April 2001

Cambodia: A Country Profile

Rohan Maxwell
Canadian Army

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

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.
Cambodia: A Country Profile

Through the efforts of CMAC, Mines Advisory Group and HALO Trust, Cambodia is working to eliminate the hundreds of contaminated areas within its borders. Rohan Maxwell proposes changes in these operations to sustain removal efforts.

By Rohan Maxwell, Officer, Canadian Army

Background

In the late 1960s, communist insurgents known as the Khmer Rouge began operations against the central government of Cambodia, launching three decades of nearly continuous warfare. Vietnamese communists supported the insurgents, while the government came to be supported by the United States and South Vietnam. The fighting was exacerbated by the expansion of the Vietnam War into eastern Cambodia, including a massive American bombing campaign against communist supply lines. Battlefield UXO was widely dispersed, while aerial-delivered UXO was concentrated in the eastern and central provinces (ref 1). According to the International Committee of the Red Cross (ICRC) (ref 2), about 10 percent of the mines in Cambodia were laid during this period—most in the central and southern provinces.

The first demining operations were performed with the defection of the central government in April 1975. It was followed by 44 horrific months of Khmer Rouge rule, during which more than 1 million Cambodians died of starvation, disease and murder. Approximately 5 percent of the mines were laid under the Khmer Rouge regime, mainly in the Thai and Vietnamese border regions. The second civil war began at the end of 1978 when Vietnam, gnashed by borders provocations, drove its entourageally back into guerrilla warfare and installed a more cooperative government led by Khmer Rouge defectors. After a decade of fighting between the central government (and its Vietnamese backers) and the Khmer Rouge (and various non-communist Cambodian groups formerly opposed to them), Vietnam withdrew its forces and peace negotiations began. With the concurrence of all parties, the U.N. Transitional Authority in Cambodia (UNTAC) was mandated to run Cambodia for 18 months (1992-1993) in order to supervise demobilization and conduct elections. The Khmer Rouge chose to resume fighting, so demobilization failed, but elections did take place and the central government gained greater international legitimacy. Since 1993, the UNTAC force commander estimated that it would take 30 to 40 years to demine Cambodia (ref 5). In fact, given the current clearance rate of approximately 25 to 40 clearance teams per month that are clearing 15 sq. km per year (ref 2), it would take 93 years to clear 1,400 sq. km. If only high-priority land is considered—land needed for resettlement, agriculture and critical development—the task becomes more manageable. For example, the HALO Trust estimates that all high-priority land in Cambodia could be cleared in five to 10 years at the current rate of progress (ref 7). This estimate depends on the definition of high-priority land, but the key point is that with continued international assistance it should be possible for most Cambodians to live a mine-free existence within a reasonable period of time. Once that has been accomplished, a smaller-scale, long-term effort can deal with the remaining areas.

The Mines

Of all mines in Cambodia, 99 percent are AP; 68 percent blast, 26 percent fragmentation, and 5 percent mines of unknown type (ref 8). Adding 15 percent for pre-1979 casualties (based on the proportion of mines laid before 1979) increases this to perhaps 56,168 casualties since the fighting began, as many as 28 percent of which may have been female (15,727 deaths—refs 1 and 8). This is by no means a worst-case analysis—present a majority of the estimated 48,846 Cambodian amputees (ref 1) are casualties of mines and UXO. As amputations represent 27 to 50 percent (ref 3), the worst-case scenario would therefore be 124,615 to 183,281 casualties. Discrepancies on such a large scale are difficult to fathom until one recalls that a much larger figure—the number who died under the Khmer Rouge—has yet to be numbed down to the nearest million.

The Mine Incident Database provides excellent data on the current situation. At present, 91 percent of casualties are civilians, 38 percent of whom are injured in the course of subsistence activities such as farming, gathering wood, fishing, collecting food, fetching water and herding cattle. An additional 15 percent are injured while travelling. Adult males...
account for 63 percent of all victims, but 30 percent are children under the age of 18. Tampering causes 42 percent of casualties, including one-quarter of the men, three-quarters of the children and one-quarter of the women. Most of them fall victim to mines, but UXO accounts for 41 percent of all casualties, including 69 percent of children. There are, on average, 85 new victims each month, and 1 in 5 do not survive their injuries.

Demining Organizations

There are many humanitarian organizations that have conducted, supported or are presently contributing to demining operations in Cambodia (e.g. Norwegian People's Aid (NPA), Handicap International (HI), World Vision, CARE) but this article will discuss only the ones that are currently conducting operations: HALO Trust, Mines Advisory Group (MAG) and the Cambodian Mine Action Center (CMAC). HALO Trust has been working in the northern provinces of Barany Meanchey and Siem Reap since October 1991. Its 500 Cambodian staff are organized into 16 clearing teams working predominantly in the immediate vicinity of villages—houses, schools, water supplies, health facilities and paddy fields. HALO's demining operations are funded by the governments of the United Kingdom, the United States, Finland, Ireland and Japan, as well as the United Nations, the European Union (EU) and private donors in Europe and Japan. MAG Cambodia started work in 1992. Its mine action teams are presently concentrated in the northern and northwestern provinces of Peanch Viharn and Battambang. Like the HALO teams, they normally work in proximity to villages. The 389 Cambodian staff (including 48 amputees and 46 woman deminers) and nine expatriates are supported by donors including the governments of the United Kingdom, the United States and Austria, as well as the Lutheran World Service and Church World Services. CMAC evolved from the UNTAC Mine Clearance Training Unit in 1993. After initial funding difficulties, it expanded to a strength of 2,800 Cambodian staff and 160 expatriates. CMAC is a Cambodian agency, but it relies almost entirely on local labour for the day-to-day operations and it is administered as a project of the U.N. Development Programme. Its annual budget has peaked at approximately $US 2.2 million in 2001, but the detailed work is carried out by the Land Use Planning Unit (LUPU). Each district has a District Working Group (DWG) which submits its demining requirements and priorities to the LUPU (and then to the PRDC) based on input from the commune chiefs (who have in turn consulted their village chiefs). The PRDC then coordinates with the demining agencies to match resources to tasks, and the result should be a fully coordinated demining and development plan.

The Planning Process

In theory, demining efforts should be preceded by a systematic Level I Survey. Unfortunately, the situation in Cambodia precluded such a survey until the late 1990s, and as a result the most comprehensive data was that collected by UNTAC and refined by CMAC. Planning was further complicated by the fact that many of the most affected areas were not accessible to demining operations for security reasons. This meant that demining efforts were frequently directed at areas that were accessible, but not necessarily of high priority. Now that security levels have improved, the planning process is slowly being refined. In concept, the provincial governments should set demining requirements and priorities. Where appropriate, NGOs and international organizations working in the province must also be involved in the planning process, as they normally provide the resources needed to put the demined land to best use. Demining agencies should provide technical advice—what can be done, and what can be done quickly, not just set priorities. This concept places responsibility for land use where it belongs, and it is a necessary condition for the success of any demining project in Cambodia.
The mechanical vegetation cutters described above are either operational or show promise; in contrast, the two mechanical demining systems that have been evaluated (both by CMAC) have enjoyed less success. The first is the Site RA-140 trial, originally designed to clear scorable mines from hard surfaces or standard mines from open terrain. After extensive trials, it has been concluded that this system cannot clear terrain to meet required standards. Only about 80 percent of the mines (at depths of 5 to 20 cm) are detoured or rendered inoperable, and there is a significant risk that some mines could be cleared from the mine field into previously safe areas. In addition, the system lacks mobility. The Finnish government, though, remains willing to underwrite the costs of deploying and operating two systems, so CMAC uses them as vegetation cutters. They enjoy reasonable success in this role, particularly against thick bamboo, but they continue to encounter mobility problems.

The second system is RHINO, a track-mounted system equipped with two heavy counter-rotating drums mounted laterally, one above the other, on the front of the chassis. This system is designed to clear MDA for area reduction and possibly for quality assurance, but the training and deployment problems have slowed progress. This project began in 1996, but there was a significant initial setback when Cambodian dogs taken to Sweden for training proved unsuitable for the task, necessitating a fresh start using Swedish dogs trained in Cambodia. This dogs and their Cambodian handlers moved from their training facility to Battambang province in early 2000. The intent was to familiarize the teams with the terrain before starting area reduction tasks in the spring of 2000, but this took longer than anticipated and in late 2000 there were no operational teams.

Conclusion

Cambodia remains a heavily mine and UXO-contaminated country with an extremely high rate of related casualties. Humanitarian demining will remain a high priority for at least another decade, and while the demining NGOs can probably be relied upon to stay the course and successfully nationalize their operations, the capability loss by the CMAC suspension must be replaced. There are various options—retain CMAC, create smaller negative organizations, diversify funding to NGOs—but they all require continued international support.

Unfortunately, the recent difficulties with CMAC have made many donors justifiably wary. The solution is not to reduce or withdraw funding, but rather to continue to insist on fundamental changes to the way in which demining funds are managed and demining operations are planned and conducted.

Rohan Maxwell is an officer in the Canadian Army with 13 years experience as a combat engineer. As landmine and UXO clearance project manager, he has made many mine and UXO clearance operations in Iraq and Kuwait. In 1999, he served as a technical advisor with CMAC.

Contact Information

Rohan Maxwell
24 Rue Gacuczi, Courcouron, QC Canada GOA 1R1
Tel: (418) 844-3180
E-mail: camilot@fasst.ca

References

1. Hidden Mines: The Global Landmine Crisis (U.S. Department of State, Bureau of Political-Military Affairs, Office of Humanitarian Demining Program, Washington, D.C., September 1998). In addition to information on mines and UXO distribution, this document contains an estimate that 1 to 2.5 Cambodians are an equivalent (exclusive from other sources) range from 1.25 to 1.250. Figures in this document suggest that 16 percent of casualties are fatal.

2. Borgen, Ida, "120 Million Landmines Duplicit Worldwide. Just One Piece (U.K. Centre, Pix and Sword Books Ltd, Barnet, 2000). This book was sponsored by the Geneva-based Pro Victimae Foundation. CRIC's estimates concerning the worldwide deployment of landmines during 1996 to 2000 are at page 15. U.N. estimates confirm that the number of mines are cited on pages 24-25, drawn from two accuracy-general's report in 1994 and 1997. RAMIL then estimates the number of mines and the rate to clear them at page 57-59. The total figure of 5.60 sq. km of contaminated land is cited on page 37, drawn from CMAC's "November 1998 monthly progress report." Further discussion on contaminated land is at page 28 and at page 57 re the clearance of 18.5 sq. km per year in page 58.


4. Author's notes while employed with CMAC from June 1999 to June 2000. These include notes from various documents such as internal CMAC documents.


