Bringing It All Together
Mine action is an international relief mechanism that responds to the changed nature of warfare, specifically the increase in unconventional warfare that involves NSAs, terrorists, insurgents and partisans. The threat landmines pose to civilians increased dramatically with the shift away from conventional warfare. Mine action will continue to evolve as warfare changes and as the international community learns new and better ways to meet post-conflict reconstruction needs.

Mine action is a relatively new field within the broader context of relief and development. While traditional humanitarian assistance activities have developed over the course of the second half of the twentieth century, humanitarian mine action (or humanitarian demining, as it was first called) came into existence only in the late 1980s in Afghanistan and Cambodia.

The recent effort to support coordinated mine action programs across countries and organizations is one of the most heartening aspects of this global undertaking. The NGOs, military units and commercial companies that have operated in numerous countries have often served as "learning catalysts," allowing for the rapid diffusion of lessons learned and best practices. Four distinct trends highlight this development: demining technology, establishing effective national programs, social development, and program coordination and integration.

How does demining technology figure into the mine action equation?

There has been a great deal of progress made in developing a comprehensive "toolbox" of mine clearance methodologies that serves to accelerate overall clearance rates by means of area reduction (declaring areas "safe") or of preparing an area for clearance operations.

Since the exact location of a mined area is seldom known, prudent deminers often begin clearing the total suspected area. The use of machines, brush-cutters and MDDs can quickly delineate the boundaries of a minefield and dramatically enhance total clearance productivity. In the future, we are expecting more and better tools to be added to this kit, including wide area detection systems and GPR. These items will not remove the need for a deminer and a detector, but they will serve to maximize the deminer's efficiency and further speed clearance rates.

Demining, however, still comes down to one person or team with a metal detector and a probe. While the mine detectors are of better quality and dependability today than 10 years ago, the threat and the environment demand the same kind of courage and skill. Uncovering and destroying mines remains a slow, tedious and dangerous process. It does not appear that there will be a major technological "silver bullet" breakthrough any time in the near future.

A mother remains with her two surviving children after a landmine accident claimed the lives of their siblings.
How are effective national programs established?

Today’s set of IMAS, recently established by a global team of experts working under the aegis of the UN and the GICHD, has defined and codified current best practices among the components of mine action. Because of this work, landmine clearance, MRE and survivor assistance efforts are being executed with greater precision, safety and effectiveness than they were just a few years ago.

The challenge for the future is to expand the rate of knowledge transfer to mine-affected countries. Greater emphasis needs to be placed on developing indigenous capacities to clear mines, repair equipment, create educational programs, institute training systems and manage comprehensive mine action campaigns. The number of technical advisers should decrease over time, as mine-affected countries acquire the skills and expertise to manage and execute their own programs. A key measure of future success will be the extent to which mine-affected countries assume ownership of their programs.

How is mine action a precursor to social development?

There is a growing recognition that restoring security and safety to war-torn societies is a vital role of successful post-conflict reconstruction. Similarly, in the future, mine action will be viewed less as a unique "stand-alone" effort. Instead, it will be incorporated into a range of post-conflict activities aimed at eliminating the effects of war on civilians and allowing for social development, the resettlement of displaced civilians, and the stimulation of local agriculture, commerce and education.

How have program integration and coordination affected mine action?

Recently, great strides have been made to overcome deficiencies that existed initially in humanitarian demining, such as competition for resources among mine clearance organizations and lack of information and coordination among organizations.

The Impact Survey process, feeding into the IMSMA, provides managers with the tools and the knowledge required to develop more structured country programs with clear strategic objectives and unified work plans. Program performance can now be measured in terms of land restored and communities rehabilitated, forming a vital link with a country’s overall development goals.

With rehabilitation programs and proper treatment, landmine survivors can return to their livelihoods.

A Nicaraguan soldier with a mine dog searching for mines.
Q. What is the potential for mine action in the future?

Mine action is more than the sum of its parts. It is a central component of any comprehensive response to post-conflict reconstruction and national reconciliation. The widespread presence of landmines is one of the factors that stand in the way of economic development, contributing instead to social instability and poverty. Future mine action efforts will be more responsive to the wider needs of war-ravaged countries, effectively planned and prioritized, and efficiently using resources to address the most pressing needs first.

This is an exciting and unique endeavor, altogether appropriate for a new millennium. To paraphrase Winston Churchill, "Rarely has there been the promise of so many diverse organizations doing so much for so many different people."

Q. What is needed for mine action programs to be successful?

Well-organized mine action centers, a diverse cast of players and adequate funding are the key elements for mine action success.

Mine Action Centers: Given the range of activities and the number of players involved in mine action, coordination is a prerequisite to the effective implementation of mine action programs in the field. The establishment of a Mine Action Center (MAC) or national landmine office is a central component of most mine action programs. MACs are normally initiated and developed under the authority of local and national governments. The United Nations typically assists by coordinating international support. This assistance is provided through the UNMAS, for programs developed in the context of peacekeeping operations or in response to immediate humanitarian needs, and through the United Nations Development Program (UNDP), for long-term capacity-building programs. As a part of their bilateral efforts to improve mine action in countries at risk, many donor countries and NGOs support and fund national or regional offices.

To be successful, MACs rely on two primary supports:

- The commitment of the national government to mine action
- The strength of the partnerships they build with international donors, operators, humanitarian agencies and the local communities.
Typical major MAC activities include:

• Managing and coordinating outreach and operation activities
• Conducting geographical surveys
• Conducting socio-medical surveys
• Prioritizing mine action projects in coordination with host-nation reconstruction and rehabilitation planning
• Coordinating mine/UXO clearance operations
• Conducting survivor assistance
• Conducting MRE
• Maintaining landmine-related information.

A Diverse Cast of Players: The number and diversity of organizations involved in mine action includes donor countries, NGOs, international organizations, military units, commercial firms and host-nation agencies. Unfortunately, they do not always coordinate and communicate.

Some countries (such as the United States) rely heavily on bilateral nation-to-nation support; others combine their energies with those of a region, such as the European Commission; and some rely on international or regional organizations to coordinate national mine action efforts.

Militaries, with their special training in countermine operations, often play key roles by developing training programs and offering valuable advisory assistance. NGOs such as Mines Advisory Group, HALO Trust and Norwegian People’s Aid have played a critical role. UNMAS and the Swiss government-sponsored GICHD offer international support and coordination, and focus on such issues as mine action standards and mine action information management.

Funding: A key problem for many mine action organizations is a lack of long-term funding commitments from donors. It often takes months and sometimes years for a successful mine action campaign to be completed. Donors understandably want to see results, but indicators of success are difficult to measure. Early attempts to measure effectiveness by ordnance destroyed or even area cleared have proven to be inadequate. Many donors have been reluctant to commit funds for extended operations. Nevertheless, many humanitarian organizations and agencies continue to work tirelessly to improve the quality of life in communities threatened by landmines. Great strides have been made and many successful operations have rendered hundreds of communities and countries mine safe.

Why is it important to talk of the landmine problem in terms of impact rather than numbers?

Nobody knows exactly how many landmines have been used or how many still remain in the ground as a threat to life and livelihood of civilian populations. What we do know, however, is that the threat of landmines denies people access to infrastructure, health care, schools, and agricultural land and impedes a nation’s progress in economic development. One landmine hidden in the playground of a school is enough to deny a class of students access to education.
A Call to Action

How can I get involved?

Now that you have read through this book, you are more informed about the challenges involved in mine action and are ready to respond to this “Call to Action.” Between 1992 and 2002, governments contributed over $1.7 billion to the cause of mine action and still it is clear that they alone cannot solve the pervasive and complex challenges presented by the landmine threat. After reading The Landmine Action Smart Book, you have probably come to realize that mine action is multifaceted; it is not just about removing landmines from the ground. But just as there are many challenges to be met, there are many ways to support landmine action; reading this book was the first step. The next step is to get involved.

There are a number of ways in which you can become involved with mine action issues. First and foremost, educating yourself and others about the issues is vital. Share this book with others. Take advantage of the educational resources that are available on the Internet through the MAIC, the US State Department and other sources. On the inside back cover of this publication, you will find a list of Web addresses that will help you discover the wealth of information available from a variety of sources. The Global Mine Action Registry (http://maic.jmu.edu/gmar/) will help you further identify potential partners in your endeavors. Organizations in the Registry are listed according to countries of operation and fields of activity. These resources will help you to answer the question “Whom should I contact?”

Getting involved does not have to involve traveling to far-flung locations. To get involved locally, try contacting and working with civic groups in your community to raise money or other contributions that are vitally needed. Devise or implement programs to raise awareness in your community and encourage others to become involved. Contact local, state or national leaders and express your concerns and ideas.

Get involved especially by educating young people; help start programs in your local schools, churches or neighborhoods. Educating our children about landmines and increasing their awareness about global problems is the key to building a society that cares and inspires citizens to take informed action on their own.

These are just a few of the many avenues that you may choose when deciding how to focus your energy and skills on the challenge of mine action. Whatever your course of action, we commend you for making the commitment to become informed and to get involved!
Glossary

Anti-Handling Device: A device intended to protect a mine that is part of, linked to, attached to or placed under the mine and that activates when an attempt is made to tamper with or otherwise intentionally disturb the mine.

Anti-Personnel Mine (APM/APL): A mine designed to be exploded by the presence, proximity or contact of a person that will incapacitate, injure or kill one or more persons.

Anti-Tank Mine (ATM/ATL): A mine designed to be exploded by the presence, proximity or contact of a vehicle, either wheeled or tracked, that will immobilize or destroy the vehicle, causing injury or death to the occupants. ATMs can be equipped with anti-handling devices to discourage their neutralization.

Anti-Tank Mine (ATM/ATL): A mine designed to be exploded by the presence, proximity or contact of a vehicle, either wheeled or tracked, that will immobilize or destroy the vehicle, causing injury or death to the occupants. ATMs can be equipped with anti-handling devices to discourage their neutralization.

Area Reduction: The act of defining and marking the extent of a mined area, usually undertaken as part of a Level 2 technical survey.

Base Line: The line that is used to initiate all demining operations, and the point from which all clearance lanes start. Also known as the start line.

Booby Trap: An explosive or non-explosive device deliberately placed to cause casualties when an apparently harmless object is disturbed or a normally safe act is performed.

Demining: The activities that lead to the removal of mine and UXO hazards, including technical survey, mapping, clearance, marking, post-clearance documentation, community mine action liaison and the handover of cleared land. Demining may be carried out by different types of organizations, such as NGOs, commercial companies, national mine action teams, or military units. Demining may be emergency-based, humanitarian or developmental.

Donor: Any government, individual, foundation or other philanthropic entity that provides funds and/or non-monetary resources for the specific purpose of alleviating the effects of the landmine problem.

Explosive Detecting Dogs (or Explosive Sensing Dogs): Dogs that are specifically trained to detect the vapors emitted by explosives contained in improvised explosive devices, mines and munitions. Some dogs can also be trained to detect tripwires and non-explosive booby traps. The dogs are normally referred to as explosive or mine detecting dogs (MDDs).

Explosive Ordnance: All munitions containing explosives, nuclear fission or fusion materials, or biological and chemical agents. This includes bombs and warheads; guided and ballistic missiles; artillery, mortar, rocket and small arms ammunition; all mines, torpedoes and depth charges; pyrotechnics; clusters and dispensers; cartridge and propellant-actuated devices; electro-explosive devices; clandestine and improvised explosive devices; and all similar or related items or components explosive in nature.

Explosive Ordnance Disposal (EOD): The detection, identification, removal and destruction of unexploded ordnance (UXO). EOD may be undertaken

a) As a routine part of mine clearance operations upon discovery of UXO.
b) To dispose of UXO discovered outside mined areas (this may be a single piece of UXO or a larger number of items located in a specific zone).
c) To dispose of explosive ordnance that has become hazardous through passage of time, by damage or unsuccessful destruction efforts.

Flail System: Vehicle-mounted devices typically composed of cylindrical drum structures housing a collection of chains on a horizontal bar that spins, beating the ground ahead of the vehicle to detonate anti-tank mines.

Internally Displaced Persons (IDPs): Persons who have been forced or obliged to leave or to flee their homes or places of habitual residence, in particular as a result of, or in order to avoid the effects of armed conflict, situations of generalized violence, violations of human rights, or natural or man-made disasters, and who have not crossed an internationally recognized state border.

Landmine: Any munition designed and manufactured to be detonated after it has been laid by the presence, proximity or contact of a person or vehicle.

Landmine: Any munition designed and manufactured to be detonated after it has been laid by the presence, proximity or contact of a person or vehicle.

Mine Action Center (MAC): Usually refers to a facility containing personnel who coordinate and assist the national mine action activities in a country.

Mine Awareness: A method of informing, teaching and relaying messages about landmines to the public. Mine awareness encompasses MRE, mine awareness training for peacekeepers, multimedia presentations, and what action to take when a mine or UXO is found. It is intended to modify behavior patterns to reduce casualties. One result of mine awareness activities is the increased flow of information back to MACs about mine and ordnance locations.

Mined Area: An area declared dangerous due to the presence or suspected presence of mines.

Minefield: In land warfare, an area of ground containing mines laid with or without a pattern.

Non-Governmental Organization (NGO): A organization consisting of private citizens that maintains a consultation status with the Economic and Social Council of the United Nations. NGOs may be professional associations, foundations, multinational businesses or simply groups with a common interest in humanitarian assistance activities (development and relief).

Orthotics: The science of using an orthotic device or orthosis (commonly known as a brace or splint) by applying it externally to the limb or body. The purpose can be to provide support, protection or replacement of lost function. Orthotic devices are utilized to eliminate abnormal gait motions and allow healing to occur.

Prosthesis: An artificial device used to replace a missing limb.

Render Safe Procedures (RSPs): The procedures that enable the neutralization and/or disarming of mines and munitions to occur in a recognized and safe manner.

Untapped Ordnance (UXO): A bomb, artillery or mortar round, mine or other explosive “device” that has the potential to detonate and cause casualties. It may have been fired, dropped or launched (or have been prepared for use), yet remains unexploded due to malfunction, design error or some other cause.
Endnotes

The Landmine Action Smart Book:

Survivor Assistance:
2 Definition used by the ICBL.
3 Landmine Monitor: Toward a Mine-Free World 2001; International Campaign to Ban Landmines, p. 37

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Helpful Websites

Adopt-A-Minefield: www.landmines.org
Canadian Center for Mine Action Technologies: www.ccmat.gc.ca
Cranfield Mine Action Unit: www.rmcs.cranfield.ac.uk/ddmsa/cma/index_html
Defence R&D Canada-Ottawa: www.dreo.dnd.ca/pages/factsheet/rt/rt002_e.html
European Commission Joint Research Center: www.jrc.cec.eu.int
Geneva International Centre for Humanitarian Demining: www.gichd.ch
German Technical Cooperation (GTZ):
www.gtz.de/unternehmen/english/snapshot/index.html
HALO Trust: www.halotrust.org
Handicap International: www.handicap-international.org/uk/index.html
Humanitarian Demining Training Center:
www.wood.army.mil/hdtd/mission.html
International Campaign to Ban Landmines: www.icbl.org
International Trust Fund for Demining and Mine Victim Assistance: www.itf-fund.si
James Madison University Mine Action Information Center: maic.jmu.edu
Landmine Survivors Network: www.landminesurvivors.org
Mines Advisory Group: www.mag.org.uk
Norwegian People’s Aid: www.npaid.org
People Against Landmines (MgM): www.landmine.org
U.S. Agency for International Development:
www.usaid.gov/hum_response/oti/focus/mines.html
U.S. Department of State Office of Weapons Removal and Abatement:
www.state.gov/t/pm/wra/
United Nations Development Program: www.undp.org
United Nations Mine Action Service: www.mineaction.org
Vietnam Veterans of America Foundation: www.vvaf.org