



The Canadian Centre for Mine Action Technologies

Mine clearance is carried out by methods which have changed little in the last two decades. With vast areas of mined land in dozens of countries around the world, the introduction of new, more effective technology is one of the best ways to improve productivity and complete the task in a reasonable length of time.

The Canadian Centre for Mine Action Technologies (CCMAT) was established in 1998 to develop low-cost, sustainable technologies for mine action and to work toward their successful deployment in the field. This goal is accomplished through a comprehensive program of research and development, testing and evaluation, and active communication with the mine clearance community. The CCMAT has now completed three years of its five-year mandate and has established an international reputation for its ability to develop and field successful products that meet the mine clearance community's needs.

Total spending in fiscal year 2000 from the Canadian Landmine Fund for the CCMAT's operations was approximately \$4.2 million. The following are some specific achievements:

Fielding products that meet the needs of the mine clearance community

The CCMAT introduced four products into service in fiscal year 2000, and a fifth is in process. This product development process involves effectively bringing the product from the laboratory into the field. CCMAT staff, with the requisite technical skills and hands-on experience in mine clearance operations, perform trials and demonstrations of the equipment for the actual user

in his or her own workplace. This approach has proven successful in providing a convincing demonstration of the equipment's value to mine clearance organizations in the environment in which it will ultimately be deployed. The CCMAT is now promoting this successful model for technology insertion within the international community. Products the CCMAT has introduced in 2000 include:

- *Mechanical mine clearance assistance equipment*

The PRO MAC Brushcutter/Deminer BDM 48 is a mine clearance assistance machine that combines the capability of clearing brush and trees with the capacity to destroy mines. Manufactured by forestry equipment company PRO MAC Manufacturing Ltd. of Duncan, British Columbia, the BDM 48 was adapted for mine clearance operations by the CCMAT. After undergoing successful trials in Canada, the machine was user-tested in Thailand, where it is now an important part of the mine clearance program. The BDM 48 substantially reduces both the hazard and cost of mine clearance. It can be operated from mine-free ground adjacent to mined areas. The machine's operator is protected by an armoured cab that has been tested by the CCMAT to resist the blast of a mine or ordnance explosion. Use of this equipment eliminates more than 99% of all