

EXPLOSIVE LITTER

Status Report on Minefields in Israel and the Palestinian Authority



DRAFT

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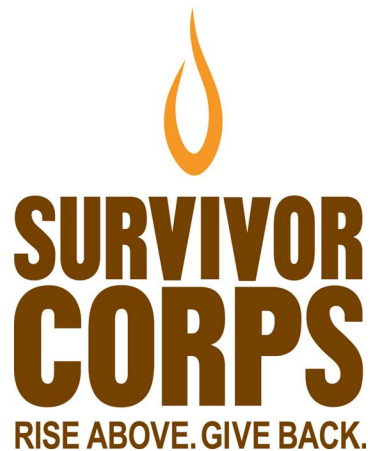


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Map of Minefields in Israel and the Palestinian Authority



Introduction

For decades most Israelis have been unaware that hundreds of square kilometers of land are rendered unusable and dangerous due to landmine contamination. It took a close succession of landmine events in 2009 and 2010, resulting in loss of life and severe injury – including eleven-year old Daniel Yuval losing his leg to a landmine in the Golan Heights,¹ for Israelis to wake up to the landmine problem. As a country with very limited land resources, it is well within Israel's interest to clear the country of non-operational minefields, thereby protecting civilian populations from injury and returning valuable land to productive use.

Landmines left over from decades of conflict lie dormant along Israel's borders, near military camps and training sites, and in close proximity to civilian infrastructure. At least 260,000² landmines are estimated to be buried in thousands of minefields³ that hold hostage an area larger than Herzlia (33,000 dunam, about 8000 acres).⁴ Taking into account the additional large tracts of land suspected of contamination due to mines that have shifted and moved because of seasonal flooding, the contaminated area covers hundreds of thousands of dunams, more than 1% of the country. Additional land is rendered off limits because of other unexploded ordnance (UXO) – the explosive remnants of war and military training, including shells, grenades and cluster bombs.

Failure to clear minefields leaves large quantities of cheap material for the manufacturing of explosives available for re-use by terror and criminal groups to create improvised explosive devices.⁵ In a country affected by terrorism, it would be only logical to minimize the availability of such explosives by demining dormant minefields.

The Israel Defense Forces (IDF) has publicly declared that hundreds of their own minefields are no longer operational. The IDF does not object to their removal.⁶ However, more than 90% of these non-operational minefields have not been cleared even a decade after Israel's State Comptroller issued a report pointing to the urgent need for their clearance.

Israel could become mine-free in a matter of years. Demining can be challenging, but it is not particularly complicated or dangerous when proper protocols are followed. Countries with far worse contamination, from Mozambique to Afghanistan and Cambodia, are successfully clearing their minefields. Between 1991 and 1995, Kuwait cleared 5 to 7 million landmines left from the Iraq invasion and Gulf War.⁷ Israel's neighbor, the Hashemite Kingdom of Jordan, has already cleared its side of the Jordan Valley and expects to be completely mine-free by 2012.

Mine clearance in Israel would be beneficial for economic development, agriculture, tourism, and foreign relations. Clearance will release valuable fertile land for farming, and prime nature reserves for hiking, camping and nature studies. Clearance will also improve human security for Israel's

¹ [Ahiya Raved, Two children hurt in Golan mine explosion; boy in serious condition, Yedioth Ahronot, February 6, 2010, see: www.ynetnews.com/articles/0,7340,L-3845040,00.html](http://www.ynetnews.com/articles/0,7340,L-3845040,00.html)

² [U.S. state Department, Hidden Killers, September 1998, p. A-1.](#)

³ Deputy Minister of Defense answering Motions for the Agenda, Knesset Plenum, February 10, 2010.

⁴ Jonathan Lis, *IDF refuses to clear landmines from land for Arab school*, Haaretz, September 8, 2003, see: tinyurl.com/jlm-mines

⁵ *Two Israelis blamed for stealing landmines laid by IDF*, Channel 7 News, May 27, 2002, see: www.inn.co.il/News/Flash.aspx/26839

⁶ Israel State Comptroller's Annual Report no. 50a, 1999. *Ibid.*

⁷ Landmine Monitor Report 2000, p. 891.

citizens and residents, from kibbutzniks to foreign workers and international visitors. Eliminating minefields will prevent unnecessary mine casualties in the future, while improving Israel's international reputation.

Several steps must take place for positive change to happen: Israel must understand the extent of its landmine problem and the benefits of cleaning up mines and other military litter, and develop political will and leadership to free the country from this problem. A national focal point for mine action must be designated, public awareness has to be raised and a mine action law adopted. The government has to be pressed to implement the conclusions of the 1999 State Comptroller's report from 1999. Furthermore, the legislature has to be lobbied to adopt a mine action law, as well as allocate local and international resources and develop a national action plan to get the job done within a set timeframe of a number of years, as do virtually all other mine affected countries in the world.



Cows grazing in a Golan Heights minefield

Photo by Simona Or-Munteanu

Israel's Landmine Problem

Analysis of Mined Areas

Golan Heights

More than 36,000 dunams (9,000 acres) are suspected to be mined in the Golan. Mines are located on the edges of settled areas, neutralizing grazing areas, agricultural land, and nature reserves. In addition to the minefields accounted for in official reports, unofficial reports corroborated by field visits and actual mine incidents (see below) indicate the existence of unmarked minefields around and within some Druze villages in the Golan.

Heavy rainfalls and snow in the region have caused mines to shift from their original locations. This has contaminated adjacent fields, streets and even houses, as was the case in January 2000 in Majdal Shams, where mine-contaminated soil erosion from a deserted IDF post had contaminated local homes.⁸ In February 2008, Haifa Magistrate's Court held the government and the army responsible for not taking action to avert the hazard, and ordered the State of Israel to pay compensation to two residents of Majdal Shams for the damage caused to their property.⁹



Survivor Corps Israeli Coordinator, Dhyan Or, and Golan for Development's Director, Taiseer Maray, examine mines swept into homes and backyards in Majdal Shams

Photo by Simona Or-Munteanu

About 20km south of Majdal Shams, near Kibbutz Ein Zivan, dozens of Israeli youth come to swim at a spring located in the midst of a minefield. The fencing and clear marking of the minefield does not deter an increasing number of people from frequenting the spring, including off-duty soldiers who repeatedly break the fence to enter this tranquil but dangerous gem. The place has become known as “Ein Mokesh,” meaning “Landmine Spring.”¹⁰

Minefields containing both anti-personnel and anti-tank mines were laid by Syria in the years before 1967. After the 1967 War, Israel laid its own mines that were reportedly mapped and recorded. According to Israeli officials, this makes Israeli minefields easier to locate than those laid previously by the Syrians.

The comparative technical ease of demining the Golan is complicated by the surrounding politics. Conquered by Israel during the 1967 War, the Golan Heights will be the focus of any prospective peace treaty between Syria and Israel. In the event of such a treaty, the area would have to be

⁸ Interview with Taiseer Maray, Director of Golan for Development, April 15, 2009.

⁹ Kobi Mandel, Walla News Service, February 11, 2008, news.walla.co.il/?w=//1233031.

¹⁰ Daniela Shaul, *Youth Swin in “Ein Mokesh” Despite Landmine Danger*, Friday in the Golan, October 17, 2008.

demined as part of the peace agreements. The prospect of a return of the region to Syria prompts some Israeli policymakers to distance themselves from responsibility for mine clearance. Decades after Israel has been in control of the Golan Heights since its annexation, policy makers cite the fact that Syria laid the mines and therefore should be responsible for clearing them.

Arava Valley

The Arava Valley (also known as “Wadi Araba”) is polluted by dozen of minefields, many of them ‘wandering minefields’ swept annually by floods in the region, contaminating the length of the Arava, from the Dead Sea to Eilat.¹¹ Minefields also dot the “Peace Route” from Ein Yahav to Hatzeva, a tourism trail initiated after the signing of the peace treaty with Jordan. Some cleared minefields remain fenced off and barred from any use due to single mines that are marked in maps



Survivor Corps Founder Jerry White with Hatzeva's Security Officer Uzi Dvir, at a partially cleared minefield near this *moshav* in Central Arava

Photo by Survivor Corps

but have never been located. Minefields, coupled with nearby military firing zones, leave less than ten percent of the Arava Valley available for development, agriculture and tourism.¹² Mines pose a danger to farmers, especially migrant workers, who are not aware of the location of mines in the area, and to tourists and locals, who hike along riverbeds where mines have shifted because of seasonal rains and periodic flooding.

While Arava farmers are adamant about the imperative to clear minefields adjacent to their communities, some environmentalists argue that

demining can harm the habitat of rare animals and plants, such as the case of the Nubian Nightjar that nests in the minefields near Ne'ot Hakikar.¹³ This concern points at the need to consult with all relevant groups in the process of demining and subsequent land designation, in order to find appropriate environmental solutions.

Most of the landmines in the Arava were laid by Israel. Many of them are made mainly from plastic, which is more difficult to detect than mines with higher metallic content.¹⁴ That, and their susceptibility to drifting from their original place complicate both the tracking and clearance of mines in the Arava. It should be noted, though, that this is by no means a situation unique to Israel. The non-static and unpredictable character of minefields is a worldwide phenomenon. Local weather patterns significantly affect mine movement and minefield marking and mapping. These are factors that deminers take into account when conducting mine surveys.

¹¹ For the latest occurrence, from January 18, 2010, see: www.ynetnews.com/articles/0,7340,L-3836425,00.html

¹² Interview with Ezra Rabins, Head of Central Arava Regional Council, June 24, 2009.

¹³ Interview with Gitit Wiesbloom, spokeswoman of the Society for Protection of Nature in Israel, November 4, 2009.

¹⁴ Interview with Ami Shacham, Director of Arava Drainage Authority, June 25, 2009.

Mine clearance may be technically more complex in the Arava than in the Golan. However few political obstacles hinder clearance efforts for this region. In fact, Jordanian deminers have already succeeded in completely clearing their side of the Arava, through international cooperation from Norwegian People's Aid, a humanitarian non-governmental organization that specializes in mine clearance work. This should help motivate clearance on the Israeli side. Indeed, a few instances of clearance were conducted as a result of massive pressure on the Engineering Corps.¹⁵ (See more below.)

Jordan Valley

The Hashemite Kingdom of Jordan ratified the Mine Ban Treaty in 1999.¹⁶ In accordance with its obligations under this international legal standard, Jordan has destroyed its stockpile of anti-personnel mines and has made steady progress to complete demining the entire country by 2012.

On the Israeli side, more than 10,000 dunams (2,500 acres) of land were mined along the Jordan River and streams that flow into it from the east, such as Nahal Bezek. Some are Syrian minefields, and others are Israeli. Some include both antipersonnel and antitank mines. Mined areas border villages such as Kfar Rupin, and spill over into nature reserves such as the East Gilboa Reserve.

In the late 1990s, the Ministry of Tourism contracted with a private Israeli demining company to conduct demining in certain areas along the Jordan River suspected of containing Syrian anti-personnel mines, such as Kibbutz Gesher. These areas are high priority tourist locations, particularly for Christian pilgrimages, as well as for rafting and kayaking.

West Bank

Over 20,000 dunams (5,000 acres) of land are suspected to be mined in the West Bank. Some of the minefields were laid by Jordan prior to 1967, along the 1949 Armistice border with Israel (the Green Line) and surrounding old military bases. Other minefields were laid by Israel after 1967, around its own military bases and the current border with Jordan.

Minefields occupy agricultural and grazing land in the West Bank and in some cases penetrate villages, putting civilians at risk of injury or death. Since marking and fencing is poorly maintained and mine risk education virtually non-existent, most of the casualties have been children. The Palestinian authority is doing little to alleviate the problem. According to the Landmine Monitor, mine action "is not on the top of the Palestinian Authority agenda as basic needs of the population are."¹⁷

Due to repeated military operations, other unexploded ordnance (UXO) can be found in many places throughout the West Bank, including within Palestinian villages. These explosive remnants of war are *de facto* mines that threaten civilian communities. Most of the northeastern part of the West Bank is an Israeli army firing range.

¹⁵ Interview with Ilan Peled, Arava resident and Engineering Corps reserve soldier, June 25, 2009.

¹⁶ The Convention on the Prohibition of the Use, Stockpiling, Production and Transfer of Anti-Personnel Mines and on their Destruction.

¹⁷ Landmine Monitor Report 2007, Palestine: //lm.icbl.org/index.php/publications/display?url=lm/2007/palestine.html

In 2001, Palestinian residents reported new mine-laying by Israelis around an army outpost near Bethlehem.¹⁸



Children walk alongside a minefield on their way to and from school in Husan Village in the West Bank

Photo by Simona Or-Munteanu

In 2002, at the urging of the Bethlehem office of World Vision (an international humanitarian organization) and the Palestinian Health Work Committees (a local charitable health organization,) the government of Canada and the Mines Advisory Group (a UK based humanitarian demining organization) tried to coordinate with Israel, the Palestinian Authority and Jordan the clearance of an old Jordanian minefield in Husan village in the West Bank. This area had claimed the lives of four people and injured more than ten.¹⁹ This particular minefield had been partially cleared by Israel in 1985 in order to pave a road to connect the settlement of Beitar Illit with Jerusalem. Though Israeli courts granted the appeal of Palestinian residents, (whose houses are literally within the minefield,) to allow them to proceed to clear the mines with international help, this international initiative failed. The Israel Defense Forces insisted that demining could only be conducted by a designated army-approved private Israeli firm, and local residents would have to pay the contractor's high cost for clearance.²⁰

There is still potential to reach consensus on mine clearance in the West Bank: Unlike mined areas within Israel that are under the sole auspices of the Israel Defense Forces, the West Bank is under the authority of the Palestinian Authority, with an opening to engage regional and international players such as Norway, the United States and Jordan in demining efforts. The Palestinian Authority recognizes the need for international partners who can provide technical assistance, training, equipment and funding.²¹

Gaza

The Gaza Strip has been contaminated by landmines since the 1967 war, when Israeli forces laid mines on the border between Egypt and Gaza and in various areas across the Gaza Strip.

Mine and UXO-related injuries and fatalities have been reported annually in Gaza, and their numbers have risen after Israel's disengagement. According to Defense of Children International, between September 2000 and July 2008, 39 children were killed by unexploded ordnance.²²

The period of the Israeli disengagement from Gaza in 2005 saw a marked increase in the number of

¹⁸ Landmine Monitor Report 2001, p. 1011.

¹⁹ Landmine Monitor Report 2002, Palestine: lm.icbl.org/index.php/publications/display?url=lm/2002/palestine.html

²⁰ Interview with Abu Bilal, Husan village resident, on April 27, 2009.

²¹ Landmine Monitor Report 1999, p. 917.

²² Defense of Children International – Palestine Section, July 24, 2008: www.dci-pal.org/english/display.cfm?DocId=822&CategoryId=1

mine incidents. As Israeli troops and settlers withdrew, Palestinians reportedly found that many Israeli settlements had been surrounded by mines and UXO. In 2005, at least 46 people were killed and 317 people injured in 187 incidents caused by mines, UXO and improvised explosive devices (IED).²³ Since 2005, armed Palestinian groups have been using mine-like explosive booby-traps. Egyptian authorities have reportedly found and seized several antipersonnel landmines and other ordnance in the Sinai Peninsula destined for Palestinian groups in Gaza.²⁴

During three weeks in December 2008 and January 2009, the IDF conducted a major military operation in Gaza, including bombardment from land, sea and air. For years before the Hamas and other Palestinian militant groups had been firing rockets from Gaza into Israel. The bombardment by the IDF resulted in extensive casualties and fatalities, and in the spread of explosive remnants of war (ERW), in particular unexploded ordnance (UXO) and unexploded bombs (UXB), contaminating this highly populated area.

Palestinian entities have been conducting surface clearance, but a significant threat remained within the rubble from damaged and destroyed buildings.²⁵ Following the January 2009 ceasefire, the United Nations Mine Action Service (UNMAS), in conjunction with United Nations Mine Action Team (UNMAT), UNDP, UNICEF and OCHA, undertook a technical assessment mission to Gaza. The UK-based Mines Advisory Group (MAG) and Norwegian People's Aid have been conducting UXO clearance throughout 2009. In the first five months of the year, about 200 items of UXO containing white phosphorous or high explosives were identified.²⁶

Mine and UXO incidents with casualties continued to occur throughout the year. At least 18 ERW casualties were confirmed in Gaza in the months following the ceasefire.²⁷

Galilee

Tens of small minefields dot the northern Galilee, a large number of them surrounding man-made water sources and water pumps. Many minefields were laid by Israel two decades ago to protect water sources from sabotage, and are located within villages, nature reserves and picnic areas.

Negev

Several small minefields are located in the south of Israel, but the most pressing issue is unexploded ordnance. Numerous UXOs fill dozens of military maneuvering areas and firing ranges across the Negev area. Most of the casualties from UXOs are Bedouins whose settlements and livestock grazing fall within contaminated areas.

²³ Email from Axel Haas, Lead Field Police Advisor, The European Union Police Mission for the Palestinian Territories (EUCOPPS), June 21, 2006.

²⁴ Israel praises Egypt for counter-terror ops, Independent Media Review and Analysis, May 17, 2009: www.imra.org.il

²⁵ Framework for Mine Action Planning & Rapid Response Gaza, MASG Newsletter, Feb 2009: www.mineaction.org

²⁶ Briefing Note, UNMAT, Gaza, June 3, 2009.

²⁷ Landmine Monitor Report 2009, p. 1188.

Jerusalem

Most mines in the Jerusalem area were laid by the Jordanians before 1967 along the Green Line border with Israel.

A number of minefields around Jerusalem (Har Adar and Tsur Baher) have been cleared by private companies since 1997, to make space for development of houses and schools. In both places, demining was funded by local development authorities and supervised by the army. (See more below.)

For a detailed list of all mined areas in Israel and the West Bank, see Appendix I.

Mine Survivors



Each year yields several reports on cases of civilians and soldiers entering minefields. The events end with injury, loss of limbs, or death. Hundreds of other incidents where farmers, shepherds, hikers, swimmers, enter minefields and manage to exit them by themselves, remain undocumented. Numerous cows and camels are fatally injured each year through stepping on mines.

On February 6, 2010, a mine incident involving two children from Ramat Hasharon who came to see the snow on Mount Avital (Tel Abu Nida) in the Golan, has brought Israel's landmine problem to the fore of public attention. Eleven year old Daniel Yuval has lost his leg and his sister Amit sustained shrapnel wounds, while playing in the snow in what turned out to be an IDF-laid minefield that was poorly fenced. According to IDF spokesman, several other families had unknowingly entered minefields on the same day, and it was a miracle that others were not injured.²⁸

Vichien, survivor of a landmine incident in the Golan in 2009, at a hospital in Petah Tikva

Photo by Survivor Corps

In March 2009 alone there were three mine incidents. An agricultural worker from Thailand lost his leg stepping on a mine in the Golan. An Israeli hand-glider landed inside a minefield in the Golan, and was evacuated without injury. The third incident made considerable headlines, when a 24-year-old Arab Israeli from the village of Mushraife sustained

serious leg injuries after stepping on a mine in Nahal Bezeq, and eventually lost his life after falling from the helicopter summoned to rescue him.²⁹

²⁸ Ruth Samia and Nir Kosti, *Miracle that only one Landmine Exploded*, IDF Spokesman, February 11, 2010, dover.idf.il/IDF/News_Channels/bamahana/2010/07/01.htm

²⁹ Eli Ashkenazi, Haaretz, March 11, 2009: www.haaretz.co.il/hasen/pages/1070337.html

The Victims of Hostile (Terrorist) Acts³⁰ provides the legal framework for assistance and compensation to landmine victims in Israel. This law does not apply to Palestinians who are injured in the West Bank and Gaza.

The Equal Rights for Persons with Disabilities and other legislation on the rights of persons with disabilities address more long term effects that injury may cause, such as discrimination, exclusion or marginalization.



Daniel Yuval with Jerry White, at Tel Hashomer hospital, February 2010.

Photo by Survivor Corps

For a list of incidents in recent years, see Appendix II.

Policy

International Humanitarian Law

One hundred and fifty six countries are party to the 1997 Convention on the Prohibition of the Use, Stockpiling, Production and Transfer of Anti-Personnel Mines and on their Destruction (the Mine Ban Treaty). By ratifying this treaty, states have committed to destroying their stockpiles of anti-personnel mines and to clearing their minefields within a fixed timeframe.

To date, Israel has not become party to the 1997 Mine Ban Treaty. No timetable or national plan exist for cleaning up its minefields. While private Israeli companies bid on contracts to perform humanitarian demining abroad, no such progress is made at home.

Israel did sign the U.N. Convention on Prohibitions and Limitations on the Use of Certain Conventional Weapons (CCW), and in April 2001 became a party to its Protocol II on Landmines,

³⁰ [National Insurance Institute of Israel, see: www.btl.gov.il](http://www.btl.gov.il)

Booby Traps and Other Devices (1996).³¹ Accordingly, it has committed to discontinuing the production of antipersonnel landmines and to monitoring export to other countries. In 1994, Israel declared a moratorium on the sale, transfer and export of all antipersonnel mines (not only those banned, a moratorium more comprehensive than is required by the CCW), and has been renewing this moratorium annually since that time.³² In 2004, Israel reported to the committee monitoring the implementation of the protocol that in the early 1980s it had dismantled all antipersonnel mine production lines.

Israel still holds a substantial inventory of landmines, possibly millions, and has used landmines as late as May 2000 when the Israel Defense Forces were withdrawing troops from southern Lebanon.

While Israel contends that it cannot join the Mine Ban Treaty for security reasons, measures can be taken to give effect to some of the treaty's obligations and will also promote visibility on the international level. Similar to the US, Israel can participate as an observer in the treaty conferences and support the UN General Assembly resolution on landmines. This sign of shouldering the global responsibility to eliminate the use of landmines could also render Israel a player in the field of international cooperation and assistance and may serve as a vehicle for raising funds for mine action in Israel.

National Level: State Comptroller Report, 1999

Between March and September 1998, the State Comptroller's Office conducted an audit on landmine use by the Israel Defense Forces. The audit covered the extent of mined areas and the consequences of landmine use; the IDF's policy regarding minefields that no longer serve a security purpose; and demining in response to civil sector requests. The Comptroller's report was published in October 1999.³³

The report found that hundreds of minefields no longer contribute to Israel's security, and that these fields in fact pose a risk to people and prevent development, agriculture and tourism. The report noted that no governmental agency has any policy or plan for future demining.

Demining is rare in Israel. It happens sporadically, in a case-by-case fashion following specific requests issued by civilian bodies to the IDF, usually accompanied by massive pressure on the IDF to carry out the demining. The IDF for its part asserts it only demines for military or security reasons, and that mine clearance for civilian purposes such as farming and development should be carried out only by private civilian companies recognized and supervised by the Ministry of Defense (MoD), thereby implying that costs be incurred by a source other than the IDF.

The State Comptroller's report called for a national effort to clear non-operational minefields. It recommended that the army reconsider the necessity of minefields along the border with Jordan in light of the Israel-Jordan peace treaty. If the army concludes that minefields are no longer needed for security, the Comptroller assessed that clearance could commence, provided that resources are allocated and standards established and applied.

³¹ Amended Protocol II on Prohibitions or Restrictions on the Use of Mines, Booby-Traps and Other Devices to the Convention on Prohibitions or Restrictions on the use of Certain Conventional Weapons (CCW) which may be deemed to be excessively injurious or to have indiscriminate effects.

³² Email from Meir Itzhaki, Ministry of Foreign Affairs, 19 September 2005 to Landmine Monitor Report.

³³ See fn 7.

Given that many of the minefields are no longer needed and actually pose a significant risk, the State Comptroller recommended that the state appoint an inter-ministerial committee comprised of representatives from the Ministries of Defense, Environment, Agriculture, Interior, Health, and Energy and Infrastructure, and from the Israel Lands Administration—in order to examine the issue further and develop a policy in line with the Comptroller’s findings.

National Developments since 1999

Responsibility

An Israeli Cabinet decision dated 17 Feb 2000, determines, *inter alia*, that minefield clearance will be conducted and supervised by civilian companies that will be chosen, employed and paid by the civil entity (an entrepreneur or a local authority) who calls for the demining. In contrast, a special army staff discussion dated 22 October 2001 indicates that the IDF has the responsibility to clear minefields, and that demining should be done by the army, and *not* by civilian companies.³⁴ This current contradiction and cross-purpose of policy and designated responsibility halts progress. Israel should examine how other countries have designated demining responsibility and handled issues of liability.

Mapping

Until 2002, open-source maps contained only limited marking of minefields.³⁵ In 2002, the Israeli Mapping Center “Survey of Israel” reported that in collaboration with the army it completed the mapping of all non-operational minefields in Israel.³⁶ Hiking trails maps published since mark the locations of most non-operational minefields and some areas that are suspected of containing mines.³⁷

All the maps that indicate minefields are in Hebrew. Minefield markings do not appear in maps in the other official language of Israel – Arabic – which pertains to 20 percent of Israel’s population. Nor do the maps and markings appear in English or other languages, despite Israel's economic reliance on income from tourism and foreign labor. Israel is thus neglecting to ensure the safety of non-Hebrew speaking citizens, tourists, and foreigners who come to live or work in Israel.

Signposts warning about minefields originally contained warning in Hebrew only. English and Arabic wording were added only after pressure by outside agencies.³⁸ In the hope of a similar response, the governments of several countries have recently issued inquiries to the Israel Mapping Center about its intention to translate its maps marking minefields into languages other than Hebrew.

³⁴ Background paper for the State Control Committee, January 28, 2002, www.knesset.gov.il/mmm/data/docs/m00256.rtf

³⁵ Meeting with Moti Ben Shitrit, Head of Israel Trails Committee, Dec 15, 2009.

³⁶ Protocol no. 27 of the meeting of the subcommittee for IDF and Defense Establishment Affairs, State Control Committee, 15th Knesset, 4th Session, Protocols/Control/4520, January 31, 2002.

³⁷ Hiking Trails Map Series, Scale 1:50000, Survey of Israel, 2003-2004.

³⁸ Interview with Ami Shacham, Director of Arava Drainage Authority, on June 25, 2009.

Demining

Israel has the capability to perform both military and humanitarian demining.

In the last decade, private Israeli companies have participated in mine surveys, mine awareness activities, mine clearance equipment transfers, and humanitarian demining in several mine-affected countries, such as: Albania, Angola, Croatia and South Korea.³⁹ Recent news reports indicate that Israeli contractors were even considered for demining the Turkish border with Syria.⁴⁰ Israel has contributed to the UN Voluntary Trust Fund for Assistance in Mine Clearance.⁴¹

At the end of 2005, after several years of pressure applied by local residents and the Jerusalem Municipality on the Ministry of Defense, including an appeal to the Supreme Court, a private company was contracted to clear a Jordanian minefield in the village of Tzur Baher in East Jerusalem. The aim was to clear space to build a high school.⁴² The clearing cost of NIS 2 million (about \$450,000) was incurred by the Ministry of Education.⁴³ In this special case, after many deliberations, Israel's Attorney General approved the hiring of a private contractor on a one-time basis. The army was still required to supervise the work and confirm its proper completion.

In 2005-2006, floods swept mines and sediment in the Jordan River, causing blockage near Highway 90. Mine clearance was performed by the IDF Engineering Corps, with the Ministry of Defense and the Southern Jordan River Drainage Authority covering the cost of NIS 5 million (about \$1.12 million).⁴⁴

Following the 2006 war in Lebanon, the IDF Engineering Corps decided to conduct its demining training on "live" minefields.⁴⁵ In 2008, the Corps thus cleared more than 11,000 landmines,⁴⁶ and in 2009 – about 10 minefields (containing several thousands mines).⁴⁷ Most of the demining was done in the Jordan Valley, in the security zone along the Israel-Jordan border, where land is under the responsibility of the IDF and is not intended for civilian use.⁴⁸

Liability

The success of the one-time project in East Jerusalem encouraged the army's Northern Command to reexamine its policy on contracting private demining companies.

The Northern Command had previously raised doubts with regard to the quality of mine clearance performed by a private company at the Had-Ness settlement in the Golan Heights in 1998.⁴⁹ The IDF was concerned about quality control of demining done by other agencies, and its potential liability in law suits challenging the release of land that is not verifiably cleared for public use.

³⁹ Maavarim Civil Engineering Ltd. project, www.bnc-il.com/maavarim/projects.htm

⁴⁰ Turkey's landmine clean-up faces road block, Burak Akinci, AFP, May 25, 2009.

⁴¹ Landmine Monitor Report 1999, p. 890.

⁴² IDF allows Jerusalem to clear minefield to build school, Jonathan Lis, Haaretz, November 9, 2005, www.haaretz.com/hasen/pages/ShArt.jhtml?itemNo=643164.

⁴³ Salwas Alinat, *Want to Build a School on a Minefield?*, Haaretz, December 8, 2004.

⁴⁴ Israel Annual Report in accordance with Article 13, par. 4(a) of Amended Protocol II to the CCW, November 2006.

⁴⁵ Roi Caspi, *Mined Thwarting* in "Bayabasha" Vol. 4, IDF, December 2007: mazi.idf.il/3838-4818-HE/IGF.aspx

⁴⁶ Israel Annual Report in accordance with Article 13, par. 4(a) of Amended Protocol II to the CCW, November 2008.

⁴⁷ *Ibid.*, November 2009.

⁴⁸ Interview with Col. Atai Shelah, Combat Doctrine Dept. Head, Engineering Corps, November 8, 2009.

⁴⁹ Interview with Had-Ness Secretary and Security Officer, March 18, 2009.

Consequently, demining by private contractors was frozen, and the army resorted to a policy of ad-hoc and irregular mine clearance by the military, only where it considered that security issues were at stake. Recently, in an effort to enable more clearance, the legal advisor of the Northern Command suggested that clearance activities be resumed through contracting with private companies, but on condition that the army, once it had inspected the work done, be absolved of responsibility for future injury to people or damage to property. She summarized: “The preferred situation is to clear the minefields and open the area to the public.”⁵⁰

While the motivation for re-enlisting private companies is worthy, the method, of releasing the IDF from responsibility at the expense of civilians, is not the solution. Various solutions exist in the common practices of international humanitarian demining, and a discussion of those should ensue among relevant policy makers and stakeholders in Israel. An example of such a practice is involving a public liability insurer to cover bodily injury or property damage suffered by third parties which arise from the insured's negligence.⁵¹

⁵⁰ Major Ronnie Justman, Legal Counsel to IDF Northern Command, in an interview to Bamahana (IDF's Magazine), February 11, 2008, dover.idf.il/IDF/News_Channels/bamahana/08/06/09.htm

⁵¹ Pehr Lodhammer, A Guide to Contracting in Mine Action, GICHD, November 2009.

Case Study

The state of affairs and developments along the years in the Jordan Valley and the Arava Valley present an instructive case study on the potential, and many existing obstacles, to progress in demining in Israel. This region is relatively uncomplicated by security issues. A wide consensus exists in Israel that following the peace treaty with Jordan minefields along the border are no longer needed nor operational. Moreover, demining can potentially be a subject of cooperation and bilateral agreements between the two countries. Finally, this region has already seen some campaigning, with partial success, by local authorities and residents.

Israeli-Jordanian Cooperation



Survivor Corps with IDF soldiers at Baptismal Site

Photo by Simona Or-Munteanu

Israel and Jordan have collaborated in the past on joint mine action projects. In 1997 and 1998 Israel conducted joint mine clearance with Jordan in the Arava valley, with support from Canada and Norway. Israel also participated in an assessment mission to Jordan regarding landmine victim assistance and contributed to the cost of medical rehabilitation for Jordanian landmine survivors.⁵²

In April 1999, Israel hosted a workshop on Mine Action and Victim Assistance with representatives from different Jordanian government branches, and in cooperation with the governments of Canada and Norway. There had been no follow up, due to the outbreak of violence between Israel and the Palestinian Authority in the following year.⁵³

Since then, Jordan has completely demined its side of the valley, while Israel has made little progress. This gap is especially apparent in the place marking the baptismal site of Jesus, on the Jordan River near Jericho. “Qasr el Yahud,” as the place has come to be known, is considered to be one of the three holiest Christian sites in the world. After the 1994 peace treaty between

Israel and Jordan, this site, previously a military border zone, was opened for development.⁵⁴ While Jordan completed demining the eastern bank by 1999,⁵⁵ Israel has not advanced mine action in the area, apart from routine fencing and signage⁵⁶ and limited development work on the western bank⁵⁷ to accommodate Christian pilgrims in advance of the Papal visit in 2009.⁵⁸

⁵² Article 13 Report, 26 November 2001, p. 11.

⁵³ Interview with Meir Itzhaki, Ministry of Foreign Affairs, Jerusalem, February 15, 2010.

⁵⁴ Baptismal Site official website: www.baptismsite.com

⁵⁵ Hind-Lara Mango, *UNMAS Endorses Jordan's Demining Efforts*, Jordan Time, Amman, January 31, 1999: www.jordanembassyus.org/013199008.htm

⁵⁶ Interview with IDF officer escorting at Qasr el Yahud Baptismal Site, September 19, 2009.

⁵⁷ Public Tender 37/03 – Qasr el Yahud, Governmental Tourism Agency, December 21, 2007:

www.info.gov.il/LAPAM/Tenders/building/2007/37-07-hamat.htm

⁵⁸ *A Rare Historical Opportunity during the Papal Visit*, Israel Nature and Parks Authority, May 13, 2009: tinyurl.com/npa-baptism

Local Campaigns

Civil-Military Dialogue in Central Arava

Nearly 90 percent of the Arava is closed off to public access because of the combination of military firing zones and minefields. Most of the area available for public access runs along both sides of Highway 90, which cuts through the country from north to south, connecting the Golan and Arava regions. The Arava Regional Council has been seeking to the release of land for development projects on the western side of the Jordanian border, such as agriculture within the Arava riverbed, and converting abandoned IDF military bases into areas for tourism and nature hikes. In order to accomplish this, several minefields have to be cleared. According to the head of the Regional Council, “getting the military and civilian groups to work together can be problematic.” Yet the IDF Southern Command has eventually responded to persistent requests from local authorities to complete mine clearance in areas intended for development, including a minefield in Moshav Hatzeva, which purportedly was cleared in 2005. Unfortunately, one or two mines that were marked on army maps were not found, rendering the entire area still contaminated.

One campaign did result in successful demining in the Arava. In 2005, the Engineering Corps reserve unit in the Southern Command cleared a minefield in Hatzeva, after repeated pressure by local residents, regional council members and soldiers who live in the area.

However, apart from this and some exchange resulting from a petition to the Supreme Court as detailed below, the impasse has by and large continued. In July 2009, at a meeting of the Army and Community Forum in Be'er Sheva, which serves as a forum for civil-military dialogue, the stalemate in demining was brought up. Civilian representatives protested that little has been done to fulfill promises to demine. The Arava Regional Council and the neighboring Ein Tamar Council in the southern Dead Sea region plan to step up their efforts in an attempt to prioritize mine clearance within the two regions.

Demining Petition to the Supreme Court

In 1994 and 1995, the IDF cleared anti-tank mines in the Arava, as part of the Israel-Jordan peace treaty. The IDF also transferred antipersonnel mine maps to the Jordanians, who used them to clear Israeli mines on the Jordanian side. Israeli residents watched with binoculars “in envy” at the effective demining of Israeli mines by the Royal Jordanian Engineering Corps with the help of Norwegian People's Aid (NPA), and “with shame” that similar steps are not taken on the Israeli side.⁵⁹ They witnessed the subsequent development of the land and the paving of roads on the Jordanian side, with no matching steps on the Israeli side.

In 2000, three drainage authority directors decided to take action. Drainage authorities maintain water channels and provide protection from floods and water erosion, which in these regions often contain landmines. Oved Dror for the Southern Jordan River, Ron Schwartz for the Dead Sea region and Ami Shacham for the Arava were frustrated by years of pressure that went unanswered, and decided the time had come to pursue legal action, with the aim of causing the Defense Ministry

⁵⁹ Norwegian Embassy in Jordan News, REC highlights efforts to combat Jordan Valley’s landmine legacy, Dead Sea, August 11, 2007: www.norway.jo/News_and_events/policy/NPA_cleared_50K_mines

to take responsibility for issuing and implementing a work plan for regional mine clearance.

In 2001, the drainage authorities took the case to the Supreme Court. In their petition they demanded that the State of Israel and the Ministry of Defense assume responsibility for creating landmine contamination in their regions and for solving it.

The Defense Ministry cited in its defense the danger that clearance poses to soldiers, as well as limited manpower and budget, and priority and liability issues. Subsequent years of negotiations over clearance of specific minefields did not yield results. Eventually, in 2006 the Court decided to dismiss the case and allow the Defense Ministry time to come up with safer and less expensive demining solutions, particularly in light of information provided by the Ministry that within a year a low cost mechanical solution for demining will most probably be found. The Court referenced the petitioners' right to appeal again if no action plan is prepared for demining in the following years.⁶⁰

Frequently Asked Questions

Can Israel really afford to demine?

Yes. Demining the whole country within a decade will cost less than 0.1 percent of the government's budget. A national action plan can spread the cost and activities over a reasonable number of years. In the long term the cost will be off-set by the profit that will arise from new development of cleared areas. Furthermore, countries which join the Mine Ban Treaty benefit from international cooperation and funding to advance demining. The United States, Norway, Canada, United Kingdom, Japan and other states all fund humanitarian demining projects around the world.

Doesn't Israel need these landmines for its security?

The IDF has already declared many of the existing minefields, including all the mines it laid along the Jordanian border, as non-operational, meaning they have no military purpose. It is worth noting that when planning the construction of the separation barrier, between Israel and the West Bank, then prime minister Ariel Sharon ordered the military not to place landmines along the barrier, as they will not contribute to security. In a February 10, 2010 Knesset plenary speech, MKs said that not only do landmines not serve any security purpose anymore, they actually infringe on security.⁶¹

⁶⁰ Israel Supreme Court Decision, Bagatz 9735/01: Southern Jordan, Dead Sea and Arava Drainage Authorities against the Minister of Defense et al., January 25, 2006

⁶¹ MK Zvulun Orlev, Motions for the Agenda, Knesset Plenum, February 10, 2010.

Isn't demining too dangerous—risking the lives of deminers?

Not really. The risk is significantly decreased through use of standard protocols, protective gear and detection technology, some of it developed in Israel. Demining is a long-standing practice and recognized profession regularly implemented around the world. Statistics show that demining is far less hazardous to the individuals carrying it out than other occupations, such as construction. When deminers follow standard procedures, the risk of an accident is very small indeed.⁶²

Several Israeli demining companies already operate in accordance with international safety standards. These companies actually demine elsewhere in the world. There is no reason why they cannot manage clearance here at home.

Isn't it difficult to demine in a terrain such as the Golan, and without proper maps from the Syrians?

About 400,000 Israeli-laid landmines had been cleared between 2002 and 2006 in South Lebanon, in a similar terrain to the Golan and without relying on mine maps, but rather using humanitarian demining methodology, by the United Nations Mine Action Service (UNMAS).⁶³

Isn't liability from potential future casualties in an area mistakenly pronounced mine-free too great to risk?

Humanitarian demining standards require that the land be certified as 99.8 percent cleared. There is always the risk of human error, but scores of mine-affected countries are managing successful and professional mine clearance projects daily.

Liability can be shared, and is for a fact shared in other countries, for example through an insurance mechanism that covers bodily injury or property damage suffered by third parties.

In Israel, successful ways of dealing with mine clearance and issues of liability already exist. For example, in 2005, minefields were cleared in East Jerusalem and at Koah Junction. Thousands of students and trekkers have since used those grounds freely and safely.

Finally, it should be remembered that non clearance of mines also creates liability. With hundreds of thousands of mines still buried in Israeli soil, the government is held responsible for evacuating people who enter minefields, and the National Insurance Institute (Bituach Leumi) is obligated to cover rehabilitation costs and compensate the injured. In fact, liability risk and insurance costs may be greater under the current situation, in which Israelis live in proximity to active minefields that could injure or kill civilians.

⁶² Demining Research, University of Western Australia, school.mech.uwa.edu.au/~jamest/demining/info/help.html

⁶³ Interview with Kerei Ruru, former UN Chief of Operations, MACCSL, January 15, 2010.

Appendices

Appendix I: Table of Mined Areas in Israel and West Bank

Mined Areas in Israel and the West Bank

Region	Location	Ownership	Potential Use	Size sq km	Level of contamination	Other info	Source	
Golan	Throughout Golan	State	parks, agriculture, devel	36+	high		Golan Council	
	Ein Gonen	State	nature reserve	3	partly mined		Mapping Center	
	Had Ness	Private	expansion of settlement	2	Partly cleared in 1998	close to houses	Maavarim	
	Had Ness Reservoir	State	water	1	partly mined		Mapping Center	
	Bnot Yaakov Bridge	State	nature reserve	5	Partly cleared in 1998	close to main road	Maavarim	
	Nahal Ein Gev	State	nature reserve		high		Deshe institute	
	Gamla	State	national park	½	partly mined		Mapping Center	
	Khan Toufiq	State	historical site		partly mined		Deshe institute	
	Mitspor Beit Saïda	State	nature reserve	½	partly mined		Mapping Center	
	Mitspor Negev Kinarot	State	nature reserve	5	partly mined		Deshe institute	
	Nukaib Beach	Private	public beach	½	partly mined		Deshe institute	
	Wadi Dvora	State	nature reserve				Mapping Center	
	Susita Reserve	State	nature reserve	5	partly mined		Mapping Center	
	Susita – Tel Atar	State	national park	1			Mapping Center	
	Yahudia	State					Mapping Center	
	Ein Kinia	Private	development, agriculture			partly mined	Golan for Development	
	Majdal Shams	Private	playground, developmer	½	partly mined	close to houses	Golan for Development	
	Masadeh	Private	grazing area		partly mined		Golan for Development	
	Bukata	Private	grazing area		partly mined		Golan for Development	
	Nahal Hermon	State	nature reserve	4	high	inc. Tel Azizyat	Mapping Center	
	Odem	State	development, agriculture	1	high		Mapping Center	
	Sha'al	State	development, agriculture	2	partly mined	close to houses	Mapping Center	
	Snir	State	nature reserve	3	partly mined		Mapping Center	
	Rajar	State	nature reserve				Mapping Center	
	Mordot Hagolan	State					Mapping Center	
	Tel Za'atar	State		½	partly mined		Mapping Center	
	Hirbet Nahila	State	historical site	¼	partly mined		Mapping Center	
	Har Baron	State	nature reserve	¼	high		Mapping Center	
	Metsokey Harev	State	nature reserve	5	partly mined		Mapping Center	
	Al Mansura, Al Hamra	State	grazing area	100+	suspected	unmarked	Al Haq	
	Galil	Har Dov						
		Nahal Misgav	State	nature reserve	¼	partly mined		Mapping Center
		Givat Egel	State	nature reserve	½	partly mined		Mapping Center
Nahal Betset							Mapping Center	
Rosh Hanikra							Mapping Center	
Hanita Forest		State	nature reserve				Mapping Center	
Har Avivim							Mapping Center	
Park Hayarden					partly mined		Mapping Center	
Gan Leumi Arbel		State	national park				Mapping Center	
Koah Junction		State	nature reserve	2 dunams	cleared in 2005		Israel's annual report to	
Jordan Valley	Nahal Yarmuch	State	nature reserve				Mapping Center	
	Meoz Haim – Geon Hayarden						Mapping Center	
	Hamadia – Geon Hayarden						Mapping Center	
	Kfar Rupin – Hurshat Yakum						Mapping Center	
	Tirat Tsvi – Hof Hashaket						Mapping Center	
	Um Zuka Reserve		nature reserve	3	high	along border	Mapping Center	
	Agamit Reserve	State	nature reserve	5	partly mined	close to houses	Mapping Center	
	East Gilboa-Nahal Bezek	State	nature reserve	3	high	recent death	Mapping Center	
	Qasr elYahud (Baptism Site)	State	Christian pilgrimage site		high	around ancient monaste	Mapping Center	
	Northern Jordan Valley	State	development	40 antitank fields	cleared in 2005		Israel report to UN	
	Kibbutz Geshher	State	tourism		cleared in 1999	Israeli mines	Maavarim	
	Jordan Park	State	tourism		cleared in 1998		Maavarim	
West Bank	Nahal Kfira	State	nature reserve		partly mined		Mapping Center	
	Wadi Malha-Nueime	State	nature reserve	10	partly mined		Mapping Center	
	Nahal Tirza	State	nature reserve	4	partly mined		Mapping Center	
	Geshher Adam	State	nature reserve	4	partly mined		Mapping Center	
	Surin – Soref	Private	development, agriculture		partly mined	close to houses	Mapping Center	
	Husan village	Private	playground, developmer	18 dunams	high	close to houses	Mapping Center	
	Mitspe Midrag	State	nature reserve	¼	high		Mapping Center	
	Al-Nabi Elias	State	development		partly cleared		Landmine Monitor 1999,	
	Ya'abad	State	development		partly cleared		Landmine Monitor 2000	
	Jerusalem	Har Adar	State	1200 new houses		Cleared in 1998	close to houses	Maavarim
Sur Baher		Private	development		Partly cleared in 2005	close to houses	Mapping Center	
Shfela	Ayalon Park	State	nature park		partly mined		Mapping Center	
	Nahal Kfira	State	nature reserve		partly mined		Mapping Center	
Negev	Ein Netafim	State	nature reserve	¼	high	near Egypt-Israel border	Mapping Center	
	Mashabei Sade/Tlalim	State	nature reserve	¼	high	close to houses	Mapping Center	
	Taba-border	State	nature reserve	¼	high	across Egypt-Israel bor	Mapping Center	
Arava	Dead Sea Factories	State	nature park	2	partly mined	erosion	Mapping Center	
	South Dead Sea-border	State		10	high	erosion, along border	Mapping Center	
	Ktura Reserve	State	nature reserve	¼	high	erosion	Mapping Center	
	Ktura Valley	State	nature reserve	3	partly mined	cluster bobmblets	Eilat Regional Council	
	Nahal Sheizaf	State				erosion	Mapping Center	
	Neot Hakikar – Ein Tamar	State	nature reserve	5	high	erosion, close to house	Mapping Center	
	Timna Park	State	nature park	3	partly mined		Mapping Center	
	Hatseva	State				erosion	Mapping Center	
	Nahal Idan – Hatseva	State	nature reserve	5	high	erosion, close to house	Mapping Center	
	Ein Yahav	State				erosion	Mapping Center	
	Evrona Reserve – border	State	nature park	3	high	erosion	Mapping Center	
	Grupit	State			partly mined	erosion	Mapping Center	
	Mlehat Yotveta-border	State		2	high	erosion	Mapping Center	
	Netafim-border	State	nature park	¼	high		Mapping Center	
	Tsomet Ha'arava	State	nature reserve	¼	high	erosion	Mapping Center	
	Nahal Tsafit	State	nature reserve	10	suspected	erosion	Mapping Center	

Appendix II: Table of Landmine Injuries 1999-2010

Landmine Injuries - Israel and Palestinian Territories 1999-2010

Area	Place	Injury	Year	Age	Name	Nationality	Other details	Source
Golan	Mt. Avital	leg amputated	2010	11	Daniel Yuval	Israeli	while playing in snow	Israeli media
Golan	Mt. Avital	sharpnel/burns	2010	12	Amit Yuval	Israeli	while playing in snow	Israeli media
East Gilboa	Sde Trumot	death	2009	24	Ali Agbaria	Arab-Israeli	dropped from helicopter	Israeli media
Golan	Meitsar	leg amputated	2009	35	Vichien	Thai		Israeli media
West Bank	Jenin	death	2008	24	Mahmoud Suarka	Palestinian	while farming	Israeli media
Negev	Ramat Hovav	death	2008	11	Amer Algadisi	Bedouin-Israeli		Israeli media
Negev	Shivta	lost arm	2008	42	(female)	Bedouin-Israeli	UXO	Israeli media
Negev	Hatserim	death	2008		(shepherd)	Bedouin-Israeli	UXO	Israeli media
Arava	Ketura	lost leg	2007		(IDF soldier)	Israeli	on duty	Israeli media
Arava	Eilat	minor injury	2007	24	Afif Granawi	Bedouin-Israeli	while clearing mines	Israeli media
Arava	Eilat	sharpnel/burns	2007		(IDF non-commissioned officer)	Israeli	while clearing mines	Israeli media
Arava	Eilat	unspecified injury	2006		(IDF soldier)	Israeli	on patrol	Landmine Monitor
Lebanon BorcYiffah		death	2006		Sargent Alex Asaf (Givati)	Israeli	on duty	Israeli media
Lebanon BorcYiffah		severe injury	2006		(IDF soldier, Givati)	Israeli	on duty	Israeli media
Lebanon BorcYiffah		leg amputated	2006		(IDF Major, Givati)	Israeli	on duty	Israeli media
Lebanon BorcYiffah		minor injury	2006		Col. Basem Alian (Givati)	Druze-Israeli	on duty	Israeli media
Lebanon BorcEastern Sector		lost leg	2006		IDF Soldier (Handasah)	Israeli	on duty	Israeli media
Gaza	Deir Al-Balah	death	2003	21	Matan Biderman	Israeli	on duty in tank	Btselem
Gaza	Deir Al-Balah	death	2003	19	Rotem Shani	Israeli	on duty in tank	Btselem
Gaza	Deir Al-Balah	death	2003	21	Ala Hubeishi	Israeli	on duty in tank	Btselem
Lebanon Border		unspecified injury	2000		(IDF soldier)	Israeli	while clearing mines	Landmine Monitor
Palestinian Territory		unspecified injury	2000		N/A	Palestinian		Landmine Monitor

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