crisis in school and community presentations by the Ambassadors; hundreds have taken active part in mobilization events such as Landmine Awareness days and a fundraising event called "Dance without Fear". This spring, interested teens were invited to deepen their knowledge and commitment by taking part in regional youth conferences held in May 1999. The reach of the YMAAP has been extended by radio, television and press coverage of their activities.

To promote sustainable funding for mine action, DFAIT worked with Mines Action Canada to establish the Canadian Landmine Action Fund. This fund was launched by Minister Axworthy in September 1998 as an opportunity for Canadian businesses and individuals to make charitable contributions to mine clearance and victim assistance initiatives.



1998-1999 Canadian Landmine Fund Spending Summaries



Departmental expenditures by program

TABLE 1	Spent fiscal year 1998-99 (000s)
Department /program	
DFAIT	
Mine Action Partnership	761
Mine Ban Initiatives	1808
Multilateral Coordination	500
Mine Monitoring	469
Mine Action Research, Training and Policy Development	207
Outreach and Sustainability	937
Stockpile Destruction	72
Policy Support Unit	884
Total DFAIT	5638
CIDA	
Integrated Country Program – Mozambique	425
Integrated Country Program – Bosnia and Herzegovina	2470
Tapping Canadian Creativity	2000
Country Initiatives – Asia	600
Integrated Country Program – Americas	500
Multilateral Institutions Program	2805
Support Unit	200
Total CIDA	9000
DND	
Stockpile Destruction	100
Canadian Centre for Mine Action Technologies	1063
Total DND	1163
Industry Canada (Canadian Centre for Mine Action Technologies)	38
Total Industry Canada	38
TOTAL	15,839

Investments in banning landmines

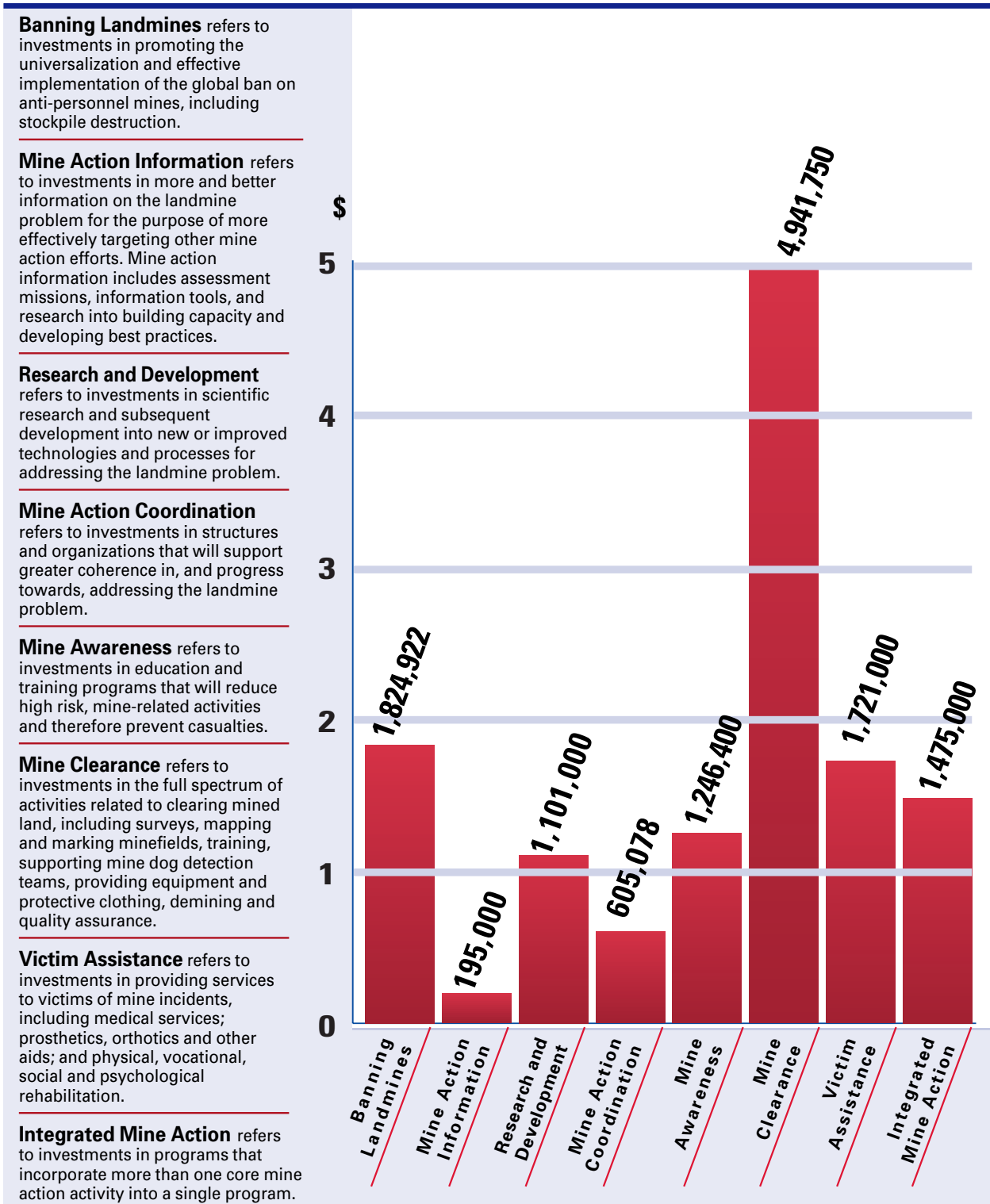
TABLE 2

This table details expenditures made by the Government of Canada in 1998-99 in support of universalization and implementation of the global ban on anti-personnel mines. These expenditures have been broken down according to:

- A** country-specific campaign support;
- B** support for the global campaign;
- C** support for regional campaign conferences; and
- D** support for stockpile destruction efforts.

A Investments in support of country-specific campaigns to ban landmines	Total spending fiscal 1998-99
Georgia	\$ 46,000
Nepal	\$ 14,000
Russia	\$ 62,129
Ukraine	\$ 51,204
Yugoslavia	\$ 20,229
B Investments in support of global efforts to ban landmines	
International Campaign to Ban Landmines	\$ 885,521
Mines Action Canada	\$ 300,000
C Investments in support of regional campaign conferences	\$ 273,839
Amman (Jordan); Bangkok (Thailand); Beirut (Lebanon); India (various locations); Mexico City (Mexico); Moscow (Russia); Oagadougoo (Burkina Faso)	
D Investments in stockpile destruction	\$ 172,000
Total investments in banning landmines	\$ 1,824,922

1998-99 Investments by thematic area of mine action



1998-99 Mine action spending by country/region

This map shows country-specific or, in the cases of Central America and Southern Africa, region-specific total expenditures made by the Government of Canada in 1998-99 on mine action information, mine awareness, land clearance, victim assistance and integrated programming. Global expenditures on banning landmines are detailed in table 2.

