Environmental Applications in Demining

Ian McLean

Geneva International Centre for Humanitarian Demining (GICHD)

Follow this and additional works at: https://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: https://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 characteris-
tics, mine action will have to continue to firmly make it
its case to improve its mainstreaming into development
activities in mine-affected states. This should not cause
cost but rather acceptance of a broader prioritization
process, whereby no scarce funding should go to the
“demining of mountaintops or deserts” while the popula-
tion in the valley is suffering—or worse, dying, from the
consequences of extreme poverty. There is no ratio-
nal that can justify this—neither a humanitarian, nor a
development or even an Ottawa Convention one. The
straightforward rational to prevail should be the pri-
oritization of those humanitarian and/or development
projects that most significantly reduce human suffering or
create the biggest socio-economic benefits. In this re-
gard, the strategic guidance from the MDG framework is
very helpful and the option to extend Convention
deadlines very useful.

Mine action should focus on the subordinate plan-
ning level to the MDGs rather than create additional
Millennium Goals. Appropriate and coordinated ac-
tion should be undertaken at the three political levels of
planning, and to incorporate a concrete and practical stra-
tegy for mine action in the national development
plan. To regard the MDGs as a stand-alone concept is quite impracticable.

Analyzing a post-conflict environment is very com-
plex, especially with an ongoing mixture of develop-
ment aid and emergency relief efforts. Success in cre-
ating a better understanding has been limited. The
number of highly volatile factors makes it a daunting
task to indicate reliable, long-term socio-economic
benefits. To maintain its credibility, the mine action
sector should avoid overestimating the beneficial develop-
mental impact of mine clearance, as automatically
calling the majority of their projects “high priority” or
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
and the need to indicate reliable, long-term socio-
economic benefits. To maintain its credibility, the mine action
sector should avoid overestimating the beneficial develop-
mental impact of mine clearance, 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-
call critical yestidays. Therefore, the campaigns for a
“mine-free world” or “making poverty history” should not
refrain from using the confrontational element of
detailing the human costs of missed targets and dead-
lines. Once more, business as usual will not be sufficient.
The credibility of the big and powerful donor countries is clearly at stake if these historical promissory notes do not get beyond the many pledges made at fancy summits and banquets. See “References and Endnotes,” page 106

McLean: 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.

by Ian McLean [ Geneva International Centre for Humanitarian Demining ]
Overgrazing and vegetation growth is prolific and unsustainable levels of wood removal. Perhaps there are endangered orchids that thrive today in the mine-infered hills around Sarajevo. And so on.

The above examples all have the same theme. Positive environmental effects are obtained when human impact 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 reintroduction of humans to a destroyed environment, and reintegration biology is a core theme of environmental science. Clearly, environmental science has much to offer the science 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 remember one early conversation. “Is there any demining technique that reliably removes all mines?” The answer described a gravel crusher being used in Afghanistan. The soil is dug up to a designated depth, passed through a flail 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 so difficult on which to mitigate even limited impact. I commented that the effect was likely to be no soil at all, because, with its structure and roots removed, it would all blow away. The answer: “Yes, they are having a bit of trouble with that. Yes, the land is now ‘mine free.’” But it is also free of all other life and anything else—value.

During the first meeting of the advisory group to A Study of Mechanical Applications in Demining initiated at the Geneva International Centre for Humanitarian Demining in 2001, I was delighted to hear a voice arguing that environmental issues should be a significant concern to all. The systems were being used and should be a part of the study. The advisory group endorsed the principle that environmental issues be addressed, although there was too much else to do at the time. I was shocked at this cavalier treatment of desert soils, which are extremely sensitive to disturbance and are well-known (to biologists) to be so difficult on which to mitigate even limited impact. I commented that the effect was likely to be no soil at all, because, with its structure and roots removed, it would all blow away. The answer: “Yes, they are having a bit of trouble with that.” Yes, the land is now “mine free.” But it is also free of all other life and anything else—value.

The answer described a gravel crusher being used in Afghanistan. The soil is dug up to a designated depth, passed through a flail 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 so difficult on which to mitigate even limited impact. I commented that the effect was likely to be no soil at all, because, with its structure and roots removed, it would all blow away. The answer: “Yes, they are having a bit of trouble with that.”

Thanks to A. Arnold, H. Bach, I. Mansfield, S. McGowan, and researcher. 8 He noted in the discussion of Law 1 that “it is the height of folly to believe that we can redo soils, destroy biological diversity, and create ugliness—human and ecological—without paying. Sooner or later, the full costs will have to be paid one way or another.” Law 2 says, “Problems of ecology are first and foremost political problems having one way or another.” Law 2 says, “Problems of ecology are first and foremost political problems having one way or another.” Law 2 says, “Problems of ecology are first and foremost political problems having one way or another.” Law 2 says, “Problems of ecology are first and foremost political problems having one way or another.” Law 2 says, “Problems of ecology are first and foremost political problems having one way or another.”

During the first meeting of the advisory group to A Study of Mechanical Applications in Demining initiated at the Geneva International Centre for Humanitarian Demining in 2001, I was delighted to hear a voice arguing that environmental issues should be a significant concern to all. The systems were being used and should be a part of the study. The advisory group endorsed the principle that environmental issues be addressed, although there was too much else to do at the time (environmental issues do not feature in the study). There is, therefore, a strong requirement for the beneficiary from process is entirely incompatible with the development perspective. There is, therefore, a strong requirement for the beneficiary from process is entirely incompatible with the development perspective. There is, therefore, a strong requirement for the beneficiary from process is entirely incompatible with the development perspective. There is, therefore, a strong requirement for the beneficiary from process is entirely incompatible with the development perspective. There is, therefore, a strong requirement for the beneficiary from process is entirely incompatible with the development perspective. There is, therefore, a strong requirement for the beneficiary from process is entirely incompatible with the development perspective.
Humanitarian Demining as a Precursor to Economic Development, Lundberg [from page 53]


The Road to Mine Action and Development: The Life-Cycle Perspective of Mine Action, Patterson and Filippino [from page 55]

1. This phrase is from The World Bank, which has been in the forefront of planning, managing and post-conflict re-construction since the war arising from the break-up of Yugoslavia. The central role placed by the World Bank in one of the defining features of post-conflict re-construction, and during each period the Bank may be an important source of financing for demining.

2. Rogiles teachers will notice a strong similarity to Figure 1 in the article from Issue 9.1 (Chip Brennan, “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 Brennan to illustrate the “End-state Strategy” approach to developing a national mine action strategy for Cambodia. GICHD personnel developed the life-cycle perspective 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.

4. Mine Action and the Millennium Development Goals, Van Der Linden [from page 58]


3. More detailed information on the United Nations Development Programme 2000, the eight MDGs, its stand 18 targets and 46 indicators, can be found on the United Nations’ Sept. 18, 1997.


Environmental Applications in Demining, McLean [from page 60]


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

5. From page 69

6. From page 71

7. From page 72

8. From page 74

9. From page 77

That Landmine Thing: Students Take On the Landmine Crisis, Hudson and Fuentes [from page 77]


From Interventions to Integration: Mine Risk Education and Community Liaison, Durham [from page 80]


6. USSR-manufactured fragmentation bounding mine whose resulting blast shatters into more than 1,000 metal splinters. For more information, visit http://www.eng.warwick.ac.uk/DTU/pubs/wp/wp48/appendixcminesandordinance.html.


8. From page 61


Chris North, Domoreover [from page 81]

1. To meet EOD level-three qualifications, a detonator must have specific training in disposal by detonation of larger UXO and artillery ammunition up to 240 mm.

2. A level-three detonator should be qualified to render safe UXO for safe removal from the demining worksite and to undertake their final destruction.

3. These books can only be purchased by contacting Chris North at Chrisnorth@bersonic.com or through his publisher, The Old Pot House.