
In response to the attacks on innocent civilians that took place in New York and Washington on September 11, 2001, the United States began positioning military forces around the country of Afghanistan. The imminent appearance of ground troops on Afghan soil raised images of Americans being air dropped into mine fields and the information feeding frenzy was afoot. Many in the media and elsewhere wanted to know more about these mine fields. The questions continue even as this issue of the *Journal of Mine Action* goes to press.

by Joe Lokey, Deputy Director
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Even though it has one of the longest running mine clearance programs, Afghanistan is still believed to be one of the most severely mine-affected countries in the world. The Mine Action Program in Afghanistan (MAPA), a United Nations-supported entity, is one of the largest and most successful national programs in the world and one almost exclusively run by the Afghans themselves with fewer than a dozen or so of the 5,000-person workforce being non-nationals.

As of January 2001, there were 31 technical survey teams, 114 clearance teams (manual, mechanical, EOD/bomb disposal and mine detecting dog), 11 training and monitoring teams, 10 mine awareness projects and a range of management, technical and support services.

Afghanistan gained its full independence from British rule in 1919 after centuries of dispute. A Soviet-supported coup in 1979 dismantled the Afghan government causing an estimated five million Afghans, including the exiled king, Mohammad Zahir Shah, to flee the country. Resistance groups forced Soviet withdrawal from Afghanistan

in 1989. Competing factions within Afghanistan throughout the 1990s have been fighting over control of the country.

Although estimates from wartime landmine activities by the Soviet Union in Afghanistan regularly exceed 10,000,000, more realistic estimates are likely to be between 5—7,000,000 with some continuing use and limited access making that estimate impossible to verify. The most heavily mined regions are those bordering Iran and Pakistan. Security belts of landmines exist around major cities, airports, government installations and power stations. Most, if not all, of these are attributed to Soviet occupation or Soviet stocks left in their withdrawal.

Kabul, the capital, is considered to be one of the most heavily mined cities per capita in the world. Thousands of mines are believed to be scattered throughout Kabul as the legacy of four years of bitter fighting between rival Islamic groups that ended in 1996 when the Taliban took control of the capital city and ousted President Burhanuddin Rabbani and his military chief Commander Ahmed Shah Massud,

the *Lion of Panshir*, who was assassinated in September 2001 by two terrorists posing as journalists. The fighting continues with the Northern Alliance forces relegated to about 10–15 percent of country primarily in the mountainous northeast.

With continued fighting and movement severely restricted, there are still areas of the country that are unreachable to survey teams making the exact extent of the mine problem unclear. Mined areas are still being discovered at a rate of 12 to 14 million square meters per day. Known contaminated land is about 723 square kilometers or over 11 percent of the total country. About 162 of 356 districts are believed to be mine affected and 27 of 29 provinces have some degree of landmine contamination. The total mined area remaining to be cleared is found in

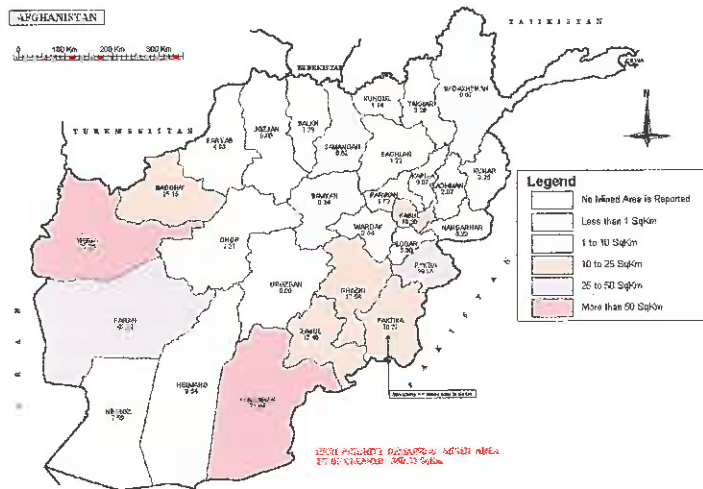


Figure 1.

Working to address the plague of mines in their country, there are eight organizations that are currently engaged in mine and UXO clearance in Afghanistan. All of these organizations, except the head office of Afghan Technical Consultants (ATC), are now based in Afghanistan

■ High priority mined area remaining at the end of April, 2001. *c/o MAPA*

Afghanistan Overview

Total area:	647,500 sq km
Comparison:	Slightly smaller than Texas
Border Countries:	China, Iran, Pakistan, Tajikistan, Turkmenistan, Uzbekistan
Population:	26,813,000
Percent Disabled:	4%
Literacy:	Total - 31% (Female 15%)
Life Expectancy:	46/male 45/female
External debt:	\$5.5 billion

with small offices in Pakistan for logistics support. ATC's operational staff is all based inside Afghanistan while the head office is in the process of moving to Afghanistan. From 1990 through 2000, over 224 million square meters of mined area and about 320 million square meters of former battle areas were cleared of mines and UXO. In the same period, 215,908 AP mines, 9,897 antitank mines and 1,305,558 different types of UXO were detected and subsequently destroyed. In 2000, mine clearance organizations cleared more than 24 million square meters of mined area and about 80 million square meters of former battle areas. A total of 13,542 AP mines 636 antitank mines, and 298,828 UXO were destroyed during these clearance operations.

While the UN's MAPA has successfully destroyed 1.6 million landmines over the past 11 years, it estimates another five to seven years

to clear "high priority" contaminated land that will allow daily life to resume. Unfortunately, those estimates were dismissed by most last year when UN support to Afghanistan was drastically curtailed. This continues to be a concern as the Afghan NGOs are extremely efficient and cost effective. As an example, according to the Mine Clearance Planning Agency (MCPA), it costs less than \$0.60 US to clear a square meter of land from the threat of mines in Afghanistan. It is cleared land that is the key, not the number of mines.

The United States has long recognized the needs of the Afghan people in this regard. The United States has supported demining operations in Afghanistan since 1989 and has contributed more than \$25 million since 1993. In 2000, the United States allocated \$3 million to continue funding a highly successful mine detecting dog (MDD) program, manual and mechanical clearance operations and mine survey teams.

What these groups are finding is also interesting. There have been over 50 types of AP (both blast and fragmentation) mines and AT mines from eight different countries found in mine clearance efforts in Afghanistan. About 57 percent of these were of Russian/CIS origin. Other countries that manufactured landmines used in the Afghan conflicts over the years include the People's Republic of China, Czechoslovakia, Italy, Pakistan, the United Kingdom, Yugoslavia and Zimbabwe. The most common AP mines found are PMN, PMN-2, POMZ, POMZ-2, Type 72

and OZM 3/72. The AT mines found most often are the Russian TM family (46/57), TC-6 and Pakistani P2.

A question received frequently by the Mine Action Information Center (MAIC) is about the Russian PFM-1, or "butterfly" mine that everyone has heard about. These were scattered widely by Soviet forces from helicopters along *Mujahadin* trails and supply routes. They were chemically activated on dispersal and were armed on the ground in just under 10 minutes. From a humanitarian standpoint, these mines are deadly with children in the area who will pick up anything oddly shaped and brightly colored. In queries to the field, however, it does not appear that the PFM-1 is as widely found as was believed, and although no less dangerous, it is only found rarely by clearance teams working in the region.

Except for improvised explosive devices (IEDs), there is no report of any AP landmine production within Afghanistan. In 1998, the Taliban denounced the use of mines and has forbidden the import or export of mines. The Taliban has stated that they are not maintaining any stockpiles of AP mines. A Taliban official also claims "We do not store any landmines and we do not need them because they are against human beings and the holy religion of Islam." Landmine use continues on the part of the opposing Northern Alliance with Iran and Russia suspected of being the suppliers. The extent is unknown.

Casualty figures in Afghanistan are difficult to get and even more difficult to validate. There were just over 1,000 casualties recorded by the MAPA during 2000 with an average of about 88 per month. About 92 percent were male and 49 percent were under the age of 18. About half of the casualties were caused by mines; the other half were caused by UXO and IEDs. Initial reports coming from NGOs within Afghanistan indicate that this daily rate of incidents may have gone back up to as many as 15 a

day with many refugees and internally displaced peoples (IDPs) moving to avoid the conflict. These numbers and the facts leading up to them cannot be independently verified at the moment.

In the wake of military action against Taliban and suspected terrorist targets in Afghanistan, there has been mass displacement of people. Most of the people have moved out to rural areas from almost all the major Taliban-controlled cities including Kabul, Jalalabad, Khost, Herat and Kandahar. While some of the people have chosen to remain in the rural areas, some have made attempts to enter Pakistan, Iran and other neighboring countries in search of food and shelter.

Landmines pose a safety threat to the lives of the displaced people when they go through unfamiliar routes or settle in an unfamiliar environment. Because all the communication facilities of the UN and other organizations in the Taliban-controlled areas have been sealed by Taliban authorities, reports of mine accidents among the displaced people have not been able to reach the outside world, and unconfirmed reports are simply anecdotal at this point.

The Landmine Monitor Report for 2001 also estimates that there are 210,000 people in Afghanistan disabled by landmines. Most of the landmine and UXO victims were in the Kabul and Balkh provinces. The fear of injury is also a problem. Refugees and internally displaced persons are still reluctant to return home, in part due to fear of mines. A total of 12,216 families were repatriated in 1999, including 72,098 individuals.

The deminers themselves are, like most indigenous participants, dedicated to ridding their land of mines and UXO. This is dangerous work but their sacrifices are thought to be well worth it. In 2000, four deminers died and ten were injured in efforts to clear mines. MAPA's

record of demining casualty incidents indicates that from 1990 to February 2001, 34 deminers and surveyors were killed and 544 injured during mine clearance operations. Their salary for this dangerous work ranges from \$60—\$100 a month.

Farm and working animals are a critical part of developing countries like Afghanistan. When an animal is lost to a landmine, the economic consequences can be devastating. A study by the VVAF in Afghanistan found that 48,823 sheep, 14,985 goats, 6,297 cows, 576 horses, 3,615 donkeys and 1,267 camels have been killed by landmines. The report also cites a similar study by the MCPA. The survey of 949 villages documented 264,136 sheep and goats, 55,369 cows and oxen, 36,276 horses and donkeys and 5,354 camels killed by landmines since the beginning of the war in the early 1980s.

The current status of demining operations in Afghanistan is fluid at best. All mine action operations were officially brought to a complete halt on September 12 until further notice due to security reasons. A contingency mine action plan is being prepared by MAPA to effectively respond to the changing situation in general and in Afghanistan in particular. The European Union is also developing a working group for a post-conflict scenario dealing with reconstruction in Afghanistan that will likely include a significant effort at mine clearance and community risk reduction.

The current situation has the potential to severely impact indigenous demining organizations, which are already suffering from a severe shortage of funds over the last two years.¹ Reports of Taliban looting and theft of demining equipment and property, if confirmed, indicate that a significant recapitalization of the demining effort will be needed post-conflict. Another obvious impact may be an increased amount of mined land that would lead to increases in incidents and additional casualties.

In many ways, Afghanistan is no different from Cambodia, Angola or Mozambique. By clearing land from the threat of mines, crop production is increased, transportation and other costs come down, refugees (who would otherwise depend on aid and outside support in the refugee camps) can return to their homes, implementation of rehabilitation and development projects are facilitated, and employment opportunities are created. More importantly, many precious lives and limbs are saved, and the burden on medical facilities and supplies are reallocated toward other critical health needs. Landmine and UXO clearance, therefore, is not a cost but an investment.

However, in many other ways, Afghanistan is unique. The global focus on the mine fields of Afghanistan can only result in an increased awareness by the international community of the devastation mine fields cause in post-war economies. The focus by the world's media has not only resulted in more information and knowledge being produced about Islamic societies, Middle East geopolitics, cultural differences and regional history, but landmines in general. Hopefully, this will be a precursor to increased demining efforts and support for not only the programs in Afghanistan, but in all mine-plagued countries around the world. ■

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■ Typical Afghanistan terrain. c/o GICHD

■ Figure 1

Type of Land	Total Area (in m ²)	Percent of Total
Agricultural	183,680,000	25.4%
Residential	13,896,000	1.9%
Irrigation	3,806,000	0.5%
Road	39,533,000	5.5%
Grazing	482,635,000	66.7%
Total Mined Land:	723,550,000	100%

Source: Landmine Monitor 2001