

# Humanitarian Impact Evaluation: Battle-area Clearance in South Lebanon

After the 2006 conflict between Israel and Hezbollah, Handicap International sent battle-area clearance teams to South Lebanon to help clear the land of unexploded ordnance and other explosive remnants of war. This article is a report of the impact on the civilian population due to the conflict and the impact of the cleanup efforts by HI. It aims to provide narrative and statistical data to demonstrate the humanitarian impact of Handicap International's BAC efforts in South Lebanon from December 2006 to December 2007.

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Handicap International has been conducting battle-area clearance in South Lebanon since December 2006, following the conflict between Israel and Hezbollah in Lebanon in the summer of 2006. During the first year of clearance, HI cleared cluster-bomb submunitions from a variety of areas:

- Private homes and gardens
- Private agricultural land
- Public land used for grazing and natural resources
- Public resources, such as clinics

The clearance had wide social, psychological and economic benefits, which Handicap International documented through post-clearance data gathering and collection of personal stories.



HI BAC operator working in a banana plantation in the village of Borj El Shamali.  
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## General Information

Handicap International is a nongovernmental, non-religious, nonpolitical and nonprofit international organization specializing in the field of disability. HI has been present in Lebanon since 1992, implementing disability-related projects. Following the 2006 conflict between Israel and Hezbollah, HI deployed battle-area clearance teams in South Lebanon.

**UXO contamination in Lebanon.** Following the 2006 conflict, a vast number of unexploded cluster-bomb submunitions and other types of unexploded ordnance were scattered in South Lebanon. Recent information from the Lebanon Mine Action Center and Mine Action Coordination Centre–South Lebanon indicates that there were 965

cluster-bomb strikes in 447 areas covering 38.82 square kilometers (15 square miles).<sup>1</sup>

The data covers all accidents from different types of mines and UXO, and shows that the majority of accidents were among adult men, with the highest period for accidents immediately following the end of the conflict as men tried to clear their homes and farms to be reoccupied and utilized. UXO and mines injured or killed 78 men in August and September 2006.

**HI BAC project.** Beginning in December 2006, Handicap International established three battle-area clearance teams in South Lebanon to conduct surface and subsurface clearance of cluster-bomb submunitions in the Tyre area. The clearance goal was to rapidly reduce the risk and alleviate the socioeconomic impact posed by UXO to the local populations. Community-liaison officers supported the clearance activities by carrying out an assessment prior to clearance, and communicating with the community during clearance and at the time of the handover. The community-liaison officers completed an HI humanitarian impact assessment form, which measured and recorded the socioeconomic and psychological impact of clearance for beneficiaries. The data presented here is the result of the HI assessment forms and case studies that the community-liaison officers collected.

## Data

The HI community-liaison officers assisted MACC SL by collecting data for the Information Management Systems for Mine Action database. Specifically, the officers worked on the standard town data sheets, dangerous area forms and victim reports.

The community-liaison officers obtained further relevant background information on the affected towns/villages (e.g., population size and movements, main livelihoods or sources of income, and other socioeconomic concerns) and information about the explosive remnants of war problem in a specific community (history of local battles/conflicts). The community-liaison officers worked with the affected landowners, the village *muktars* (traditional authority figures) and other authority figures and established a collaborative relationship.

**Beneficiaries and affected population.** During the 2006 conflict, the vast majority of the communities in South Lebanon were evacuated. The internally displaced persons from these areas returned to their villages from August 2006 on and faced a drastically increased risk from UXO, including cluster-bomb submunitions, in their daily lives. The removal of UXO was essential for their return to normal life, for economic rehabilitation, and before reconstruction of destroyed and damaged properties could commence.

Civilian Casualties in South Lebanon (14 August 2006–30 December 2007)							
Victim Status	Boys 0–12	Girls 0–12	Boys 13–18	Girls 13–18	Men	Women	Total
Injured	18	2	46	5	110	14	195
Killed	4	0	1	0	20	1	26
<b>Total</b>	<b>22</b>	<b>2</b>	<b>47</b>	<b>5</b>	<b>130</b>	<b>15</b>	<b>221</b>

Table 1: Civilian accidents in South Lebanon



Destroyed building in the village of Al Bazuriah.

Displaced Persons from Contaminated Land Prior to Clearance	
Al Bazuriah	17,000 inhabitants
Burj al Shamaly	17,000 inhabitants
Burj al Shamaly	15,000 Palestinian refugees
<b>Total</b>	<b>49,000 people</b>

Table 2

HI was deployed to the so-called “Tyre pocket” for clearance tasks in Al Bazuriah and Burj al Shamaly. The areas cleared included private homes and gardens, public land, private agricultural land, and land used for health or governmental facilities. Table 2 describes the number of people displaced in the areas prior to clearance by HI during the reporting period.

During 2007, the majority of clearance work focused on Al Bazuriah, with a greater number of areas cleared for the purpose of rebuilding private homes and private agricultural land than for other purposes. This clearance allowed people to resettle and restart their economic livelihood (agriculture forms the basis of 40 percent of the economy for Al Bazuriah).

**Impact on agricultural land.** Handicap International calculated the number of landowners, farm workers and their dependents as the beneficiaries of agricultural land cleared. The number of farm workers including both owners of the land and the employees was 2,679. The number of dependents of the landowners and farmers was



13,710; therefore, the total number of beneficiaries from cleared agricultural land was 16,389 people. The total area of the agricultural land HI cleared was 233,269 square meters (58 acres).

The second most commonly cleared area by Handicap International was local agricultural land. The orchards HI cleared were utilized for the crops listed in Table 3, which shows that cleared orchards in 2007

Crops Produced from Cleared Orchards in 2007		
	Orchards Cleared	Projected Annual Profits in Post-Clearance Orchards (US\$)
Olive	11	15,500
Banana	1	120,000
Citrus	22	809,900
Fruit	3	7,200
Vegetable	2	4,500

Table 3: Displaced persons from contaminated land

were most commonly used for citrus trees. HI also asked landowners to project an estimated income that would be gained from the crops grown on cleared land, the expected harvest size and the selling price per kilogram to arrive at a projected profit from the cleared land. (See Table 3)

Handicap International asked all the farmers how they planned to use their income and for what purpose. Thirty-two of the landowners and farmers intended to use their income from the land primarily to support their general daily living needs. This indicates that the agricultural land was the main revenue for many households to meet basic living costs at a time when they were most financially vulnerable and insecure after the conflict. Others planned to use the income for education (16), agriculture (6), business (6), construction (3), and savings (3), and two had no specific plan for using the money.

**Impact on private homes.** HI cleared a total of 40 residential homes. The total number of beneficiaries residing in those homes was 462. Many people were fortunate to be able to access alternative accommodations or were able to rent elsewhere. About one-third (13) of families for whom HI cleared the land had no housing alternatives other than their own damaged and dangerous homes. More than half of the inhabitants of the households that were assisted by HI's BAC activities had previously been living in dangerous environments.

**Impact on public land.** Handicap International also cleared publicly owned or communal land. Some sections were open, wild areas that provided economic usage for the population. HI's BAC project returned to the population the option of undertaking activities such as:

- Shepherding
- Collecting wild fruit
- Hunting
- Collecting firewood

Additionally, some public land was locally used for specific social reasons. Through its

Case Study 1

Ali Mahmood Nisr is a landowner of an olive orchard and employs eight farm workers. His olive orchard of 4,500 square meters (1.1 acres) can expect to produce a harvest of 1,800 kilograms (2 tons) of olives in the months of September and October. The olives are sold to the local oil press to be processed for cooking oil. Nisr expects to gain a profit of US\$2,400 from the harvest to pay his workers and support his family. He has 12 dependent family members who rely on the income from the orchard and on his small income as a teacher. The approximate number of dependents Nisr's farm workers is 72 people. Handicap International cleared the orchard, enabling 13 people to resume work and a total of 84 dependents to benefit from it.

Case Study 2

Khalil Srour is a landowner of an orange orchard in Al Bazuriah. He previously earned an income from renting out the 80 square meters (94.7 square yards) of orchards to farmers; however, 30 percent of the orchard

was destroyed in the 2006 conflict, and the remaining land was covered with cluster-bomb submunitions, so no one was eager to rent it. Following clearance by HI, Srour was able to regain his income.

Case Study 3

Mohammed Karaouni is the head of a household based in Al Bazuriah. His household numbers seven people living in a single house. His household garden was contaminated with cluster-bomb submunitions until HI cleared it. HI found 27 submunitions in Karaouni's 600-square-meter (718-square-yard) garden.

While the clearance was ongoing, Karaouni and his family lived elsewhere with relatives. The clearance of his home was a tremendous relief to him and his family as one of Karaouni's daughters is blind and the property was especially dangerous for her.

Case Study 4

In South Lebanon, it is customary for people to visit the graves of relatives on a weekly basis and read the Quran at

the graveside. In Al Bazuriah, there are four graveyards, one of which was contaminated by cluster-bomb submunitions. Determined visitors continued to enter the contaminated graveyard following the war, putting themselves at risk until it was cleared by HI BAC teams.

Case Study 5

HI BAC teams cleared a Lebanese Red Cross clinic in Al Bazuriah, which served a geographical coverage area of a 70-kilometer (44-mile) radius. Cluster-bomb submunition blasts had left several holes in the clinic roof, making it unsuitable for use, especially in the winter that followed the end of the conflict. After clearance of unexploded cluster-bomb submunitions, the clinic roof was renovated. At the time of clearance, the clinic had 480 patients in its beds and five medical staff.

The clinic is the only medical center that delivers health services related to women only, such as mammography, gynecology and prenatal care. The closest alternative clinic offering similar treatment is in Beirut, 90 kilometers (56 miles) away.

clearance work, HI returned to the population the possibility of using the public land as:

- Picnic areas
- Sports grounds
- Cemeteries

In total, HI cleared seven areas that were publicly owned land. A total of 87,305 square meters (22 acres) of public land was cleared. HI estimated the beneficiaries of this clearance to be the total resident and refugee populations of Al Bazuriah and Burj al Shamaly (49,000 people). Cleared land in these areas was expected to be used for shepherding, collecting wild fruit, sports or recreation and a cemetery.

HI BAC Success

As of 14 December 2007, a total of 608,569 square meters (150 acres) of land had been cleared by HI BAC teams. A variety of people were shown to be direct beneficiaries of the newly cleared lands (see Table 4).

BAC activities HI conducted in the villages of Al Bazuriah and Burj al Shamaly during 2007 had direct humanitarian benefits for the residents and local communities in general. The end use of the cleared land was primarily for agricultural activities by small farmers and for private residences. HI also cleared land for public use.

The process of battle-area clearance is time-consuming and conducted under difficult and dangerous physical circumstances, a fact appreciated by the affected communities. Handicap International was able to return the cleared land to local citizens, who could trust in its safety, enabling affected communities to again begin to thrive.

Community-liaison efforts were not always straightforward as rural communities were under significant pressure to resume their daily agricultural activity and to return to their homes after the bombings ceased in August 2006. The ongoing insecurity (both economic and psychological) put great stress on ordinary people. They felt a need to resume economic activity despite the dangers from the remaining UXO.

Handicap International continues to operate in South Lebanon conducting humanitarian BAC. Since December 2007, HI has been clearing contaminated land in the villages of Aytit, As Sawanah and Deir Amis, and it is committed to continuing to rid Lebanon of explosive remnants of war. 🚫

See Endnotes, page 111



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