

Humanitarian Demining in Egypt: A Half-Century Struggle

Egypt has made great strides in its humanitarian demining efforts. However, recent funding shortages have decreased Egypt's ability to continue its HD programs.



Egyptian Landmine Problem

As a result of combat operations during World War II and between Israel and Egypt on four occasions between 1948 and 1973, lands within Egypt reportedly contain 21—23 million landmines and UXO. This problem most significantly affects locations in the Western Desert region, the Sinai Peninsula, and in the vicinity of the Suez Canal and Red Sea coast. The most seriously affected areas within the country are sparsely populated, but current national development plans require large-scale redistribution of the growing population and infrastructure to locations in proximity to a known or suspected mine threat. This will increase the risk of casualties—estimated at 8,313 (7,617 injured, 696 killed)—both to the local population and to national and international tourists attracted to the new developments and population centers.

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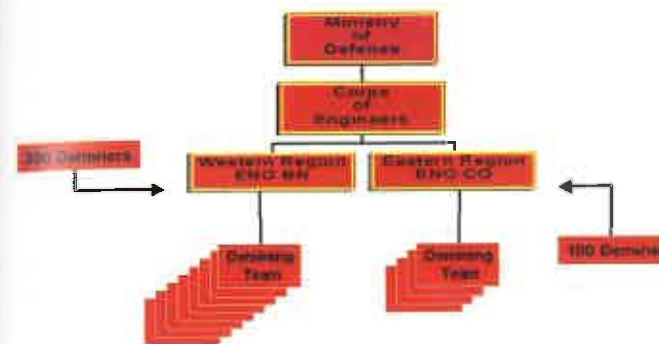
Summary

Over the years and with limited resources, Egypt has demonstrated a strong commitment to eradicate the landmine threat through its dedicated Army Corps of Engineers demining campaign. Since 1948, with limited financing and direction, they report clearing approximately 31 percent of the total mined areas and 51 percent of the mines or UXO. These clearance operations have been costly—Egypt expended over \$91 million (U.S) in national funds and lost over 200 deminers. Competing

priorities and dwindling financial resources imposed a halt to active HD operations in 1998. Egypt requested U.S. government HD assistance, and the U.S. Central Command developed a support strategy that addressed Egypt's training requirements while recognizing and complementing the huge HD efforts made by its Corps of Engineers and several non-governmental agencies. Two mutual Egypt-U.S. goals are to help Egypt integrate its HD functions into a civilian-led national mine action center and to ensure that its survey and clearance methods comply with internationally recognized standards.

Mines found in these regions include old, high-metal content WWII mines in the west and modern, low-metal content mines in the east, as well as massive quantities of UXO in all the regions. Each area presents unique detection and clearance problems including: alluvial or tidal flooding and mud, shifting sands, poor or missing mine field records, high metal fragment density rates, vast areas with widely dispersed mines or UXO, and aging/unstable mines or UXO. Additional obstacles to an effective Egyptian mine action program are funding shortfalls, inconsistent international support, disparate types

Egypt's Military Demining Organization



of donated equipment, a slow political process, vague organizational structure or hierarchy, and the lack of a full-time national-level Mine Action Center (MAC) to administer all facets of the demining program.

History of Humanitarian Demining in Egypt

As the most successful component of the Egyptian HD effort, the Army Corp of Engineers is tasked with the survey and clearance operations. This military-led effort, with clearly stated goals and objectives, has returned over 122,150 hectares of land for productive use by local inhabitants. Since 1948, with limited financing and direction, they have reportedly cleared approximately 31 percent of the total mined areas and 51 percent of the mines or UXO. Although successful, the clearance operations have proven costly. Egypt expended over \$91 million in national funds and lost over 200 deminers in its efforts to rid the nation of these devastating remnants of war. Egyptian personnel involved in HD would benefit from training that meets current international standards. Mine field survey and marking, in preparation for clearance operations, are two specific training requirements that, if addressed and applied, would pay huge dividends by preventing casualties among the demining teams.

Egypt's HD capability, by the admission of its own government, is not capable of solving the entire landmine problem it faces, particularly within the Western Desert area, due to the magnitude and scale of the suspected and known mine-affected lands. Egypt requires modern survey and clearance technologies and is looking to enhance its HD capacity with the assistance of the international community. Compared to their clearance and survey capabilities, the mine awareness (MA), information management (IM), quality assurance (QA) and victim assistance (VA) aspects of the Egyptian mine action concept are less well developed, which also contributes to their high number of casualties.

In late 1997, the GOE requested HD assistance from the United States government (USG), and in mid-1998 the USG Interagency Working Group (IWG) for Demining approved HD support for Egypt. The Department of Defense (DoD), through US Central Command (USCENTCOM), was tasked to develop a support strategy that addressed Egypt's training requirements.

USCENTCOM and Egyptian Plan

In October 1999, representatives from the US Government (USG) met with Egyptian government officials, emphasizing the need to establish a

civilian-led demining organization. That visit, coupled with a United Nations Mine Action Service (UNMAS) visit in February 2000, successfully gained Egyptian support to reorganize its HD organizational structure. Although the Egyptians established a civilian-led organization, they have not formed a permanent staff or mine action office with clearly delineated roles, responsibilities, objectives and goals. One of their declared goals is to tie HD activities directly to economic development plans.

Forming a Civilian Organization

On April 10, 2000, the Egyptian Prime Minister issued Decree Number 750 for the Year 2000. It outlines a civilian management structure for the coordination of a national mine action plan that supports development programs. Under the decree, the GOE established a national demining "Technical Secretariat," headed by the Minister of Planning and State for International Cooperation (Minister Ahmed el Darsh). The Secretariat includes membership from several ministries, which meet on an ad-hoc basis to implement mine action policy and strategy through five sub-committees: Planning, Legal Affairs, Finance (International Donors), Awareness/Victim Assistance and Technical. The intent for the proposed organization is to encourage inter-ministerial cooperation and leverage international donor support.

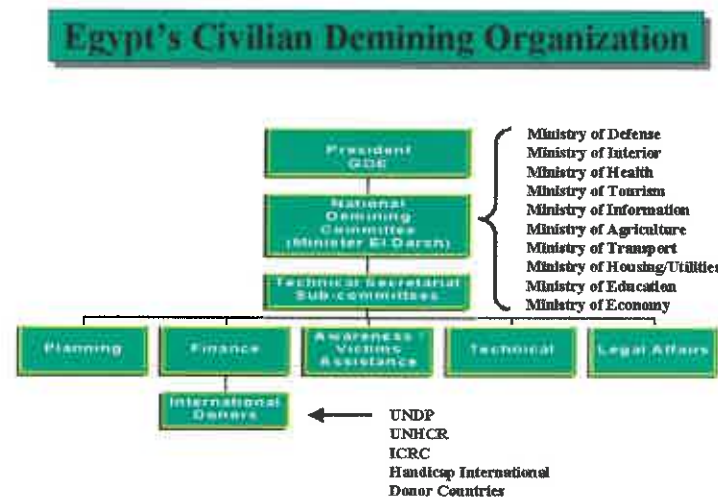
However, there still remains a need for the enhancement of this coordinating body to ensure that it uses an integrated approach that considers all aspects of mine action including surveying, marking, clearance, quality assurance, mine awareness, information management and victim assistance activities. Integration should take place within a comprehensive and effective framework under the auspices of a

permanent national mine action center. International support for the development and enhancement of such institutions and activities within such a framework is recommended, particularly with the assistance of United Nations bodies and coordinating mechanisms. Additionally, the relationship between the new civilian organization and the military, which conducts the actual mine clearance operations, is vague and not fully developed.

Identifying Requirements

In June 2000, representatives from the US Embassy, US Agency for International Development (USAID), USCENTCOM, and US Army Central Command (USARCENT) met with officials from the Egyptian Technical Secretariat, Ministry of Defense (MOD) Engineering Department, and the United Nations Development Program (UNDP) to outline potential USG support. During the discussions, Egyptian officials identified the following support requirements:

- Develop a comprehensive demining strategy that supports national development programs and fosters partnerships with international donors;
- Establish a UNDP-sponsored trust fund to sustain long-term mine action initiatives;
- Formalize the National Demining Organization (NDO) by defining form, function and duties;
- Assist the Ministry of Defense (MOD) to establish a National Mine Action Center and Regional Mine Action Centers that can implement national demining policy;
- Provide modern technical assistance, training, and equipment to enhance demining capabilities that meet or exceed internationally recognized standards;
- Provide a capability for wide-



area detection of mine fields to assist in area reduction; and

- Provide an automated Geographic Information System (GIS) to archive mine field data.

Addressing Requirements

In March 2001, USARCENT led a training site survey, with representatives from the host nation (HN), USCENTCOM and the US Embassy Country Team, to finalize detailed financial, logistical, curricular, facility, and personnel requirements to begin addressing the Egyptian requirements. A USCENTCOM train-the-trainer program consisting of Mine Awareness, Information Management with GIS capability, HD-specific staff management, advanced UXO identification and disposal techniques and inter-agency liaison training was planned and completed for 42 Egyptian Corps of Engineer students during fiscal year (FY) 2001. Mine survey, marking, clearance, and quality assurance training to international standards is planned for an additional 100 students during FY 2002. U.S. trainers will provide instruction to 25 MoD students who will then form a cadre to train 75 additional MoD students.

From June to August 2001, the ARCENT-led training team consisting

of members from the 96th Civil Affairs Battalion (CAB), 8th Psychological Operations Group (POG), and the 52nd Explosive Ordnance Disposal (EOD) Group presented the following curriculum to 42 Egyptian Corps of Engineer students:

8th POG instructed mine awareness to 15 Egyptian MoD students:

- Development of a National Mine Awareness Plan;
- Formation of national, regional and local mine action centers/programs;
- Self sustaining programs with local involvement / ownership;
- Product development based on the Egyptian culture;
- Products that explain what to do if a landmine or UXO is found;
- Hands-on development of products for schools, local villages, and hospitals;
- Mine and UXO recognition boards; and
- Dissemination techniques: Radio, TV, Press, Posters.

52nd EOD instructed Advanced UXO Identification and Destruction Techniques to 12 Egyptian MoD students:

- Explosive safety;

- Demolition safety, ammunition safety;
- Proper disposal techniques;
- Protective works;
- UXO identification and explosive ordnance recognition;
- UXO marking;
- Identify current organizational EOD expertise or training and discuss alternatives;
- Discuss and identify personnel safety equipment used during operations;
- Determine current methods of identifying, recovering and disposing of UXO; and
- Introduce the ORDATA II mine and UXO identification software.

96th CAB instructed Survey and Information Management to 15 Egyptian MoD students:

- Knowledge of UN Survey Level 1, 2 and 3 reports;
- Tracking of mine fields and their status;
- Use of GPS for survey and marking mine fields;
- Use of the Demining Information Management System (DIMS);
- Use of ArcView Geographic Information System (GIS) software; and
- Awareness of historical research techniques to accurately locate mines (especially those laid during WWII).

Although members from the Egyptian military and the Technical Secretariat have received internationally recognized training on the UN Information Management System for Mine Action (IMSMA) in Geneva, the Egyptian Army Corps of Engineers specifically requested the DIMS training for comparison purposes. DIMS is a Computing Technologies, Inc. proprietary software program, developed for USCENTCOM and written in Arabic, that archives data from UN Survey Level 1, 2, and 3 forms. Like

IMSMA, DIMS combines a relational database (Microsoft Access) with a geographical information system (ArcView) and mirrors its report generating and geographical display capabilities.

Training by 5th SFG (A) planned for April—May FY 2002 includes:

- Mine Survey, Marking, Detection, and Disposal; 25 then 75 Egyptian MoD students:
- Develop Standard Operating Procedures (SOPs) IAW international HD standards;
- Marking mine fields;
- Investigate marking techniques other than barbwire;
- Site and route markings;
- Protective equipment, clothing, and training;
- Detection equipment and training;
- False alarms;
- Quality assurance equipment and training;
- Develop a refresher-training program; and
- Develop a Quality Assurance Program.

Enhancing Future Developments

The pressure exerted by an expanding population base and the need for additional industrial, agricultural and tourism lands will eventually force the reclamation of mine/UXO-contaminated areas, although that imperative is not yet critical. Egypt's competing priorities and dwindling financial resources dictated a halt to active HD operations at the end of 1998. While Egypt has made significant progress, it still should continue the development and, more importantly, the implementation of a national mine action organization that makes all the decisions for their HD effort. Forming the Technical Secretariat was a good first step, but they should continue to solicit support and provide the resources to permanently staff that organization

while fully integrating the military arm of their mine action program with the civilian apparatus. Full-time military liaison officers could be integrated with the established sub-committees into a national mine action center to provide the technical expertise and detailed planning required to set realistic priorities that support national developmental goals. Regional mine action centers for the Eastern and Western Desert areas could be formed using the current military organizational pattern as a model to address regional issues and provide local program oversight. A national mine action training center staffed by the military should be formed to provide the trained personnel—both military and civilian—to fill mine action centers at all levels. And lastly, the decision-making process for expediting policy changes and aggressively pursuing donor opportunities should be streamlined and consolidated under one nationally recognized authority. ■

Biography

Mr. Kennedy is a project manager with UXB International, Inc., currently supporting the U.S. Central Command as the HD desk officer for Egypt, Jordan and Yemen. A 25-year Army veteran, he served 22 years in Special Forces operational units, earning an MA in Education from Campbell University.

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