

# The Future: A Call for Action

*Contributor:  
Richard Kidd*

The purpose of this booklet is to provide the information needed to support and enhance the very worthy international effort of humanitarian mine action. In order to apply resources effectively, it is important to understand what has happened to date.

**Mine Action: Where Are We Today? ||** The threat landmines pose to civilians increased dramatically as the nature of warfare changed from conventional conflict between standing armies to unconventional conflict involving non-state actors, terrorists, insurgents and partisans. As

warfare has changed, so have the international relief mechanisms designed to respond to the effects of war on civilians. Mine action is one of these mechanisms. It 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 non-governmental organizations (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.

**Demining Technology ||** There has been a great deal of progress made in developing a comprehensive “toolbox” of mine clearance methodologies that serve 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 mine detecting dogs 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 array detection systems and ground penetrating radar. These items may not remove the need for a deminer and a detector, but they will serve to maximize the

*This deminer was injured and lost a limb to a landmine, but continues demining Cambodia.*





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 a mine in order to emplace an explosive charge remains a slow, tedious and dangerous process. It does not appear that there will be a major

"silver bullet" breakthrough any time in the near future.

**Establishing Effective National Programs** || Today's set of International Mine Action Standards (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, mine risk education and survivor assistance efforts 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-

Landmine victims in Aulong Veng, Cambodia.

# The Future: A Call for Action



(Above) An Afghan man educates a group of children about the various types of landmines in their community.

(Right) A UN soldier demonstrates proper demining technique during a training session.

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.

**Mine Action as a Precursor to Social Development** || Mine action is not just a set of specific activities and skills, but also a broad coalition that brings together a disparate set of NGOs, individuals and sovereign states in order to establish stability and reduce the harm caused by landmines. For this movement to be relevant, it will have to adapt to a changing international environment, broadening its contributions and expanding

opportunities for participation.

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.

The opportunities for participation in mine action efforts will continue to expand in the coming years. Burgeoning public-private partnership programs will increase as new information technologies support marketing efforts that match capabilities in the more developed world with mine-affected communities in countries recovering from war.

**Program Integration and Coordination** || When humanitarian demining first began, individual NGOs, commercial firms, military

units, and international and regional organizations would work in mine-affected areas, often lacking an appreciation for the comprehensive needs of the country, or in ignorance of the roles being played by others. Sometimes these mine clearance organizations would compete with each other for resources and prestige, often at the expense of common objectives.

Recently, great strides have been made to overcome these deficiencies. The Impact Survey process, feeding into the Information Management System for Mine Action (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.

**A Vision for the Near Future** || While conclusive predictions are impossible, a review of the four trends above suggests that, in the future, mine-affected countries



(Left) A deminer stands with his dog on the border of a minefield in Nicaragua.

(Below) A Nicaraguan Mine Detecting Dog Team practices before heading into the field.



will have more indigenous programs than is the case today. These programs will, for the most part, be led by skilled citizens from mine-affected countries. Mine action activities will be adopted as a part of a comprehensive national effort to recover from conflict and provide security to war-torn societies. Well-run country programs will be those with national strategic plans that use impact-based data to focus efforts where they are needed most. These country plans will outline a clear “end-state” for international assistance, with the most acute threats removed immediately and less pressing requirements met over time. Partnerships between mine-affected countries and various international, community, civic and private organizations will increase in number and prominence. Individual deminers

may continue to use handheld mine detectors, but they will be supported by a broader array of assets and technologies to make their work more efficient. The enhancement of information management systems will also allow this work to be supported and analyzed accurately, creating a transparent linkage between resource inputs and clear social or economic outputs.

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



A manual deminer carefully removes dirt from around a landmine.

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.”

# 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 Mines (APM/ATL)** || 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.

**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, also 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 which 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 Detector 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 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 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** || Rotary flail devices are typically composed of cylindrical drum structures housing a collection of chains on a horizontal bar that spins, beating the ground ahead of tanks 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 generalised 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.

**Mine Action Center** || Mine Action Center 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 mine risk education, mine awareness

training (MAT) 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 Organizations (NGOs)** || A transnational organization consisting of private citizens that maintains a consultation status with the Economic and Social Council of the United Nations. Non-governmental organizations may be professional associations, foundations, multinational businesses or simply groups with a common interest in humanitarian assistance activities (development and relief).

**Orthotics** || An orthotic device or orthosis (commonly known as a brace or splint) is applied 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 for the replacement of a missing limb.

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

**Unexploded Ordnance (UXO)** || A bomb, artillery, 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

**Sidebar** || The sidebars from pages 11, 25, 29, 35, 41, 51 are reprinted with permission from:

*Landmines: Clearing the Way*. CD-ROM. Produced by Huntington Associates, published by The National Committee on American Foreign Policy, 2002.

## **Background: The Landmine**

### **Problem** || Endnotes

1. Written by Eric Filippino.
2. Written by Dave McCracken.
3. *Landmine Monitor Report 1999: Humanitarian Mine Action*. <http://www.icbl.org/lm/1999/english/exec/Execweb1-03.htm>.
4. Faiz Kakar, Ph.D, *Direct and Indirect Consequences of Landmines on Public Health*, World Health Organization, July 1995. <http://www.demining.brtrc.com/contents.htm>.
5. Susan Ellis, *Defense, State, NGO Officials Cite Demining Priorities*, 17 June 1998. <http://www.usia.gov/topical/pol/armsctrl/uxo.htm>.
6. Dennis Barlow and Kevin Cloonan, *The Role of Civil Affairs in Mine Action*, April 2000.

### **Dave McCracken** || References

- (1987) FM 5-34 Engineer Field Data, Headquarters, Department of the Army.
- (2001) *Landmine Monitor: Toward a Mine-Free World*.
- (2001) International Mine Action Standards, United Nations.
- Croll, M. (1998) *The History of Landmines*. Barnsley, Leo Cooper.

### **Survivor Assistance** || Endnotes

1. *Landmine Monitor: Toward a Mine-Free-World 2001*, International Campaign to Ban Landmines, p. 37.
2. *Landmine Monitor: Toward a Mine-Free World: Executive Summary 1999*, International Campaign to Ban Landmines, 1999, p. 22.

\* Notes 3-5 can be found in *International Diplomacy*

6. *Survivor Assistance: Contexts, Principles, and Issues*, Position paper of the ICBL Working Group on Survivor Assistance, p. 1.

7. Jerry White and Ken Rutherford, *The Role of the Landmine Survivors Network*, in Maxwell A. Cameron, Robert J. Lawson, and Brian W. Tomlin, eds. *To Walk Without Fear: The Global Movement to Ban Antipersonnel Landmines*, (Toronto: Oxford University Press 1998), pp. 99, 103-104.

8. Special Issue, "Appropriate Prosthetic Technology." *Journal of the International Society for Prosthetics and Orthotics* (20)1; April, 1996.

### **International Diplomacy: Arrangements for the Implementation of Mine Action Programs** || Endnotes

3. *Landmine Monitor: Toward a Mine-Free World, Executive Summary 2000*, International Campaign to Ban Landmines, pp. 36 and 38.
4. *Landmine Monitor Report 1999*, International Campaign to Ban Landmines, p. 24.
5. Article 15 of the Third Geneva Convention requires that states "detaining prisoners of war provide free of charge for their maintenance and for the medical attention required by their state of health." Furthermore, article 30 provides that "[t]he costs of treatment, including those of any apparatus necessary for the maintenance of prisoners of war in good health, particularly artificial appliances shall be borne by the Detaining Power." *Geneva Convention Relative to the Treatment of Prisoners of War* (Geneva Third Convention), August 12, 1949, 6 U.S.T. 3316, 75 U.N.T.S. 135 as quoted in Memorandum from Arnold & Porter to Landmine Survivors Network regarding

proposals for addressing mine survivor assistance in the Austrian Draft Convention on the Prohibition of the Use, Stockpiling, Production and Transfer of Anti-Personnel Mines and on their Destruction (August 17, 1997). *On file with co-author Dr. Ken Rutherford*.

A. *Written by Dr. Ken Rutherford*

This article was reprinted with permission from *American Foreign Policy Interests*, Vol. 22 No. 6, December 2000.

**Photos** || All photos are reprinted courtesy of the following parties:

- Adopt-A-Minefield: p. 28  
Associated Press: p. 50, 51, 53, 55, 57  
Austcare: *Back cover*, p. 56  
Cambodian Mine Action Center: p. 36, 38  
Gasser, Russell: p. 48  
Geneva International Center for Humanitarian Demining: p. 57  
Grant, Tim: p. 31  
International Committee of the Red Cross: *Front and back covers*, p. 11, 24, 26, 29, 33, 35, 52  
Limbs for Life: p. 30  
Prince Makumbe: p. 41  
MCPA: p. 14  
MgM: *Front cover*, p. 52, 56  
Mine Action Information Center: p. 7, 23, 25, 41, 42, 43, 44, 57  
Mines Awareness Group: p. 15  
Norwegian Peoples Aid: *Back cover*  
Nayla, Aisha Saeed: p. 37  
Physicians for Peace: p. 27  
United Nations: p. 14, 37, 54  
UN/DPI: p. 16, 32, 55, 57  
UNICEF: *Front cover*, p. 29, 34, 35, 37, 38, 40, 54, 60  
U.S. Central Command: p. 45, 47

# Helpful Websites

- Adopt-A-Minefield** || [www.landmines.org](http://www.landmines.org)
- Canadian Center for Mine Action Technologies** || [www.ccmata.gc.ca](http://www.ccmata.gc.ca)
- Cranfield Mine Action Unit** || [www-svr3.dmz.rmcs.cranfield.ac.uk/cma](http://www-svr3.dmz.rmcs.cranfield.ac.uk/cma)
- Defence R&D Canada–Ottawa** || [www.dreo.dnd.ca/pages/factsheet/rt/rt002\\_e.html](http://www.dreo.dnd.ca/pages/factsheet/rt/rt002_e.html)
- European Commission Joint Research Center** || [www.jrc.cec.eu.int](http://www.jrc.cec.eu.int)
- Geneva International Centre for Humanitarian Demining** || [www.gichd.ch](http://www.gichd.ch)
- German Technical Cooperation (GTZ)** || [www.gtz.de/unternehmen/english/snapshots/index.html](http://www.gtz.de/unternehmen/english/snapshots/index.html)
- HALO Trust** || [www.halotrust.org](http://www.halotrust.org)
- Handicap International** || [www.handicap-international.org/uk/index.html](http://www.handicap-international.org/uk/index.html)
- Humanitarian Demining Training Center** || [www.wood.army.mil/CTSC/Training-HDTC.htm](http://www.wood.army.mil/CTSC/Training-HDTC.htm)
- International Campaign to Ban Landmines** || [www.icbl.org](http://www.icbl.org)
- International Trust Fund for Demining and Mine Victim Assistance** || [www.itf-fund.si](http://www.itf-fund.si)
- James Madison University Mine Action Information Center** || [www.maic.jmu.edu](http://www.maic.jmu.edu)
- Landmine Survivors Network** || [www.landminesurvivors.org](http://www.landminesurvivors.org)
- Mines Advisory Group** || [www.mag.org.uk](http://www.mag.org.uk)
- Norwegian Peoples Aid** || [www.npaid.org](http://www.npaid.org)
- Organization of American States** || [www.upd.oas.org/demining/detext.htm](http://www.upd.oas.org/demining/detext.htm)
- People Against Landmines (MgM)** || [www.landmine.org](http://www.landmine.org)
- U.S. Agency for International Development** || [www.usaid.gov/hum\\_response/oti/focus/mines.html](http://www.usaid.gov/hum_response/oti/focus/mines.html)
- U.S. Department of State Office of Humanitarian Demining Programs** ||  
[www.state.gov/www/global/arms/pm/hdp/index.html](http://www.state.gov/www/global/arms/pm/hdp/index.html)
- U.S. Department of State Office of Mine Action Initiatives and Partnerships** ||  
[www.state.gov/t/pm/maip](http://www.state.gov/t/pm/maip)
- United Nations Development Program** || [www.undp.org](http://www.undp.org)
- United Nations Mine Action Service** || [www.mineaction.org](http://www.mineaction.org)
- Vietnam Veterans of America Foundation** || [www.vvaf.org](http://www.vvaf.org)

The  
Landmine  
Action  
Smart  
Book

