Minefield as a School Ground: The Tzur Baher Minefield Clearance Project

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ver the past 15 years, mine action has evolved into an established component of the relief and development sectors. During this period, programmes and projects for demining, mine-risk education, victim assistance, advocacy and minefield destruction have been discussed, refined and improved by operators, programmers, diplomats and activists. As part of its ongoing role to reinforce the effectiveness and efficiency of mine action, the GICHD commissioned contributions from development and mine-action experts on the many lessons that have been learned over the past 15 years and the challenges that remain to be met. These have been brought together in a book titled Mine Action: Lessons and Challenges. Following an executive summary of its main conclusions and findings, the work is laid out in two parts. Part I looks at the core activities—"the pillars"—of mine action: advocacy, victim assistance, mine-risk education, demining and minefield destruction. This part concludes with a thought-provoking assessment of what mine action has actually achieved. The book was published in November 2005 and can be ordered via the GICHD Web site.

IMAS Mine-risk Education: ‘Best Practice’ Handbooks

The seven mine-risk education components of the International Mine Action Standards outline minimum standards for the planning, implementing, monitoring and evaluation of MRE programmes and projects. The IMAS are large/ ly prescriptive, advising national authorities, operators and donors on what is necessary for the development and implementation of effective MRE programmes. However, they do not guide stakeholders on how they might adapt their programmes to be more compliant with the standards. To facilitate the implementation of the MRE standards in the field, UNICEF recognised the GICHD as the lead organisation to develop a series of "best practice" guidebooks to provide more practical advice on how to implement the MRE standards. A total of 12 guidebooks have been developed using a variety of people, countries and contexts. The guidebooks address a wide range of areas covered by the MRE IMAS, including:

- How to support the coordination and the dissemination of public information
- How to implement risk education and training projects
- How to undertake community mine-action fusion
- What elements should be considered to implement effective MRE projects in emergencies

Copies of the guidebooks are available by contacting GICHD or UNICEF or online at www.mineactionstandards.org.

Ongoing Work at the GICHD

The GICHD is undertaking a major study, Land Release and Risk Management Approaches, which aims to examine the various processes used to release land (other than by full clearance) and to advise on ways in which a risk-management approach can be applied to speed up this process. The study will be completed by the end of 2006.

The development of the International Mine Action Standards has been undertaken by the GICHD on behalf of United Nations Mine Action Service. There are currently 38 existing IMAS and 15 are in the final approval stage of the process. The latter IMAS are always posted on the Standards’ Web site (www.mineactionstandards.org) and the GICHD produces an updated CD each year. A revised, simple Guide to IMAS was published in early 2006.

See Endnotes, page 112

Geneva Diary: Report from the GICHD

The Geneva International Centre for Humanitarian Demining provides operational assistance to mine-action programmes and operators, creates and disseminates knowledge, works to improve quality management and standards, and provides support to instruments of international law like the Ottawa Convention and the Convention on Certain Conventional Weapons.

by Ian Mansfield [Geneva International Centre for Humanitarian Demining]

When you think about building a high school, the last word that probably comes to mind is ‘minedfield’, but that’s exactly what the people of Tzur Bahar considered. Clearing a minedfield and returning it to civilian use is always important. When the purpose is to allow youth to obtain an education, this significance has added benefits.

Tzur Bahar is a small Palestinian village on the eastern outskirts of Jerusalem where 15,000 residents live with only one general school for about 4,000 village children. Due to the lack of a public high school, those who do not find schools outside of the village get at most 10 years of basic education.

The community decided to build a new school, but available land was scarce. Most potential building areas in the village were in use for private housing, and the only public land under municipal control was the minedfield in the western outskirts of the village, where the Jordanian Army emplaced mines before the 1967 War.

In 2000, the Israeli government and Jerusalem municipality approved a new public housing project that included building two new high schools and a public youth center. The building program resulted from an Israeli Supreme Court ruling that forced the authorities to build schools for the villagers.

The decision regarding who would do the clearance and who would fund the clearance of the minedfield caused a disagreement between the army and the municipality; each side placed the responsibility with the other. The Israeli Defense Force claimed it is responsible for clearing minedfields only when the explosive is a military necessity. Additionally, the IDF insisted that since the land is located on a Jordanian minedfield, it was not the IDF’s responsibility to clear it. The municipality, on the other hand, argued the IDF has the professional and public responsibility to clear the field since the municipal government has no expertise in mine clearance.

The government’s legal counsel made the final decision: Israel’s Ministry of Justice decided it was the municipality’s responsibility to do the work and ordered it to engage a civilian mine-clearance company to complete the project. The Ministry of Justice found that although the IDF was not responsible for emplacing the field, it was, nevertheless, responsible for verifying the professional quality of the clearance work. The court consequently ordered the IDF to give the
the residents encroached on the minefield boundaries to a point that some of the houses were built bordering the field. The presence of these houses made demining on-site much more difficult and called for a gentler and more accurate clearance process.

Clearing the Field

Demining companies in Israel must be approved by the Ministry of Defense and the IDF to assure compliance with quality-controlled standard operating procedures. Maavarim Civil Engineering has years of experience in contracting with the MoD for mine clearance and explosive ordnance disposal projects, and was chosen to conduct the mine clearance and to prepare the field for construction of the school. Because this project was undertaken on behalf of the villagers, a special Maavarim liaison officer was appointed to keep the villagers informed during all stages of the project and to address any complaints that arose.

Maavarim’s standard operating procedures, based on the International Mine Action Standards, led the planning and execution of the work on the Teren Baher project from start to finish. The work on this site was a combination of a few methods. Although the survey and analysis of the field showed no evidence of anti-tank mines, to identify and destroy the proximity of this type of mine, Maavarim personnel marked the boundaries of the field and conducted manual demining using metal detectors.

Next, mechanical demining removed the land to a depth of 0.5 meter (1.6 feet) to the bedrock. In the last stage, Maavarim used specially trained mine-detection dogs to verify that all mines had been removed.

The Israeli Army provided supervision and final approval for the clearance of the field, accepting Maavarim’s recommendation to approach this project according to IMAS, even though the IDF does not normally work according to IMAS.

Conclusion

The work on the site started in early September 2005 and was complete by the end of October. Construction will be concluded by May 2007. The Teren Baher project is an example of how mine clearance can influence the daily life of an entire village. From experience working with the demining industry in Israel, it is evident that government and private funds are rarely being spent on this type of activity unless commercial interests are involved.

This project is unique because this is the first time the Israeli Supreme Court has stated that the government is responsible for clearing a minefield that was not left by its army. Additionally, the Ministry of Justice set a new precedent involving the areas of responsibility of each body involved in civil and humanitarian mine clearance.

The decision to force the Jerusalem municipality to fund mine clearance and to force the army to then be professionally responsible for landmines it did not place is a model for mine-clearance activity in Israel—a model that hopefully will lead the way to clearing more minefields.

This article was written with assistance from the project manager, Mr. Ido Talaviro of Maavarim Civil Engineering Ltd.

See Evaluation, page 112

Systematic Test & Evaluation of Metal Detectors: Interim Report Field Trials Mozambique

The Joint Research Centre of the European Commission published at the end of 2005 another interim report for the STEMD project. This article gives background on the project and report and some results and recommendations of the trial. The authors hope this article will pique interest in the full report.

The concept of the Systematic Test & Evaluation of Metal Detectors project is to conduct tests relevant to specific mine and UXO problems in different regions of the world. STEMD can be regarded as a trial making use of the experience distilled into the Centre for Normalisation Workshop Agreement (CWA) about testing of metal detectors and giving an overview of the state-of-the-art of the current metal-detection field. The project consists of laboratory tests, field trials and training of interested parties in testing methods. Lab tests are being carried out in the laboratories of the JRC-Ispra. A trial in southern Africa was planned from the outset. Mozambique was favoured because of previous experience and because of the existence of a dedicated training site with different types of soils and the availability of local test targets. The project describes the second field trial of the STEMD project. Some basic information from the STEMD Interim Report Field Trial 1997 is repeated in the present report may be understood independently. The purpose of the trials in Mozambique was to:

• Assess commercial off-the-shelf detectors believed to be appropriate to Mozambique and for humanitarian demining generally
• Make data available for the humanitarian-demining communities

Objectives of the trials were to:

• Compare performance of detectors in different types of Mozambican soils
• Measure sensitivity of detectors to typical local targets of interest and standard targets
• Train local staff in the CWA
• Collect site information for International Test and Evaluation Program for Humanitarian Demining

The report gives an overview about the preparation and describes in detail the methodology and procedures used to achieve comparable results. The technical details of the detectors described in the report are divided into two categories: technical information that is relevant to users and that which is relevant to technical personnel. A full chapter explains the main factors influencing metal-detector performance—the ground. A simple method to measure and gain knowledge about the magnetic soil properties is explained.

In this trial, we were able to take advantage of seven prepared lanes used for training purposes by the Accelerated Demining Program. Lane 1 contained builders’ sand from a sandpit. Lanes 2–6 contained five different soil types from the zone around Moamba. Lane 7 contained soil from Namaacha, adjacent to the Swaziland border. With these seven lanes and increasing detection difficulties from one lane to the other, the results reflected the influence of soil on the detection abilities of the current metal-detector field. The detectors being tested included the latest models from the following manufacturers:

• CEJA S.P.A.
• Ehinger Ges.m.b.H.
• Guardt Ltd.
• Institut Dr. Foermer GmbH and Co. KG
• Minsahl Pty. Ltd.
• Schoelch Elettronica Gerate GmbH
• Shanghai Research Institute of Microwave Technology
• Yulllon GmbH

The results of the trial are laid out in two chapters of the report. One describes the direct comparison of all detectors versus the 15 targets and the seven soil types, and the other is an individual assessment of each detector. For sensitivity comparison in air, the detectors were