February 2006

Environmental Applications in Demining

Ian McLean

Follow this and additional works at: http://commons.lib.jmu.edu/cisr-journal

Part of the Defense and Security Studies Commons, Emergency and Disaster Management Commons, Other Public Affairs, Public Policy and Public Administration Commons, and the Peace and Conflict Studies Commons

Recommended Citation

Available at: http://commons.lib.jmu.edu/cisr-journal/vol9/iss2/25

This Article is brought to you for free and open access by the Center for International Stabilization and Recovery at JMU Scholarly Commons. It has been accepted for inclusion in Journal of Conventional Weapons Destruction by an authorized editor of JMU Scholarly Commons. For more information, please contact dc_admin@jmu.edu.
planning decisions are also more the rule than the excep-
tion, often giving way to an early loss of momentum in
the process of post-conflict restoration.

Recommendations
Due to its complexity and cross-cutting character-
istics, mine action will have to continue to firmly make
its case to improve its mainstreaming into development
activities in mine-affected states. This should not cause
concern but rather an acceptance of a broader prioritization
process, whereby no scarce funding should go to the
"demining of mountaintops or deserts" whilst the popula-
tion in the valley is suffering—or worse, dying, from the
corollaries of extreme poverty. There is no ratio-
nale that can justify this—neither a humanitarian, nor
data or even an Ottawa Convention one. The straightforward
rationality from the MDG framework should be the pri-
oritization of those humanitarian and/or development
projects that most significantly reduce human suffering
immediately. To maintain its credibility, the mine action
sector should not avoid presenting the beneficial develop-
mental impact of mine clearance, such as automatically
calling the majority of their projects "high priority" if
land can have any use in the future or referring to im-
pressive socio-economic benefits that were "calculated"
years ago.

As a closing note, it is important to continuously un-
derline the real human costs and human faces behind all
the figures, goals or deadlines. Human development
is still much more than the MDGs. Poverty Reduction
Strategy Paper or even the Convention, but they re-
maintain critical yardsticks. Therefore, the campaigns for
a "mine-free world" or "making poverty history" should
not refrain from using the confrontational element of
demining to show the everyday reality of a recurring prob-
lem and to create the biggest socio-economic benefits. In this re-
gard, the strategic guidance from the MDG framework
is clearly at stake if these historical promissory notes do
not refrain from using the confrontational element of
demining to show the everyday reality of a recurring prob-
lem and to create the biggest socio-economic benefits. In this re-

The author takes a look at the environmental impact of demining and shows
how demining not only affects the environment but also bears heavily on
development and economics.

Environmental Applications in Demining

by Ian McLean | Geneva International Centre for Humanitarian Demining

As the demining industry moves towards its
rightful place as just another member of the
community of organizations supporting de-
velopment in post-conflict situations, a new layer of
responsibility is emerging. It is no longer acceptable to
simply get the mine out of the ground in the safest pos-
sible way with minimal regard to consequences. It is
agreed that demining supports some vague notion of
subsequent use of the land. But the development pers-
ppective imposes a new reality. Subsequent use should
inform, influence and perhaps even dominate decisions
about the demining process.5

When I first joined the demining industry in 2000, I
arrived with experience as a biologist dealing with envi-
nmental issues. I immediately recognised remarkable
overlap between post-conflict and environmental man-
agement in terms of need and consequence. Wars pol-
lute the landscape and destroy infrastructure. So does
deforestation, for example. Human society depends as much on ecological infrastructure
as on human-created infrastructure, even if we do not value the former because it is
self-maintaining and inconspicuous. Lost to destroyed infrastructure leads to precocious human
existence. In terms of this principle, it makes no difference if the loss is of sewage disposal
systems (which mean high rates of sickness) or of roots that bind soil on hillsides (leading to ero-
sion, landslides, destroyed agricultural land and famine). The result is the same—ruin.

Wars dramatically change the way in which local environments are used and managed by
local people, often with devastating consequences. For example, through the 1990s, the el-
ephants of western Africa suffered massive mortality because of an increase in the availability
of weapons as a result of local wars.6 The destruction followed an earlier period of increased
mortality due to poaching for ivory. These pressures are now somewhat reduced, but neither
has been eliminated, and pessimistic reviewers already regard the forest elephants of western
Africa as a species being driven to extinction.7

But let it be said, wars can have ecologically positive effects. Wars frequently remove
people from the landscape, reducing an impact that in at least some cases may have been
unsustainable. Examples include reduced grazing pressures that improve the diversity of
local vegetation communities and allow native wildlife to return to land from which it has
been excluded. Reduced rates of browse collection allow recovery of stressed forests subject

See "References and Endnotes," page 106

Figure 2: Linking up mine action with the MDGs. Graphic by Filip Van Der Linden / MAIC

Filip Van Der Linden
is a former secretary of the New York-based Mine
Action Support Group. He contributed to strategic planning for the Mine Action
Programme for Afghanistan. His interest in mine action resulted in the Ph.D. can-
didacy on the politics of mine action from the Department of Political and Social
Science at the University of Antwerp — Belgium. He now works for the
United Nations.

Filip Van Der Linden
United Nations Department of
Peacekeeping Operations
Military Planning Service
United Nations Headquarters
New York, NY 10017 / USA
Tel: +1 917 367 2168
Fax: +1 917 367 2169
E-mail: vanderlinden@un.org

McLean: Environmental Applications in Demining

Environmental Applications in Demining

The author takes a look at the environmental impact of demining and shows
how demining not only affects the environment but also bears heavily on
development and economics.
to unsustainable levels of wood removal. Perhaps there are endangered orchids that thrive today in the mine-infested hills around Sarajevo. So and so.

The above examples all have the same theme. Positive environmental effects are obtained when human im-
 pact is reduced. Clearly, such a perspective has little relevance from a development perspective—or does it?

Environmental science is not about removing humans from the landscape. It is about repairing damage and achieving sustainable use. In a post-war scenario, there is no more central theme than sustainable reintegration of humans to a destroyed environment, and reintroduc-
tion biology is a core theme of environmental science. Clearly, environmental science has much to offer the sci-
cence of post-conflict development. But what does any of this have to do with mines?

Having joined the demining industry, I inevitably began asking questions about environmental issues. I re-
member one early conversation beginning, "Is there any demining technique that reliably removes all mines?" The answer described a grapple crural being used in Afghanistan. The soil is dug up (to a designated depth), passed through a "shredder" and then returned to the source. I was shocked at this cavalier treatment of desert soils, which are extremely sensitive to disturbance and are well-known (to biologists) to be the most difficult source. I was shocked at this cavalier treatment of desert

Afghanistan. The soil is dug up (to a designated depth), everything has to be chopped before the demin-
er can go to work. Correction: "Everything" includes plants with important medicinal prop-
erties that require years of growth to reach maturity and/or do not reinvade easily into disturbed environments.

An influential modern writer on environmental issues, David Orr, recently outlined a series of prin-
ciples based on a lifetime of experience as a teacher and researcher.9 He noted in the discussion of Law 1 that "it is the height of folly to believe that we can

erode soils, destroy biological diversity, and create ugliness—humans and ecological—without paying.

Orr's Law 2 states that "it would be preferable if the whole system were to be reborn all at once rather than one way or another." Law 2 says, "Problems of ecol-

ey are first and foremost political problems having to do with who gets what, when and how." Law 3 is, "Humans are more ignorant than smart and most

try with any understanding of environmental issues. Demining agencies have a job to do and are under
time (environmental issues do not feature in the study). Nevertheless, there are promising consequences. The fol-
down five: to ensure that absolutely all mines are located and removed. It is hardly surprising, then, that any

issue perceived as peripheral to those imperatives will be set aside. Environmental issues are currently trea-
ted as peripheral. They must therefore be established as an imperative.

Achieving such an outcome requires a political pro-

cess (Orr's Law 2), and that process must be built on knowledge (Orr's Law 3). Cost-effectiveness still ap-
plies, but there must be a new line in the budget that takes environmental consequence into account. The new scenario minus mainstreaming demining with develop-
ment—provides the framework. The immediate chal-
legens are to explore the issues, raise awareness, create incentives and educate the practitioners.

Thanks to A. Arnold, H. Back, J. Mansfield, S. Neelen, R. Sargisson and E. Tolfteisen for discussion and comments. See "References and Endnotes," page 106
Humanitarian Deming as a Precurser to Economic Development, Lundberg | from page 53 |

Endnotes

The Road to Mine Action and Development: The Life-Cycle Perspective of Mine Action, Patent and Filipino | from page 55 |

Endnotes
1. This phrase is from The World Bank, which has been in the forefront of planning, managing and financing post-conflict reconstruction since the wars arising from the break-up of Yugoslavia. The central role played by The World Bank in one of the defining features of post-war reconstruction efforts, and during such periods The Bank may be an important source of financing for demining.
2. Rogich teachers will notice a strong similarity to Figure 1 in the article from Issue 9.1 (Chip Bowman, “The Mining Link in Strategic Planning: ALARA and the End-state Strategy Concept for National Mine Action Planning”), which was developed independently in 1998 by Chip Bowman to illustrate the “End-state Strategy” approach to developing a national mine action strategy for Cambodia. GICHD personal developed the life-cycle perspectives to illustrate not only that the size of a programme would eventually diminish, but also that the principal purposes of and partnerships for a mine action programme will evolve in a manner that can be understood and planned for.
3. Raw data does not help decision-makers unless it is “analysed” into information. Information is the right data presented in the right format at the right time to the right people.

Mine Action and the Millennium Development Goals, Van Der Linden | from page 58 |

Endnotes

Environmental Applications in Demining, McLean | from page 60 |

Endnotes
4. Editor’s Note: Some countries and mine action organisations are wary of the term “mine-free”, while others are opening the term “mine-safe” or “impact-free”. “Mine-free” connotes a condition where all landmines have been cleared, whereas the terms “mine-safe” and “impact-free” refer to the condition in which landmines no longer pose a credible threat to a community or country.

Chris North, Dombrower | from page 62 |

Endnotes
1. To meet EOD level-three qualifications, a detonator must have specific training in disposal by detonation of larger UXOs and artillery ammunition up to 240 tons. A level-three detonator should be qualified to handle safer UXOs for safe removal from the detonating worksite and to undertake their final destruction.
2. These books can only be purchased by contacting Chris North at chrisnorth69@hotmail.com or through his publisher, The Old Pier House.

Developing Economy or Easing the Landmine Crisis, Green | from page 68 |

Endnotes


Failing to Remember: Landmine Victims Get Little Attention, Beloff | from page 70 |

Endnotes
2. From Interventions to Integration: Mine Risk Education and Community Liaison, Durham | from page 80 |

Endnotes

Chris North, Dombrower | from page 62 |

Endnotes
1. To meet EOD level-three qualifications, a detonator must have specific training in disposal by detonation of larger UXOs and artillery ammunition up to 240 tons. A level-three detonator should be qualified to handle safer UXOs for safe removal from the detonating worksite and to undertake their final destruction.
2. These books can only be purchased by contacting Chris North at chrisnorth69@hotmail.com or through his publisher, The Old Pier House.