Facts on the Ground:
Heavy Engineering Machinery and the Israeli Occupation

Report by
Who Profits Research Center
July 2014
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Who Profits from the Occupation is a research center dedicated to exposing the commercial involvement of Israeli and international companies in the continued Israeli control over Palestinian and Syrian land. Currently, we focus on three main areas of corporate involvement in the occupation: the settlement industry, economic exploitation and control over population. Who Profits operates an online database which includes information concerning companies that are commercially complicit in the occupation. Moreover, the center publishes in-depth reports and flash reports about industries, projects and specific companies. Who Profits also serves as an information center for queries regarding corporate involvement in the occupation – from individuals and civil society organizations working to end the Israeli occupation and to promote international law, corporate social responsibility, social justice and labor rights.

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# Table of Contents

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduction</td>
<td>9</td>
</tr>
<tr>
<td>Methodology</td>
<td>12</td>
</tr>
<tr>
<td>House Demolitions</td>
<td>13</td>
</tr>
<tr>
<td>Administrative Demolitions</td>
<td>13</td>
</tr>
<tr>
<td>Punitive Demolitions</td>
<td>15</td>
</tr>
<tr>
<td>Military and Land-Clearing Demolitions</td>
<td>15</td>
</tr>
<tr>
<td>Large-Scale Demolitions in Gaza</td>
<td>17</td>
</tr>
<tr>
<td>The “Pressure Cooker Procedure”</td>
<td>19</td>
</tr>
<tr>
<td>A Broken Home: The Effects of House Demolitions</td>
<td>20</td>
</tr>
<tr>
<td>Tearing Down the House: The Execution of House Demolitions</td>
<td>24</td>
</tr>
<tr>
<td>Demolition Contractors</td>
<td>25</td>
</tr>
<tr>
<td>Demolition as a Turn-Key Project</td>
<td>29</td>
</tr>
<tr>
<td>Demolitions in the Negev (Naqab): The Story of Al-Araqib</td>
<td>31</td>
</tr>
<tr>
<td>Section</td>
<td>Page</td>
</tr>
<tr>
<td>--------------------------------------------------------------</td>
<td>------</td>
</tr>
<tr>
<td>Military Use of Engineering Tools</td>
<td>34</td>
</tr>
<tr>
<td>The D9</td>
<td>34</td>
</tr>
<tr>
<td>Other Caterpillar Military Engineering Tools</td>
<td>36</td>
</tr>
<tr>
<td>The HMEE and the Military 1CX</td>
<td>37</td>
</tr>
<tr>
<td>The Sahar or Robotic Bobcat</td>
<td>38</td>
</tr>
<tr>
<td>Roadblocks, Collateral Damage, Vandalism and Crowd Control</td>
<td>38</td>
</tr>
<tr>
<td>Construction of Settlements</td>
<td>42</td>
</tr>
<tr>
<td>Construction of the Wall and Checkpoints</td>
<td>47</td>
</tr>
<tr>
<td>Manufacturers of Engineering Machinery</td>
<td>52</td>
</tr>
<tr>
<td>Bobcat</td>
<td>52</td>
</tr>
<tr>
<td>Caterpillar</td>
<td>54</td>
</tr>
<tr>
<td>CNH Industrial</td>
<td>55</td>
</tr>
<tr>
<td>Doosan</td>
<td>60</td>
</tr>
<tr>
<td>Hidromek</td>
<td>61</td>
</tr>
<tr>
<td>Hitachi</td>
<td>62</td>
</tr>
<tr>
<td>Hyundai</td>
<td>64</td>
</tr>
<tr>
<td>JCB</td>
<td>66</td>
</tr>
<tr>
<td>Liebherr</td>
<td>68</td>
</tr>
<tr>
<td>Terex</td>
<td>69</td>
</tr>
<tr>
<td>Volvo</td>
<td>71</td>
</tr>
<tr>
<td>Conclusion</td>
<td>74</td>
</tr>
<tr>
<td>Annex A - Caterpillar Response</td>
<td>76</td>
</tr>
</tbody>
</table>
The image of a yellow bulldozer\(^1\) digging into the soil of the occupied Palestinian territories (OPT) has become one of the most iconic representations of the Israeli occupation. Unlike many hidden control methods and uses of force originating in the world of regulation and bureaucracy, the operation of heavy machinery on occupied Palestinian land has a rare visibility. Heavy construction machinery is characterized by slow and restricted movement and robust strength. These tools are designed to exert power in order to execute construction and earthwork tasks; when used by the Israeli army, Israeli authorities, settlers or corporations in the OPT, they become an important – and visible – component of the occupation mechanism.

Since the start of the 1967 occupation, Israel has used heavy construction machinery in order to strengthen its hold over the Palestinian territories and Palestinian people by “establishing facts on the ground.” Excavators and loaders were and still are reshaping the landscape: building the infrastructure for the illegal Israeli settlement project; separating Palestinian communities from each other by creating roadblocks, barriers and apartheid roads; and demolishing thousands of Palestinian houses, public buildings and commercial properties in order to restrict the development of towns and villages and as a punitive measure. Among the many human rights violations perpetrated by Israel through the use of

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\(1\) A bulldozer is a continuous track tractor equipped with a metal blade; however, the term is often used to describe any heavy construction machinery. This report will distinguish between the different types of heavy machinery, but when quoting eyewitnesses, media reports and publications will use the term in the meaning attributed to it by the sources, as a generic name.
construction machinery in the OPT, one can identify four main categories of involvement in the occupation: house demolitions, military use and control of population, settlement construction and the construction of the wall and the checkpoints. The following report will provide an in-depth description of these different categories of involvement.

As there is hardly any local industry specializing in the manufacturing of construction equipment and capable of supplying the local demand, the Israeli heavy machinery market is based on import. Thus, most of the construction machinery sold in Israel is manufactured in Western Europe (primarily in the United Kingdom, Sweden and Germany), the United States, Japan, South Korea and Turkey; and is distributed through Israeli representatives. Local distributors sell some of the imported machinery to the Israeli army and authorities; however, the greater portion of their revenues is generated from sales to public and private Israeli construction companies.

A Caterpillar bulldozer is seen demolishing one of the houses in the former Palestinian village of Imwas | Imwas, Latrun Enclave | 10 June 1967 | Photo by Yosef Hochman

Who Profits made every possible effort to obtain permission to use each of the photographs featured in this report. In the exceptional case of a photograph used without permission, this was done only after repeated and extensive attempts to contact the photographer to no avail.
Despite the fact that the international community has never recognized Israeli sovereignty over the OPT and that the settlements are illegal under international law – as an occupying power is prohibited from transferring parts of its civilian population into the occupied territory³ – the Israeli government and the vast majority of Israeli corporations consider the Israeli presence in the OPT to be legitimate. The latter support the occupation and profit from it by conducting routine commercial activities in the occupied Palestinian territories. The Israeli distributors of imported construction machinery are no exception to this rule: the only element that distinguishes the heavy machinery industry from other sectors of the global economy is the prominent presence of its products in recurring commission of breaches of international law and the clear-cut involvement in human rights violations.

Most of the foreign manufacturers of construction machinery included in this report champion corporate social responsibility policies or ethical codes. Considering the ethical difficulties inherent to operations in the Israeli market, these corporations ought to address the wrongdoings carried out by using their products and the consequent grave ramifications on the lives of Palestinians.

³ Article 49 of the Fourth Geneva Convention (12 August 1949) and United Nations Security Council Resolution 446 (22 March 1979). In Resolution 446, the UN Security Council “determines that the policy and practices of Israel in establishing settlements in the Palestinian and other Arab territories occupied since 1967 have no legal validity and constitute a serious obstruction to achieving a comprehensive, just and lasting peace in the Middle East.” In its advisory opinion on the “Legal Consequences of the Construction of a Wall in the Occupied Palestinian Territory” (9 July 2004), the International Court of Justice “concludes that the Israeli settlements in the Occupied Palestinian Territory (including East Jerusalem) have been established in breach of international law” (p. 52 of the advisory opinion).
Methodology

This report is based on both desk and field research. The desk research included the collection and analysis of information from various public sources, such as company records and publications, newspapers and other media sources, archives of photography agencies and publications by state authorities (including Israeli government ministries). Some of these sources are publicly-available records, while others were obtained by queries filed under Israel’s Freedom of Information Act. The desk research also included interviews with local NGOs dealing with human rights violations in the OPT.

The field research consisted of visits to Israeli settlements, settlement industrial zones and construction sites of the separation wall and checkpoints in the West Bank.

Prior to publication, we contacted all companies mentioned in this report requesting their comments and responses. On 2 August 2014, Caterpillar’s Media Relations department contacted Who Profits. The full statement is attached in Annex A at the end of the report. No other responses were received as of the date of publication.
Since 1967, Israel has demolished more than 28,000 Palestinian houses, public buildings and private commercial properties in the occupied Palestinian territories. In part these demolitions were carried out by using explosives, but most of them were executed using heavy construction machinery. This massive, man-made destruction is not a side effect of the occupation but a fundamental element in a control mechanism, designed to tighten the Israeli hold on East Jerusalem, the West Bank and Gaza Strip.

The primary motivation behind the demolitions is political, as they enable the clearing of land from its inhabitants, forcing the Palestinians into narrow, overpopulated, poverty-stricken and isolated segments. Demolitions, planned or impulsive, also serve as a means to terrorize the Palestinian population and deter it from resisting the Israeli control over the OPT. According to the Israeli Committee Against House Demolitions (ICAHD), an NGO that has been documenting demolitions since 1997, there are three distinct types of house demolitions: administrative, punitive and military.

An administrative demolition is the demolishing of houses and structures for lack of a building permit. This happens in Area C and in East Jerusalem, which are under exclusive Israeli authority, though prior to the Oslo Accords and the division of the West Bank into Areas A, B

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4 Adv. Emily Schaeffer, Jeff Halper and Itay Epshtain, “Israel’s Policy of Demolishing Palestinian Homes Must End: A Submission to the UN Human Rights Council,” Israeli Committee Against House Demolitions (ICAHD), March 2012.

and C it also took place in other areas. Israeli authorities justify this type of demolition by stating that Palestinians are violating the zoning and planning laws and that the demolitions are merely law enforcement. In reality, Palestinians have virtually no means to build legally, because permits are almost impossible to obtain.

The Civil Administration prohibits Palestinian construction on some 70% of Area C in the West Bank and designates this land almost exclusively for settlements, military use and Israeli infrastructure facilities. In East Jerusalem, since 1967 Israel has expropriated 35% of the land for the purpose of constructing new settlement neighborhoods. Palestinian construction is also prohibited in most of the remaining land due to the fact that the Israeli authorities avoid approving outline plans (a valid outline plan is required for issuing permits), or because large portions of this land were designated as “open spaces” or “green spaces,” where construction cannot take place. Hence, only a fraction of East Jerusalem land is even theoretically available for construction. The small number of Palestinians who can apply for a permit under this restrictive planning policy still have to face a process tailored for Israelis, meaning extraordinary legal, financial and bureaucratic obstacles for a Palestinian applicant.

Under these circumstances, Palestinians have very limited options: they can crowd into existing houses; leave their towns and villages and emigrate to another country; or build illegally. Most of them choose to build illegally and live in constant fear of indictments, heavy fines for building violations and demolition orders. Administrative demolitions

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7 “Demolishing Homes, Demolishing Peace” (supra note 5).
9 “Restrictions on Palestinian Planning,” Ibid.
11 Ibid.
12 According to the annual reports published by the Jerusalem Court for Local Affairs, in 2000-2010 the Jerusalem Municipality has collected more than NIS 220 million in fines for building violations. These fines constitute a significant component of the municipal budget, providing an incentive for the municipality to seek out offenders and bring them to court – often resulting in demolition orders. These fines also serve as one of the main reasons for the economic hardship in East Jerusalem and are directly linked to the fact that 65% of the families live below the poverty line. A conversation with Dr. Meir Margalit – a former member of the Jerusalem City Council, Meretz party, 22 April 2014, on file with Who Profits.
account for approximately 23% of all demolitions documented in the OPT since 1967.\textsuperscript{13}

A punitive demolition is the destruction of Palestinian houses as a punitive measure. The declared objective of this type of demolition is deterrence – by hurting the relatives of Palestinians who had been suspected of a wide array of actions, from political organizing to attacks on Israeli civilians. The main victims of these demolitions are innocent family members, including women and children, who bear no responsibility for the acts committed by their relatives.\textsuperscript{14}

According to figures published by ICAHD in 2012, punitive demolitions account for only 6% of all demolitions.\textsuperscript{15} This policy was suspended by the Israeli army in February 2005, after it had reached the conclusion that punitive demolitions are not an effective deterrent and only inflame the Palestinian public. Nevertheless, the practice was resumed in January 2009. Since 2009 the practice has rarely been used; however, on 23 June 2014, a demolition order was issued, as a punitive measure, for the house of Ziad Awad, suspected of killing police officer Baruch Mizrahi in April 2014. Prime Minister Binyamin Netanyahu was quoted as saying that he personally approved this order: “I gave the directive to destroy the home of the terrorist, a Hamas man, as part of the general effort to combat Hamas,”\textsuperscript{16} noting that the decision would have to be approved first by the High Court of Justice. The High Court authorized this measure and on 2 July 2014, Awad’s house, which is owned by his brother, was demolished.\textsuperscript{17} Israeli media then reported that the military is considering demolishing dozens of Palestinian houses in the West Bank, claiming that “prison time is not an adequate deterrent for crimes.”\textsuperscript{18}

Military and land-clearing demolitions are when houses, cultivated land and other property are demolished by the Israeli army in the course of military operations for purposes of clearing off a piece of land, accessing a particular target in a densely populated area, achieving a military goal

\textsuperscript{13} This figure is based on ICAHD data, which refers to all demolitions documented by the organization between 1967 and February 2012. “Demolishing Homes, Demolishing Peace” (supra note 5).

\textsuperscript{14} B’Tselem, “Background on the Demolition of Houses as Punishment,” 1 January 2011.

\textsuperscript{15} “Demolishing Homes, Demolishing Peace” (supra note 5).


\textsuperscript{18} Chaim Levinson, “IDF Planning to Demolish Homes of Dozens of Palestinian Militants in West Bank,” Haaretz, 4 July 2014.
or killing alleged Palestinian suspects.\textsuperscript{19} The Israeli army asserts that all these actions are security or military necessities.

The criteria used by the Israeli army to define military or security needs are extremely broad and often contradict the laws of war, which strictly forbid the destruction of buildings, except for imperative operational military needs.\textsuperscript{20} Regulation 23\textsuperscript{(g)} of the Hague Regulations clearly states: “It is especially forbidden [to] destroy or seize the enemy’s property, unless such destruction or seizure be imperatively demanded by the necessities of war.”\textsuperscript{21} Article 53 of the Fourth Geneva Convention stipulates that: “Any destruction by the Occupying Power of real or personal property belonging individually or collectively to private persons, or to the state, or to other public authorities, or to social or cooperative organizations, is prohibited, except where such destruction is rendered absolutely necessary by military operations.”\textsuperscript{22}

Over the years, rulings of the Israeli High Court of Justice (HCJ) accepted the Israeli authorities’ reasoning and allowed demolitions for a variety of “security needs,” among them: the building or expansion of roads, barriers and other infrastructure for the benefit and protection of Israeli settlers or soldiers; “preventive demolitions,” which may include any house or property near Israeli settlements, army positions and roads used by Israeli settlers and soldiers;\textsuperscript{23} and carrying out arrests of Palestinian suspects, including the brutal “pressure cooker procedure” (which will be described below). Military demolitions account for about 47\% of defined demolitions.\textsuperscript{24}

\begin{flushleft}
\textsuperscript{19} Demolishing Homes, Demolishing Peace” (supra note 5).
\textsuperscript{21} Convention (IV) Respecting the Laws and Customs of War on Land and its annex: Regulations concerning the Laws and Customs of War on Land, The Hague, 18 October 1907.
\textsuperscript{22} Convention (IV) Relative to the Protection of Civilian Persons in Time of War, Geneva, 12 August 1949.
\textsuperscript{23} According to Amnesty International: “When carrying out preventive demolitions “the Israeli army frequently targets several homes, and on a number of occasions tens or even scores of homes have been destroyed in one single operation. Even though the Israeli authorities claim that the destruction is intended to prevent future attacks from the area, such demolitions are often also manifestly carried out in retaliation for Palestinian attacks and as a form of collective punishment on the inhabitants of a given area.” Amnesty International, “Under the Rubble: House Demolition and Destruction of Land and Property,” 17 May 2004, p. 8.
\textsuperscript{24} “Demolishing Homes, Demolishing Peace” (supra note 5).
\end{flushleft}
Large-Scale Demolitions in Gaza

Nowhere did the security considerations of the Israeli army receive an all-inclusive interpretation as in the Gaza Strip, where thousands of houses were razed to the ground for the sake of Israeli soldiers’ safety. Prior to Israel’s “disengagement” from Gaza, the Israeli army employed a policy of demolishing houses and destroying agricultural land in areas surrounding settlements and army positions, mostly along the Egyptian border, in order to create so-called “buffer zones.” Demolitions were usually conducted at night, without any prior notice to the Palestinian residents, who were forced to flee and leave all of their belongings under the rubble. In many cases, the only warning about the imminent demolition was the sound of the approaching bulldozers.

This aggressive policy is termed “clearing” or “flooring” and it reached a peak in January 2009, during Operation Cast Lead. During the attack on Gaza, Israel carried out massive-scale house demolitions along the routes of the Israeli army forces’ movement. According to UN figures, 3,540 houses were completely destroyed during the operation, displacing approximately 20,000 persons (as of July 2009). In several neighborhoods, large-scale destruction of property took place after Israeli forces had already gained effective control over the area and in the absence of ongoing fighting. According to Human Rights Watch: “In the neighborhoods of Izbt Abd Rabbo, Zeitoun and Khoza’a, virtually every home, factory and orchard had been destroyed within certain areas, apparently indicating that a plan of systematic destruction was carried out in these locations.”

Another recurring pattern evident in the scope of destruction in Gaza during Operation Cast Lead was that the protection of Israeli soldiers took precedence over any other consideration, including avoiding harm to Palestinian civilians. This policy did not solely rely on the legal backing

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25 “Under the Rubble” (supra note 21), pp. 1, 8.
29 Ibid.
Heavy Engineering Machinery and the Israeli Occupation of the Military Advocate General, but also on an official ethical code of conduct for “fighting terrorism,” developed by the Israeli Philosopher Prof. Asa Kasher.\(^{30}\) One of the Israeli soldiers who participated in Operation Cast Lead testified about the influence of Prof. Kasher’s ethical code over the combat on the ground:

The Asa Kasher doctrine of zero risk to soldiers also affects the way you treat buildings and people in the field. It means that the ideal space for an IDF soldier to be in is [...] an open area. If there’s an agricultural structure or something like that here, it’s razed to the ground. At some point, the number of D9s (bulldozers) out there was insane. [...] I don’t remember the number, the amount, but they razed entire areas to create an open space, under the assumption that if we’ve made the area look like this, no one from Hamas will take the risk of being spotted there, since our infantry troops have such a huge advantage in terms of defense, offense, everything.\(^{31}\)

The interviewer asks if this policy was explicit: “Is that something that was said – raze areas in order to protect our soldiers?” The interviewee confirms: “Of course. It’s literally part of the work procedure.” He describes the military method as “‘flooring, razing, evacuating and cleaning” and when asked to explain the term “flooring” he notes: [It means] bringing every structure down to floor level.”\(^{32}\)

As reflected in numerous testimonies by Palestinian civilians and Israeli soldiers, the Caterpillar D9 armed bulldozers were a key tool in the execution of the Israeli army’s zero-risk policy during Operation Cast Lead. Dozens of these engineering vehicles, unmanned or operated by soldiers, razed almost a thousand houses in order to ensure maximum safety for the Israeli forces operating within Gaza.\(^{33}\) It seems that the


\(^{32}\) Ibid.

\(^{33}\) The Human Rights Watch report “I Lost Everything” (supra note 26) includes multiple testimonies of Palestinian civilians and Israeli soldiers on demolitions executed using military bulldozers. Most of the soldiers’ testimonies specifically refer to the Caterpillar D9 bulldozers, while the Palestinians describe
devastation inflicted upon the Palestinian population was negligible in the eyes of the Israeli high command.

The Israeli army’s enthusiastic attitude toward the use of military bulldozers is manifested in the words of former Chief of Staff, Gabi Ashkenzi; while participating in a military drill in 2011, before his retirement, he explained to an Israeli reporter why he is particularly excited about these machines: “In the end, it [the D9] has an answer to all obstacles. And it doesn’t stop.”

The “Pressure Cooker Procedure”

Military engineering machinery is an essential component in a notorious technique for the arrest and sometimes extrajudicial killing of Palestinian suspects, known as the “pressure cooker procedure.” This procedure was initially developed in order to handle hostage-takers barricaded inside a building, but during the Second Intifada it was modified and used against Palestinian suspects entrenched inside a house with no hostages. The procedure’s objective is the surrender or killing of the suspect, preferably without injuring other civilians while minimizing risk to the Israeli soldiers.

The pressure cooker procedure includes the use of gradually escalating measures. First, the soldiers surrounding the house use a megaphone or a loudspeaker to order any persons inside to evacuate it immediately. In case a suspect remains inside the house, the soldiers start shooting at the building, beginning with small arms, continuing with machine guns and rocket-propelled grenades (RPG) and finally firing tank shells into the house. If the suspect survives and still refuses to turn himself in, an armored bulldozer or excavator is sent to the scene. The

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34 Alon Ben David, “Staff Bids Farewell to the Ground Forces” [in Hebrew], Channel 10 News, 2 February 2011.
35 A description of the procedure’s escalating steps can be found in a decision granted by the HCJ, Civil Appeals Authority case no. 6706/11, Article 2 [in Hebrew]. For an English summary of the court’s decision, which denied the request for leave to appeal by the Palestinian owners of a building destroyed under the pressure cooker procedure and accepted the District Court’s definition of the specific incident as “wartime action,” see HaMoked’s website: www.hamoked.org/Document.aspx?dID=Updates1282.
boulozer initially shakes the house and then starts peeling off the walls of the floor in which the suspect is located, ultimately destroying the house and burying the suspect beneath it.\(^{36}\)

There are no official figures on extrajudicial killings carried out using the pressure cooker procedure, but Israeli media reports from the past decade mention several people killed by it.\(^{37}\) The last known victim of this procedure was 24-year-old Muataz Washaha, a resident of the town of Birzeit, who was wanted by the Israeli army for “suspected terror activity.” On 27 February 2014, Israeli soldiers and police entered Birzeit in order to arrest Washaha, who was barricaded inside a house and refused to surrender himself. After several hours, the Israeli forces knocked down part of the building with an armored excavator and opened fire. Washaha’s body was found shortly afterwards.\(^ {38}\)

Although heavy engineering machinery clearly plays a significant role in the human rights violations caused by different types of house and property demolitions, its brutal use in the framework of the pressure cooker procedure upgrades it from a potentially deadly tool to a lethal weapon used systematically for extrajudicial killings.

### A Broken Home: The Effects of House Demolitions

House demolitions are undeniably intertwined with the forced displacement of persons. Israel uses house demolitions as a means for pushing the Palestinian population out of different areas in the OPT. The UN described house demolitions as “the main trigger for displacement”\(^ {39}\) in Area C and Palestinian and Israeli NGOs noted that demolitions

\(^{36}\) An Interview with the engineering officer of the army’s Menashe Territorial Brigade: Yael Livnat, “Preparing also for Extreme Scenarios: Central Command Trains for Handling a Terrorist Blockaded in a Building” [in Hebrew], IDF website, 20 March 2013; Shahar Fisher, “Monsters of Glory” [in Hebrew], BaMahane (a weekly magazine published by the IDF), 2005 [specific date unknown].


\(^{39}\) “Fragmented Lives” (supra note 8), p. 27.
enhance Israeli control over the OPT and effectively block any viable Palestinian state.40

Devastating as the demolition policy might be for Palestinian statehood, its impact on the daily lives of many Palestinian families is even graver. Demolitions lead to a significant deterioration in the living conditions of the affected people, many of whom had already been living in poverty prior to the destruction of their homes. For families and communities, the loss of a house – which is not only a financial asset but also a safe haven – means increased poverty and long-term instability, as well as restricted access to basic services such as education, healthcare, water and sanitation.41 Homelessness also takes its toll on the family structure, because the search for an immediate housing solution often leads to crowding in small spaces or the separation of family members, who are scattered among houses of different relatives.42

Members of the Al-Sharabi family standing on top of the rubble of their destroyed house | Beit Hanina, East Jerusalem | 13 July 2010 | Photo by Activestills

The impact of house demolitions on children can be particularly devastating. The criminologist and feminist researcher Nadera Shalhoub-Kevorkian explains the influence of demolitions on children: “When a child’s house is demolished, she or he loses her or his bed, books, toys, clothes, neighbours and friends. Children must accept and adapt to living with relatives, moving to a new environment, place and space, change schools, witness their family’s loss.” As a result, many children display symptoms of post-traumatic stress disorder, depression and anxiety. Their educational achievements also frequently deteriorate.

Women are another vulnerable group suffering from distinct and severe effects of house demolitions. According to Shalhoub-Kevorkian:

> Within the highly oppressive Israeli militaristic regime, the home is one of the few places where Palestinian women can find solace. As the only place for refuge, the home is a place for personal growth and community-building. As such, the home is an oppositional site within a military-state patriarchy and a place where Palestinian women can be safe from the ‘dual spheres of racism and sexism.’

> Precisely because of its importance as a safe space, a house demolition has particularly harsh implications on Palestinian women. Shalhoub-Kevorkian notes that “when a woman’s house is demolished, her loss affects her bodily safety, privacy, mobility, lifestyle, welfare, physical health, psychological wellbeing and system of social support.”

Women who experienced demolitions reported feelings of anxiety and constant fear of losing their homes, family members and ability to provide for their children. They also struggled with the loss of privacy and bodily safety due to the need to share a crowded living space with their extended family. Others expressed fear for their physical safety and reported that they sleep fully dressed, afraid of abuse and the potential

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44 “Fragmented Lives” (supra note 8), p. 27.
45 Shalhoub-Kevorkian (supra note 40), p. 12.
46 Ibid., p. 6.
return of bulldozers coming to demolish the house. In many cases, the demolition also affects decisions concerning women’s futures. The economic difficulties facing displaced families drive some young women to accept an early marriage proposal and to refrain from applying to universities. 47

47 Ibid., pp. 9-10.
Tearing Down the House: The Execution of House Demolitions

The different types of demolitions are executed through different courses of action, involving varied private, governmental and military actors. Administrative demolitions differ according to the geographical location of the house subject for demolition. In East Jerusalem, the municipality and the Ministry of Interior are in charge of issuing administrative demolition orders. Both authorities are also responsible for filing criminal complaints for building violations and for the resulting judicial demolition orders. In Area C, the authority issuing demolition orders is the Civil Administration, a unit of the Coordinator of Government Activities in the Territories (COGAT), which is under the authority of the Ministry of Defense.

The execution of demolitions in East Jerusalem is not carried out directly by the municipality, which only handles the bureaucratic procedure. The actual demolition is performed by outsourced contractors, who provide the heavy machinery and the workers who remove the residents’ belongings from the house before the demolition. The municipality hires the contractors through a tender, which is renewed annually; the overall demolition budget for the years 2000-2010 was NIS 18.5 million.

Like the municipality, the Ministry of Interior also outsources the demolitions to external contractors. A tender for demolition services, published by the ministry for the year 2012, allows annual renewal for the winning contractor, for a period of four years. The tender specifies

48 For further information about the differences between the two kinds of demolition orders, see: “A Layman’s Guide to Home Demolitions” (supra note 8).
50 According to Margalit, “this amount includes the cost of operating bulldozers, hiring contractors to remove movable structures and taking and analyzing aerial photos to detect illegal construction. It doesn’t include the inspectors’ salaries, the use of patrol vehicles and the salary of the lawyers who prepare the indictments and present them in court.” Ibid.
the contractor’s obligations, including an early tour of the demolition site, as well as providing and operating heavy construction machinery and personnel for the eviction of the structures.\footnote{Ministry of Interior – National Unit for the Inspection of Construction, Tender No. 51/2011, “Execution of Structure Demolition Works (Contract)” [in Hebrew], 8 December 2011.} There is no available data regarding the ministry’s demolition budget in East Jerusalem. According to an estimate by former city council member Dr. Meir Margalit, it amounted to approximately half a million shekels per year.\footnote{This estimate refers to the years 2000-2010. Based on a conversation with Dr. Meir Margalit, (supra note 12).}

The demolition costs are often imposed on the owners of the demolished house, aggravating the financial situation of the now homeless family. Consequently, many Palestinians choose to demolish their own homes by themselves.

### Demolition Contractors

#### Yaaz Construction & Development

Yaaz Construction & Development is one of the private Israeli companies contracted by the Jerusalem Municipality for demolitions (see note 49). The headquarters of this construction, development and demolition company are located in Tel Aviv. It was founded in 1971 and soon after that established itself as a contractor for security-related construction works. The company initially engaged in the construction of a separation fence between Eilat and Aqaba on the Israeli south-eastern border and in the construction of the Bar Lev Line\footnote{“About Yaaz” [in Hebrew], Yaaz website, accessed on 13 May 2013.} – a chain of fortifications built by Israel along the eastern coast of the Suez Canal in the Sinai Peninsula, which was captured from Egypt during the 1967 War.

Today, the company holds long-term contracts with the Jerusalem Municipality and the Israel Land Administration for performing house demolitions. On its website, the company states that “for the past four years” it has a long-term contract with the Jerusalem Municipality for the demolition of illegal structures of one to eight floors throughout the city (it is not stated when this was written). Evidence compiled by Who Profits locates the company in demolition sites on the eastern side of the city as early...
In March 2007, for example, the company demolished a five-story building in the Palestinian neighborhood of Tzur Baher in East Jerusalem (see photos below). The excavators used by the company for demolishing Palestinian houses were manufactured by Volvo, Caterpillar and Daewoo (today: Doosan Infracore).

A demolition preformed by Yaaz, as it appears in a gallery on the company’s website presenting demolitions performed for the Jerusalem Municipality.

On 13 March 2007, the Activestills photography collective documented the same demolition in the Palestinian neighborhood Tsur Baher, East Jerusalem. The excavators captured in these photos were manufactured by Volvo and Caterpillar.

54 On file with Who Profits.
55 “Jerusalem Municipality” [in Hebrew], Yaaz website, accessed on 13 May 2013.
Children from the neighboring house watch a Volvo excavator during the demolition | Tsur Baher, East Jerusalem | 13 March 2007 | Photo by Activestills

On its website, the company also specifies the nature of services provided to the Israel Land Administration, which is responsible for demolitions within the Green Line: “Routine demolitions of structures across the country, including the demolition of temporary structures of the Bedouin in the north and the south of the country.” In this framework, the company executed the seventh and eighth demolitions of the unrecognized Bedouin village of Al-Araqib in the Negev (Naqab) desert, which has been repeatedly demolished by Israeli authorities.

**Yaaz Construction & Development**

**Ownership:** The Company is privately owned by Avraham and Yona Yakuel, through Yaaz Holdings and Assets

**Revenues:** NIS 200 million

**Location of Head Office:** 8 Haarbaa St., Tel Aviv 64739, Israel

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56 “Israel Land Administration” [in Hebrew], Yaaz website, accessed on 13 May 2014.

57 Unrecognized villages in Israel are rural Bedouin communities in the Negev (Naqab) and the Galilee which the Israeli government does not recognize as legal. Tens of thousands of the Negev (Naqab) Bedouins reside in unrecognized villages, which the state refuses to place under municipal jurisdiction and provide with outline plans. These villages are also denied basic services and infrastructure, such as electricity, running water, education and health services.
Another demolition contractor operating in East Jerusalem is Benny & Tzvika, which specializes in demolition works and the recycling of construction waste. The company carried out punitive demolitions in the East Jerusalem Palestinian neighborhood of Silwan as far back as 2003, and continued to perform demolitions in recent years. Among its clients are the Jerusalem Municipality, the Ministry of Interior and the Civil Administration. The company describes itself as “the leading demolition company in the Israeli Market.”

On 9 January 2011, a Caterpillar 330DL excavator, displaying the Benny & Tzvika logo, was documented demolishing the Shepherd Hotel in the Palestinian neighborhood of Sheikh Jarrah in East Jerusalem. The hotel was a historical building, previously owned by the Husseini family. After 1967, it was declared as “absentee property” and confiscated by the Israeli government, which sold it to Irving Moskowitz, a Jewish-American businessman and patron of Israeli settlements in East Jerusalem. The new Jewish housing project built instead of the hotel was the first settlement construction project in Sheikh Jarrah since 1967.

60 A video filmed by Peace Now, documenting the demolition of the Shepherd Hotel: www.youtube.com/watch?v=aL81ThmlyOc
Demolition as a Turn-Key Project

The privatization of the occupation is a continuing and growing phenomenon, benefiting the Israeli homeland security (HLS) and private security industries. Considering the successful privatization of checkpoints in recent years, it is no wonder that the Civil Administration hires external companies to execute house demolitions in Area C. The Civil Administration goes even further with the privatization process than the Jerusalem Municipality and the Ministry of Interior and delegates greater responsibilities to its demolition contractors.

E.T. Legal Services

E.T. Legal Services is a private company, which carries out writs of execution, including evictions, seizures and demolitions. On its website, the company states that it won the demolition tender of the Civil Administration for the second time in a row.61 The company’s website reveals interesting information about its work methods: “Demolitions are executed by our company in the turn-key project method. In other words, from the moment of receiving the administrative order and/or judgment, our company performs all necessary coordination with the different sources,

61 "Among Our Clients" [in Hebrew], E.T. Legal Services website, accessed on 16 March 2014.
including coordination with the police and/or army, ordering engineering equipment, planning the security, preparing an action plan, establishing a timeframe for execution and storing the equipment and/or possessions that are found on the site.”

The Civil Administration not only entrusts the execution of the demolition to the hands of a private company, but also the overall responsibility for the procedure, including the planning and coordination of security measures.

The company’s employees and equipment were documented twice during 2011 in the Palestinian villages of the South Hebron Hills, an area populated by Bedouin communities who suffer from an increasing number of demolitions and from settler violence. On January 12 of that year, E.T. Legal Services demolished 13 structures, including a classroom operating as the local school, in the village of Dkaika. The loaders used during the demolition were manufactured by JCB (models 3CX and 456e ZX) and Caterpillar (model 938G). On November 24, the company demolished three houses in the village of Khirbet M’fakara and a structure and a tent in the village of Susya. A JCB loader (model 456e ZX) and a Case loader (model 590 Super R) were used by the company during these demolitions. On its website, the company takes special pride in “a large number of complicated demolitions in villages in the Arab sector.”


63 A video filmed by Breaking the Silence, documenting the demolitions in Dkaika that took place on 12 January 2011: http://www.youtube.com/watch?v=FG0oSggEvE.

64 A video filmed by Ta’ayush, documenting the demolitions in Khirbet M’fakara and Susya on 24 November 2011: http://www.youtube.com/watch?v=w71Wr8IC0s.

65 “Demolitions” (supra note 62).
Demolitions in the Negev (Naqab): The Story of Al-Araqib

The political logic guiding the Israeli demolition policy is similar on both sides of the Green Line: control over a maximum area of land with a minimum number of Palestinians. House demolitions, and the inevitable consequent forced displacement, are a standard component in Israel’s approach towards its own Palestinian citizens. Demolitions are regularly conducted in the Galilee, in mixed cities such as Acre (Akka), Lod (Al-Lid) and Ramla (ar-Ramlah), and in the Negev (Naqab) desert. In recent years, the Israeli government has focused on the Negev as the next location for its colonization efforts. In June 2013, the Israeli Knesset
approved the Parwer-Begin Plan for the removal of the Palestinian-Bedouin community from its ancestral land. If implemented, this plan will result in the destruction of 35 “unrecognized” Bedouin villages, the forced displacement of up to 70,000 people and the appropriation of their land.66

Following a determined struggle by the Palestinian-Bedouin community and activists worldwide, the plan was ostensibly halted on December 2013. However, on the ground, the demolitions continue and are used to force the Palestinian-Bedouin community to negotiate their ownership claims to the land.67 The unrecognized village of Al-Araqib became a symbol of resistance to the displacement plan, as its residents continue to hang on to their land after enduring 68 demolitions executed by Israeli authorities.68

Members of the Al-Turi family rebuild a shack after it was demolished by Israeli authorities | Al-Araqib | January 2011 | Photo by Activestills


67 Yanir Yanga, “In the Past Year: House Demolitions in Bedouin Villages Have Been Doubled” [In Hebrew], Walla News, 17 March 2014.

As in the case of administrative demolitions in Jerusalem, the demolition orders in the Negev are issued by the Ministry of Interior and implemented by the Israel Land Administration through private Israeli contractors. The first six demolitions in Al-Araqib were executed by Alon E. Engineers & Contractors for NIS 662,409 overall, the seventh and eighth demolitions were executed by Yaaz Construction & Development for NIS 82,393. The exact costs are known because the State of Israel sued the residents of Al-Araqib for the overall expense of the Israeli authorities participating in the first eight demolitions of the village. The demolition costs, including salaries for hundreds of policemen securing the bulldozers, amounted to NIS 1,790,792.69

69 The statement of claim is on file with Who Profits.
Military Use of Engineering Tools

In contrast with administrative demolitions, military demolitions are directly executed by the Israeli army. For operational tasks such as large-scale “flooring” in Gaza or engineering missions in Palestinian towns, the Israeli army uses its own tools, purchased from authorized local distributors or directly from international manufacturers of heavy machinery. These tools are often modified according to the Israeli army’s requirements, either by the manufacturer, private or governmental Israeli military companies or the army itself. The requested modifications include extensive armoring and arming of the vehicles in order to adapt them to combat operations. In several cases, the modification goes beyond standard additions and turns into a joint development project of unmanned engineering tools by the manufactures, the distributors and the Israeli army.

The D9

The most famous heavy engineering machine used by the Israeli army is the Caterpillar D9 armored bulldozer. This track-type tractor, weighing more than 60 tons, is sold by Caterpillar directly to the Israeli army through the United States Foreign Military Sales program, separately from its regular supply chain to the general Israeli market. The company’s

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70 Amnesty International, “Act Now to Stop Caterpillar Inc. from Selling Life-Destroying Bulldozers to
sole representative in the country, Israel Tractors and Equipment (I.T.E, part of Zoko Enterprises), and Ramta, a division of the government-owned Israel Aerospace Industries (IAI), are responsible for retrofitting the tools. Zoko Enterprises and the Ramta Division equip the D9s with a ballistic armor suit. The standard configuration includes weapon mounts, storage compartments, a spotlight and projector lamps and communication equipment. The D9’s shield also includes a protection system against anti-tank weapons and as of 2006 an additional slat armor.

The collaboration between Zoko Enterprises and the Ramta Division also produced an unmanned, remote-controlled version of the armored D9T, nicknamed Pooh HaDov (Winnie-the-Pooh). The development of this vehicle took place in Ramta’s factory in Beersheba and was sponsored and supervised by the Administration for the Development of Weapons and Technological Infrastructure (Mafat), a joint administrative body of the Ministry of Defense and the army. An earlier unmanned version, the so-called Thunder of Dawn, based on the Caterpillar D9N model and developed by Ramta alone, was operational during the Second Lebanon War and Operation Cast Lead.

Today, the Engineering Corps holds and operates hundreds of Caterpillar D9 bulldozers in three models: D9R, D9N and D9L, including the unmanned Thunder of Dawn. The wide and aggressive use of these bulldozers during Operation Cast Lead was deemed a phenomenal success by the Israeli army and apparently led to a change in its military tactics. According to the former Chief Officer of the Engineering Corps, Moshe Sheli, during Operation Cast Lead there were more engineering tools on the ground than tanks. Sheli dubs this “a military revolution” and notes that this change is manifested in the growing number of Engineering Corps units. Statements made by the Ground Forces Command shortly after the attack on Gaza reveal plans to double the number of unmanned,

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71 “Armored D9 Multi-Task Tractor,” Ramta Division; “Armored Earthmoving Machines,” Zoko Industries
72 The D9 slat armor was developed and installed by different IDF units: Amir Buchbut, “The ‘Patent’ that Saved the Lives of Engineering Corps Soldiers” [in Hebrew], NRG, 8 February 2007.
75 Yaacov Katz, “‘Black Thunder’ Unmanned Dozers to Play Greater Role in IDF,” Jerusalem Post, 30 March 2009 (the article mistakenly refers to the Thunder of Dawn model as “Black Thunder”).
armored D9 bulldozers in the Engineering Corps.\textsuperscript{77} As long as the “minimum risk doctrine” continues to guide the Israeli army’s operations, the number of armored and unmanned D9s is only expected to rise.

\textbf{Other Caterpillar Military Engineering Tools}

Other than the D9, Caterpillar supplies a variety of heavy engineering machinery to the Israeli army: various wheel loaders; 225, 245 and 330 armored excavators; and the Front Runner – a remote controlled mini loader built on the chassis of a Caterpillar MTL 257B (also known as the MiniCat). The Front Runner is another product of the fruitful collaboration between Zoko Enterprises and the Ramta Division. According to the Israeli Engineering Corps, the armored Caterpillar excavators took part in house demolitions, in the destruction of the Mukataa in Ramallah and in the Israeli army’s 2006 raid on the Palestinian prison in Jericho.\textsuperscript{78} The Front Runner, which was developed for urban warfare, can also operate in the narrow alleys of Palestinian refugee camps.

The local distributor of Caterpillar equipment to the Israeli army, Zoko Enterprises, also provides the maintenance, spare parts and storage

\textsuperscript{77} “‘Black Thunder’ Unmanned Dozers” (supra note 68).
\textsuperscript{78} Engineering Corps Veterans Association website, “Armored Excavator” [in Hebrew].
services for the machinery. Moreover, Zoko’s employees function not only as civilian maintenance workers, but also as potential reserve soldiers. In 2009, the Israeli newspaper Haaretz reported about a planned contract between the army and the company, which would enable the immediate drafting of Zoko’s civilian staff, in order to allow them full access to the tools on the battlefield.\footnote{Anshel Pfeffer, “IDF to Draft Civilians to Maintain Bulldozers in Battle,” Haaretz, 11 March 2009.} No information was found confirming the final signing of such a contract.

The HMEE and the Military 1CX

An additional international manufacturer of construction equipment, which supplies military engineering tools to the military, is the British company JCB. The company has been selling its High Mobility Engineer Excavator (HMEE) to the Israeli army since 2011.\footnote{Daniella Bokor, “New HMEE Bulldozer to Be Incorporated in the IDF,” IDF website, 14 September 2011.} The HMEE was developed in the United Kingdom for the US Army and is currently manufactured in the company’s factory in Pooler (Georgia, USA). The armored HMEE was modified according to the specifications of the Israeli
army and sold through the American Foreign Military Sales program.

JCB also supplies the 1CX mini backhoe loader to the Israeli army. This mini loader is used by the army for urban warfare in the occupied Palestinian territories.81

The Sahar or Robotic Bobcat

The Israeli Engineering Corps is evaluating a relatively new engineering support robot – the Sahar (also known as Sand Cat or Spartacus). This robot is based on the American Bobcat mini loader and is used to remove and neutralize improvised explosive devices (IEDs) from patrol routes. The Sahar system, developed jointly by IAI and Qinetiq North America, can be connected to various Bobcat models in order to control them from afar.82 This unmanned mini loader has been used by the army since 2011, including in the Gaza Strip.83

Roadblocks, Collateral Damage, Vandalism and Crowd Control

Beyond demolitions, military loaders and excavators are also employed in different tasks aimed at controlling or intimidating the Palestinian population. One of the main tasks of the Israeli army’s Engineering Corps in the OPT is to manage and control the movement of Palestinians within the West Bank and between the West Bank and Jerusalem, by creating roadblocks. Military loaders – erecting earth mounds to serve as roadblocks or destroying asphalt roads leading to Palestinian villages and towns – are a common sight throughout the West Bank.84 Roadblocks and checkpoints severely infringe upon the right of

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81 Israeli Ground Forces, “Clear the Way” [in Hebrew], BaYabasha, volume 6 (June 2008).
Palestinians to freedom of movement; they separate family members and communities, cut off commercial activities and restrict or prevent access to medical treatment and education. They disrupt the daily lives of Palestinians in many different ways, imposing a reality of uncertainty and hindering routine activities.

85 For further information on movement restrictions: B’Tselem, “Background on the Restriction of Movement,” 15 July 2012.
A recent testimony by an Israeli military veteran reveals how harmful the mere execution of the roadblock could be, regardless to the future implications of closing an access road. This specific blocking was carried out near the Palestinian village of Susya.

I remember going one day with the Engineering Corps and we blocked a nearby route with boulders because Palestinian vehicles were passing there. [...] The loader came, teared out a rock from some mountain on the way, moving very slowly, causing a traffic jam, reaching the road, putting down the rock. One rock can’t block the entire route so it started removing rocks. What can you find around roadways? Fields of wheat, barley. We trampled all the wheat fields in the area, on the way we broke a few olive trees in order to get to some rocks, so we could drag them to the road. [For] five hours they trampled the entire area in order to put a pile [of rocks] on the road.86

Massive damage to Palestinian property is a common by-product of many military tasks preformed by heavy engineering machinery. Often, the damage caused to the surroundings is the result of negligence on the part of the military operators or of the rough or narrow terrain (especially in urban areas). Nonetheless, the destruction caused by these tools is frequently not accidental but rather deliberate, intended as a punitive measure in order to terrorize the Palestinian population.

Additional testimonies by veteran Israeli soldiers expose the use of Palestinian vehicles for constructing temporary roadblocks in urban areas, the random toppling of utility poles and the destruction of roads, sewerage and water pipes by dragging the back ripper of the D9 bulldozers through the streets of Palestinian towns.87 One testimony, by a former soldier in the Engineering Corps, describes a night-time demolition tour through the streets of Hebron, following the killing of two Israeli soldiers.

86 Breaking the Silence, “We Blocked the Route with Boulders” [In Hebrew], Testimony Catalog Number 153385.
87 On the systematic destruction of roads and infrastructure in Gaza by the use of D9 back rippers, see: “Razing Rafah” (supra note 24), pp. 76, 83, 98-99.
in the city; it lasted for six hours and included the random destruction of vehicles and property.⁸⁸

In recent years, Palestinian protesters have encountered military loaders in a relatively new context, mainly during demonstrations in the villages of Kafr Qaddum and Ni’lin. During the weekly protests on Fridays, the military Caterpillar loaders have been used as a crowd control weapon. In Kafr Qaddum, they were used on the main street of the village, against unarmed demonstrators, in order to disperse them. The loaders have also dismantled barricades, which had been placed by the demonstrators at the entrance to the village, or used as a safe zone for the launching of tear gas canisters by Israeli soldiers.⁸⁹

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⁸⁸ For further information regarding vandalism conducted by using bulldozers, see the following Breaking the Silence testimonies: “I Say I Have Nothing to Block With” [in Hebrew], Testimony No. 676807, Hebron, 2002; “They Dug Until They Hit Something,” [in Hebrew], Testimony No. 334886, Gaza, 2006.

⁸⁹ Photos documenting this were taken by Activestills and are kept on file with Who Profits.
In the occupied Palestinian territories, including East Jerusalem, Israeli housing and infrastructure projects effectively serve two purposes: annexing more land and resources to Israel while cutting off the local Palestinian residents from such resources. While the fenced or patrolled areas of settlements cover approximately 3% of the West Bank, 43% of the West Bank area is off-limits for Palestinians because it is allocated to the local and regional councils of settlements. There are nearly 150 settlements established by Israel in the West Bank, in addition to some 100 outposts built without the official authorization of the state but with generous assistance and support from government ministries, including Israeli army security and access to public utilities and infrastructure. The settler population in the West Bank is estimated at more than 531,000 persons.

The construction of an Israeli road system, on which Palestinians are forbidden from travelling, reinforces the establishment of a separate Jewish-Israeli space on top of the fragmented Palestinian space. The roads and settlements thus become part of the separation system, which also includes fences, walls, gates and checkpoints.

92 Ibid.: “In late 2012, the population of the West Bank settlements was 341,400; in late 2011, there were 190,423 individuals living in Israeli neighborhoods in East Jerusalem.” These figures are based on data published by the Israeli Central Bureau of Statistics (CBS).
The existence of settlements leads to the violation of numerous human rights, including the right to property, equality, development, an adequate standard of living and freedom of movement. In addition, each new house added to the settlements encroaches upon the right of the Palestinians to self-determination, as it makes a Palestinian state less and less viable.

The establishment of settlements contravenes international law, which prohibits the occupying power from introducing permanent changes to the occupied territory. International law also specifically prohibits the occupying power from transferring its own civilian population into the occupied territory. Nevertheless, consecutive Israeli governments have systematically encouraged Israeli citizens to relocate to the West Bank by offering them financial benefits and incentives and through the provision of infrastructures.

Despite the fact that the international community considers the settlements to be illegal and has never acknowledged Israel’s sovereignty over the West Bank, Israeli governments continue to expand the settlement project. For example, during the nine months of the last round of peace talks (which began on 29 July 2013 and apparently ended on 29 April 2014), Israel promoted plans and tenders for nearly 14,000 new settler housing units on occupied Palestinian land in the West Bank and East Jerusalem. However, Israeli settlements are not exclusively a government enterprise. Israeli governments plan, approve and fund the settlements, but their actual construction is undertaken almost entirely by the private sector. Like the vast majority of the Israeli private sector, the construction industry considers the settlements to be legitimate. Construction companies support the expansion of Israeli settlements and profit from it, and therefore they play a key role in bolstering and prolonging the occupation. Not a single Israeli construction company has ever publicly stated that it refrains from building in settlements due to their illegality.

As noted above, the Israeli heavy machinery market is import-based and the local construction sector is highly dependent on foreign manufacturers. Thus, most of the construction machinery sold in Israel is manufactured in Western Europe (primarily in the United Kingdom,

94 Article 49 of the Fourth Geneva Convention (supra note 20).
Sweden and Germany), the United States, Japan, South Korea and Turkey, and it is distributed through local Israeli representatives. Under these circumstances, multinational corporations selling construction machinery to the Israeli market have good reason for concern that their products will be used for the construction of settlements. Over the past five years, Who Profits has collected hundreds of photos documenting foreign manufactured bulldozers used for building Israeli settlements in the occupied Palestinian territories (a complete list, divided according to locations and corporations, can be found below). As the construction of modern sewerage and water systems requires extensive earthwork, it is safe to say that all Israeli settlements and nearly all outposts in the OPT were built using imported bulldozers.
Heavy Engineering Machinery and the Israeli Occupation

A JCB wheel excavator conducting construction work | The Har Homa settlement neighborhood, East Jerusalem | 21 January 2010 | Photo by Activestills

A Fiat Kobelco (CNH) excavator conducting construction work | Leshem settlement, West Bank | 7 December 2012 | Photo by Activestills
JCB machinery conducting construction work | Barkan Industrial Zone | 20 June 2013 | Photo by Esti Tsal
The apparatus of the Separation Wall is the highlight of an advanced population control mechanism imposed on the West Bank. Alongside the discriminatory planning and zoning policies, the extensive jurisdiction granted to settlements, the exclusive Jewish-Israeli roads and the random roadblocks, the wall and the checkpoints demonstrate the tremendous effort invested by Israel in order to maintain the ethnic and territorial segregation of the Palestinian population.

The Separation Wall, approximately 85% of which is located in the West Bank, will isolate 9.4% of the West Bank, including East Jerusalem, if completed as planned. The wall includes electronic fences, watchtowers, ditches, razor wire, sensors, cameras, patrol roads and a buffer zone. Approximately 61 kilometers of the constructed wall, particularly in urban areas, consist of 8-9 meter high concrete slabs. Land obtained for construction of the wall is confiscated from Palestinian landowners by the Israeli Ministry of Defense through military orders.

The checkpoints in the West Bank are often portrayed by Israeli officials as a security measure, aimed at protecting Israelis from Palestinian assaults. However, most of the checkpoints, whether integrated into the wall or not, are located inside the West Bank, isolating Palestinians from...
The wall and the checkpoints separate communities, block access to agricultural lands, isolate many Palestinian villages and towns and reshape the geography, economy and social life of the West Bank.

In 2004, the International Court of Justice (ICJ) found the construction of a wall in the OPT, including in and around East Jerusalem, to be illegal under international law and called upon Israel to cease its construction. The Court also obligated Member States not to recognize the illegal situation created by the wall and to ensure Israel’s compliance with international law. A decade after the ICJ advisory opinion, the construction of the wall continues. In 2013, approximately 62% of the wall’s approved route was complete, a further 10% was under construction and 28% was planned but not yet constructed.

Much like the settlement project, the wall was planned and funded by Israeli governments, but its actual construction was entrusted to the hands of the private sector. A long list of construction and earthwork contractors prospered while Israeli governments kept pouring large budgets into what can be described as one of the biggest and most expensive construction projects in the history of Israel. Finance Ministry data, collected by B’Tselem in 2010, indicated that by the end of 2013 the cost of construction and maintenance of the Separation Wall was projected to reach NIS 10.84 billion (some USD 3.16 billion, according to current exchange rates).

The Seam Zone Administration was a unit within the Israeli Ministry of Defense, established in order to manage the wall’s construction and supervise the different civilian contractors. Information published by the Seam Zone Administration demonstrates the scope of involvement of the private construction sector. “As of January 2007, the Seam Zone project employs approximately 700 different suppliers: some 60 planning offices are involved in the project, some 53 major contractors carry out the construction, about 5 fence manufacturers, about 11 private security companies secure the works along the route, [and] some 34 manufactures of observation, communication and control equipment.”

103 “The Humanitarian Impact of the Barrier” (supra note 90).
105 Seam Zone Administration, “Details of Executing the ‘Seam Zone’ Plan” [in Hebrew], Ministry of Defense website.
Much like their colleagues building the settlements, the private contractors hired by the Ministry of Defense for the construction of the wall were using imported bulldozers for performing this task. As the bulldozers were the main tool used on the ground, they were also one of the first targets of the Palestinian villagers who demonstrated against the confiscation of their land and the wall’s construction. Back in September 2002, it was the sight of the bulldozers approaching the village of Jayous that triggered the villagers to run to the groves to protect their trees. They were beaten up and some were arrested, but they managed to stop the construction work. Over the next days, they kept coming out to protect their land. This marked the beginning of the popular struggle against the wall.106

Over the years, demonstrations started in Bidu, Budrus, Beit Liqya, Qaffin, Azun, Bil’in, Ni’lin, Beit Sira, Al-Walaja, Beit Jala, Artas, Al-Ma’asara, Wad Rachal, Beit Ummar and many other villages; some of these local struggles continue to this day. The international media showed images very similar to the ones appearing below, documenting Palestinian, international and Israeli activists attempting to stop the bulldozers with their bodies. But the construction of the wall continued, and international manufacturers of heavy machinery kept selling bulldozers to any buyer in the Israeli market.

Palestinian demonstrators trying to stop a Liebherr 994 excavator during the construction of the wall | Ni’ilin | 7 August 2008 | Photographed by Activestills

A Caterpillar track excavator and Israeli soldiers during the construction of the wall | Nîlin | 16 June 2008 | Photo by Activestills

Palestinian and Israeli demonstrators trying to stop a Caterpillar 330C excavator during the construction of the wall | Al-Walaja | 8 January 2012 | Photo by Activestills
Palestinian demonstrators trying to stop a Caterpillar excavator during the construction of the wall | Niliin | 24 June 2008 | Photo by Activestills

Demonstrators trying to prevent the uprooting of trees by a JCB JS330 excavator during the construction of the wall | Al-Walaja | 3 March 2010 | Photo by Activestills
Bobcat Company

An American manufacturer of farm and construction machinery, specializing in mini loaders. The company sells skid steer loaders, compact excavators, compact utility vehicles and compact tractors under the Bobcat brand name.

Bobcat mini loaders were used during the construction of the Separation Wall and checkpoints. The company’s mini loaders were documented performing earthwork on the land of the Palestinian village of Al-Walaja and participating in the construction of the Huwara, Anabta and Deir Sharaf checkpoints. The model most commonly used for these tasks was the S220, and the majority of tools used appear to be property of the Israeli army, as they were carrying military serial numbers.107

Bobcat equipment was also used for the construction of settlement infrastructure, including maintenance works on Highway 5 in the West Bank.108

The Israeli army owns Bobcat mini loaders and uses them for a variety of purposes: for example, earthwork in Israeli Air Force bases and training for new heavy machinery operators in the Engineering Corps.

107 Photos are on file with Who Profits.
108 Ibid.
The Engineering Corps also uses the Sahar – an engineering robot based on the Bobcat mini loader (see more about this robot above) – for neutralizing explosives. This unmanned mini loader has been operational since 2011 and was used in the Gaza Strip.

**Ownership:** The Bobcat Company is a subsidiary of Doosan Infracore International, a U.S.-based subsidiary of the South Korean corporation Doosan Infracore.

The President of Bobcat / Doosan North America & Oceania for Doosan Infracore Construction Equipment: Richard M. Goldsbury.

**Subsidiaries / Partners:** Emcol LTD is the exclusive distributor of Bobcat products in Israel.

**Global Presence:** The Company has approximately 1000 distributors in over 100 countries worldwide.

The Bobcat headquarters and three manufacturing facilities are located in North Dakota, USA. The company has factories in Pontchâteau, France; Dobříš, Czech Republic; and Wujiang, China. Additional company sites can be found in, Chennai, India; Mülheim, Germany; Shanghai, China; Singapore; and Waterloo, Belgium; Tucson, Arizona; and Chicago, Illinois.

**Location of Head Office:** 7250 East Beaton Drive, P.O. Box 6000, West Fargo, ND 58078-6000, USA.
Caterpillar

A U.S.-based multinational manufacturer and provider of civil and military engineering machinery. Caterpillar is the world’s largest manufacturer of construction and mining equipment. The company operates in three sectors: resource industries, construction industries and power systems.

The company’s machines were used for the demolition of Palestinian houses in the occupied Palestinian territories, the construction of the Separation Wall, settlements and settlement infrastructure on Palestinian land, for creating roadblocks, dispersing demonstrations and as weapons (see above).

Caterpillar is a long-standing supplier of the Israeli army and provides it with a variety of heavy engineering machinery, including different wheel loaders, armored excavators, mini loaders and several models from the D9 armored bulldozer series (D9R, D9N and D9L). D9s were used for operational tasks such as large-scale house demolitions in Gaza, land-clearing missions in Palestinian towns and arresting or killing Palestinian suspects using the pressure cooker procedure. D9s and armored Caterpillar excavators also took part in the destruction of the Mukataa in Ramallah in 2002.109

The company’s sole representative in Israel, I.T.E. (part of Zoko Enterprises), and Ramta (a division of the government-owned Israel Aerospace Industries, IAI) are responsible for retrofitting the tools, including extensive armoring and munitioning. The collaboration between the two companies also produced unmanned, remotely controlled machines: Poo HaDov (Winnie-the-Pooh) and the Front Runner. An earlier unmanned model, the Thunder of Dawn (based on the Caterpillar D9N), was operational during the Second Lebanon War and Operation Cast Lead.

The local distributor, Zoko Enterprises, also provides maintenance, spare parts and storage services for all of the Caterpillar machinery owned by the Israeli army. Moreover, some Zoko Enterprises employees can function as reserve soldiers during military operations. A planned contract between the Israeli army and the company, will enable the immediate draft of Zoko’s civilian staff, in order to allow them full access to the equipment on the battlefield.

109 Ibid.
The Israeli Engineering Corps holds and operates hundreds of Caterpillar D9 bulldozers, including the unmanned Dawn Thunder. Their importance to Israeli military tactics is rising steadily.

Caterpillar’s engineering machinery was also used by civilian companies for the construction of a large number of settlements in the OPT, including Revava, Maskiot, Oranit, Carmel, Elkana and Beitar Illit in the West Bank and the Har Homa settlement neighborhood in East Jerusalem. Caterpillar machinery was also used in various projects serving the settlements, such as the Ariel West and Barkan industrial zones, the Tel-Aviv-Jerusalem high speed railway and the headquarters of the Judea and Samaria District of the Israel Police, located in the E1 area. The models used for these tasks are: 330B, 330BL and 936.\(^{110}\)

The construction of the Separation Wall and checkpoints was also executed using Caterpillar heavy machinery. The company’s loaders and excavators were documented during works on the land of the Palestinian villages of Mas’ha, Al-Walaja, Qalandiya, Jayous, Ras al-Tira, Khirbet Jbara and Wadi a-Rasha and during the construction of the Anabta and Qalandiya checkpoints. The models used for these tasks are: 330C, 330CL, 345B, 345D, 936 and D10N.\(^{111}\)

Wheel loaders manufactured by the company were used by the Israeli army for creating roadblocks or for demolishing access roads leading to Palestinian villages in the area of Qarawat Bani Hassan, Aqabah and various locations around the South Hebron Hills. The roadblocks were created using the 938G wheel loader and military loaders.\(^{112}\)

In addition, Caterpillar track excavators and wheel loaders were used for the demolition of Palestinian houses. The company’s tools participated in demolitions in the Palestinian neighborhoods of Sheikh Jarrah, Beit Hanina and Tsur Baher in East Jerusalem and in the South Hebron Hills area.\(^{113}\)

As of the past several years, Caterpillar military wheel loaders are also used as a crowd control weapon in Kafr Qaddum, during the weekly demonstrations in the village.\(^{114}\)

\(^{110}\) Ibid.
\(^{111}\) Ibid.
\(^{112}\) Ibid.
\(^{113}\) Ibid.
\(^{114}\) Activestills’ Photos, (supra note 89).
Ownership: Major shareholders: State Street Corporation (9.91%); Vanguard Group, Inc. (5.70%); Capital World Investors (4.19%); State Farm Mutual Automobile Insurance Company (3.15%); BlackRock Institutional Trust Company, N.A. (2.64%); FMR LLC (Fidelity Investments) (1.95%); Bank of New York Mellon Corporation (1.83%); and the Bill & Melinda Gates Foundation (1.80%).

Subsidiaries / Partners:
Exclusive representative in Israel: Zoko Enterprises
CEO and Chairperson: Douglas R. Oberhelman.

Additional brand names include: Anchor Coupling, AsiaTrak, FG Wilson, Halco Rock Tools, Hindustan, MaK, MWM, Olympian, Perkins, Progress Rail (including Electro-Motive Diesel, or EMD), SEM, Solar Turbines, Turbomach, Turner Powertrain Systems, Unit Rig and Caterpillar (Zhengzhou) (formerly Zhengzhou Siwei).

Global Presence: Caterpillar distributes its products through an international network of representatives, 130 of which are located outside the United States, serving 182 countries.

Traded in: The New York Stock Exchange (NYSE)
Sales and revenues: USD 55.656 billion (in 2013)
Location of Head Office: 100 Northeast Adams Street, Peoria, IL 61629, USA
A Caterpillar track excavator uproots olive trees during the construction of the wall | Jayous, West Bank | February 2013 | Photo by the Jayous Youth Committee
Heavy Engineering Machinery and the Israeli Occupation

CNH Industrial (formerly CNH Global)

A multinational manufacturer of agricultural and construction equipment, trucks, commercial vehicles and buses. Engineering machinery manufactured by the company was used for the construction of West Bank settlements and their infrastructure, settlement industrial zones and the Separation Wall. The company’s tools were also documented during house demolitions in the area of the South Hebron Hills in the West Bank.

CNH EX355 excavators were used during the construction of the Israeli outpost Leshem. The same model was documented during the construction of the Separation Wall on the lands of the Palestinian villages of Bidu, Bil’in and Nî’lin and uprooting an apricot and date orchard belonging to the Palestinian village of Artas, in order to expand the infrastructure of the Efrat settlement.\(^{115}\)

Case wheel loaders were documented building an expansion of the Barkan Industrial Zone and the new Tel-Aviv-Jerusalem high-speed railway, which crosses the Green Line twice into the OPT. Case wheel loaders were also used during house demolitions in the Palestinian villages of Khirbet M’fakara, Susya and Bir al-’Id in the South Hebron Hills.\(^{116}\)

Ownership: CNH Industrial N.V. was incorporated in November 2012, following a merger between Fiat Industrial S.p.A. and CNH Global N.V. Major shareholders: EXOP (44%); Harris Associates (10.14%); Fiat (4%); and BlackRock (2.9%).

Subsidiaries / Partners: In the field of construction equipment, CNH Industrial owns two major brands: New Holland Construction and Case Construction. Until 2012, Fiat Kobelco was one of the brand names included under the CNH portfolio, but its distribution ended following the termination of the global alliance between Kobelco and CNH. Additional brand names under CNH Industrial include Steyr, Case IH, Magirus, FPT and Iveco. Since the year 2000, N. Feldman and Son was the exclusive Israeli importer of CNH and Case products in the fields of construction and agriculture. Following changes in CNH distribution channels, the New Holland and Case agricultural machinery remained in the hands of N. Feldman and

\(^{115}\) Photos are on file with Who Profits.
\(^{116}\) Ibid.
Son, while the distribution of construction equipment was transferred to Carasso Motors, a major Israeli importer of vehicles.

**Global Presence:** The Company operates 62 production sites and 48 research and development centers worldwide.

**Traded in:** The New York Stock Exchange (NYSE) and the Milan-based Italian Stock Exchange (BIT).

**Revenue:** USD 33.8 billion (in 2013)

**Location of Head Office:** Cranes Farm Road, Basildon, Essex, SS14 3AD, United Kingdom

![A Fiat Kobelco (CNH) excavator uprooting an apricot and date orchard belonging to the Palestinian village of Artas | 20 May 2007 | Photo by Activestills](image)
Doosan Infracore Co.
(formerly Daewoo Heavy Industries & Machinery)

A manufacturer of construction machinery. The company’s products include construction equipment, industrial vehicles, diesel engines, power generators, machine tools and armored vehicles for the defense industry.

Doosan track excavators were used for the construction of the Leshem outpost in the West Bank and the settlement neighborhood of Gilo in East Jerusalem. Doosan machinery was also used for construction work in the Barkan Industrial Zone.

In East Jerusalem, Doosan track excavators were documented during the construction of the Jerusalem Light Rail, which connects settlement neighborhoods with the city center. The company’s machinery was also used by Israeli contractors during house demolitions in the Palestinian neighborhoods of East Jerusalem.117


President and CEO: Yongsung Kim
Chairperson: Yongmaan Park

Subsidiaries / Partners: Emcol LTD is the exclusive distributor of Doosan’s construction equipment in Israel.

Through its U.S. subsidiary, Doosan Infracore International, the company owns the Bobcat Company.

Major Brands include Bobcat, Doosan Portable Power, Montabert, Geith and Tramac.

Global Presence: The Company has operations in more than 100 countries across the world, some 60 subsidiaries and a sales network consisting of 4,000 dealers. Doosan Infracore’s subsidiaries are located in Australia, Belgium, Brazil, Canada, Chile, China, the Czech Republic, France, Germany, India, Ireland, Italy, Japan, Luxembourg, Mexico, the Netherlands, Norway, Russia, Singapore, South Africa, Spain, the United Kingdom and the United States.

Traded in: The Korea Stock Exchange (KRX) in South Korea.

Revenue: Approximately USD 7.6 billion (in 2013)

117 Ibid.
**Location of Head Office:** 7-11 Hwasu-dong, Dong-gu, Incheon, 401-020, South Korea

A Doosan DC520LC track excavator performing construction work | Gilo settlement neighborhood, East Jerusalem | 25 October 2013 | Photo by Guy from Ta’ayush

**Hidromek**

A manufacturer of construction equipment specializing in backhoe loaders and excavators.

Machinery manufactured by the company was used in the demolition of Palestinian houses in the occupied Jordan Valley and in the Palestinian neighborhood of Beit Hanina in East Jerusalem. Hidromek equipment was also documented during the demolition of cisterns in the South Hebron Hills.118

**Ownership:** A private company, owned by Hasan Basri Bozkurt, Ahmet Bozkurt and Mustafa Bozkurt.

CEO: Mustafa Bozkurt

118 Ibid.
Subsidiaries / Partners:
The company’s sole distributor in Israel, Emcol, supplies heavy engineering machinery to the Israeli Ministry of Defense.

Global Presence: Angola, Mozambique, South Africa, Australia, Philippines, Thailand, Bulgaria, Croatia, Georgia, Hungary, Latvia, Poland, Russia, Azerbaijan, Kazakhstan, Uzbekistan, Algeria, Iran, Israel, Morocco, Qatar, Tunisia, United Arab Emirates, Argentina, Chile, Colombia, Belgium, France, Italy, the Netherlands, Portugal and Spain.

Revenue: USD 342 million

Location of Head Office: Ayaş Yolu 25. km 1. Organize Sanayi Bölgesi Osmanlı, Caddesi No: 1, 06935 Sincan, Ankara, Turkey

Hitachi

A Japanese multinational engineering and electronics company, which supplies products and services in the fields of information and telecommunication systems, power systems, social infrastructure systems and industrial systems. Its construction machinery segment manufactures hydraulic excavators, wheel loaders and mining machinery.

As of 2009, Hitachi products are distributed in the Israeli market through an exclusive local representative: C.M.D. Engineering Equipment Supplies Co.
The company’s engineering equipment was used during house demolitions in the Palestinian neighborhoods of At-Tur and Beit Hanina in East Jerusalem and in the unrecognized Bedouin village of Al-Sayyid in the Negav (Naqab) desert. The Hitachi model used mostly during these demolitions was the ZX250LC-5 track excavator.119

**Ownership:** Major shareholders: The Master Trust Bank of Japan (6.56%); Japan Trustee Services Bank (5.15%); Hitachi Employees’ Shareholding Association (2.30%); Japan Trustee Services Bank (2.24%); and Nippon Life Insurance Company (1.98%).

Chairperson and CEO: Hiroaki Nakanishi
President and Chief Operating Officer (COO): Toshiaki Higashihara

**Traded in:** The Tokyo Stock exchange (TYO) in Japan.

**Subsidiaries / Partners:** The company holds 936 subsidiaries, 649 of which are located outside of Japan.


**Revenue:** Approximately USD 95 billion (in 2013)

**Global Presence:** Under the framework of its construction segment, Hitachi Construction Machinery Co., the company owns 47 subsidiaries in various countries, including the United States, Canada, China, Singapore, Indonesia, Thailand, Malaysia, India, Australia, New Zealand, the Netherlands, United Kingdom, France, Italy and South Africa.

119 Ibid.
Hyundai Heavy Industries

Hyundai Heavy Industries (HHI) is the world’s largest shipbuilder and among the top five manufacturers in other heavy industries.

The company’s construction equipment division manufactures excavators, wheel loaders, skid steer loaders and forklift trucks, which are distributed in Israel through Efco Equipment - a large Israeli importer of construction machinery.

Hyundai’s track excavators were used in many house demolitions in the Palestinian neighborhoods of Beit Hanina, Silwan, Tsur Baher, Issawiya and At-Tur in East Jerusalem. The company’s tools also preformed demolitions in Beit Jala and in the villages of Jawaya and Derath in the South Hebron Hills.\(^{120}\)

\(^{120}\) Ibid.
Hyundai excavators were documented during construction works in the settlement of Halamish and in the Barkan Industrial Zone.

The models used for all of these tasks are: 320LC-7, 320LC-9, 290LC-9 and 450LC-3.\textsuperscript{121}

\textbf{Ownership:} Major shareholders: M.J. Chung (10.15%); Hyundai Mipo Dockyard Co. (7.98%); KCC Corporation (3.12%); Hyundai Motor Company (2.88%); Asan Foundation (2.53%); and Posco (1.94%).

CEO and President: Lee Jai-Seong

\textbf{Traded in:} The Korea Stock Exchange (KRX) in South Korea.


\textbf{Revenue:} Approximately USD 52.8 billion (in 2013)

\textbf{Global Presence:} The company has 50 overseas offices and production sites.

\textbf{Location of Head Office:} 1, Jeonha-dong, Dong-gu, Ulsan 682-792, South Korea

\textsuperscript{121} Ibid.
JCB (J.C. Bamford Excavators)

The world’s third largest construction equipment manufacturer, which manufactures equipment used in the agricultural, construction and defense industries.

The company’s tools are used in the construction of settlements, settlement industrial zones and infrastructure projects on Palestinian land. JCB loaders and excavators were used for the construction of housing projects in the West Bank settlements of Alfe Menashe, Oranit, Ma’ale Adumim and Zufin; in the settlement neighborhood of Har Homa in East Jerusalem; and for the construction and expansion of the Kalia settlement’s beach and the Barkan and Ariel West settlement industrial zones.122

JCB machinery was also used in the construction of the A1 high-speed railway between Tel Aviv and Jerusalem, which crosses the Green Line in two places, and during the construction of the Jerusalem Light Rail station in the settlement neighborhood of Pisgat Ze’ev. The models used for the construction of settlements are 3CX, 537 and JS 175W.123

The company’s engineering equipment also contributed to the construction of the wall and checkpoints. Track and wheel excavators and wheel loaders were documented during the construction of the wall near the Palestinian villages of Al-Walaja, Anata and Beit Jala and at the Qalandiya and Ofer checkpoints. The models used for these tasks are JS330, JS200, 537 and 3CX.124

House demolitions were executed using the company’s equipment in the Palestinian villages of Dkeika, Bir al-Eid, Lasefer and Umm Fagarah in the South Hebron Hills, in the East Jerusalem neighborhoods of Silwan and al-Suwaneh and in the Jordan Valley. The wheel loaders models used for these demolitions are 456e ZX and 3CX.125

JCB supplies military engineering tools to the Israeli army, including its High Mobility Engineer Excavator (HMEE) and 1CX mini backhoe loader. The HMEE was developed in the United Kingdom for the

122 Ibid.
123 Ibid.
124 Ibid.
125 Ibid.
American army and is currently manufactured by the company’s factory in Pooler, Georgia, USA. The armored HMEE was modified according to the requirements of the Israeli army and sold to it through the American Foreign Military Sales program. The 1CX mini loader is used by the Israeli army for urban warfare in the occupied Palestinian territories.

**Ownership:** The company is owned by the Bamford family. The CEO is Graeme Macdonald and the Chairperson is Anthony Bamford.

**Subsidiaries / Partners:** The company’s exclusive distributor in Israel is Comasco. On its website Comasco claims to hold 35% of the Israeli engineering machinery market.

The company has two subsidiary companies: JCB Finance and JCB Insurance.

**Revenue:** GBP 2.68 billion, approximately USD 4.57 billion (in 2013)

**Global Presence:** JCB has 22 factories around the world. Its products are sold in over 150 countries.

**Location of Head Office:** Rocester, Staffordshire ST14 5JP, United Kingdom
Liebherr International

A manufacturer of construction and mining equipment, specializing in cranes, aircraft parts and mining machinery.

The company’s heavy construction machinery was used in the construction of the Separation Wall in the West Bank. Liebherr 942, 944 and 954 track excavators were documented during the construction of the wall on the land of the Palestinian village of Ni’lin.126

**Ownership:** The Liebherr Group is owned by the Liebherr family through Liebherr-International AG (Switzerland). Willi Liebherr is Chair of the Supervisory Board and Isolde Liebherr is Vice Chair of the Supervisory Board at Liebherr-International AG. The company’s Executive Director is Andreas Böhm.

**Subsidiaries / Partners:** The exclusive distributor of Liebherr in Israel is Tashtit, a division of Taavura Holdings LTD, Israel’s largest road haulage and logistics company. The main Liebherr tools marketed in Israel are cranes and excavators. Taavura’s earth-moving division provided training to several Israeli army units, including an Engineering Corps unit stationed in the West Bank.

**Global Presence:** The Liebherr Group operates in 130 countries worldwide and holds production sites in Austria, Brazil, Bulgaria, China, France, Germany, India, Ireland, Italy, Malaysia, Mexico, Russia, Spain Switzerland, Thailand, the United Kingdom and the United States.

**Revenue:** EUR 8.96 billion (in 2013)

**Location of Head Office:** 45 rue de l’Industrie, CH-1630 Bulle, Switzerland

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126 Ibid.
Terex Corporation

An American manufacturer of heavy equipment for the construction, quarrying, recycling and transportation industries. The company manufactures and markets aerial work platforms, construction cranes, materials processing and mining equipment and road-building and utility products.

Terex track excavators were used during demolitions in the Palestinian neighborhoods of At-Tur and Beit Hanina in East Jerusalem.127

Terex trucks were also used by private contractors for the construction of the Separation Wall on the land of the Palestinian villages of Nî’nî’n and Ras A-Tira, and in the construction of the A1 high-speed railway between Tel Aviv and Jerusalem, which passes through the land of the Palestinian villages of Beit Surik and Beit Iksa in the West Bank. 128

Terex Amida floodlights are used in construction sites along the Separation Wall and in checkpoints. For instance, Amida equipment was used in the construction of the checkpoint near Ofer prison and the Deir Sharaf checkpoint in the West Bank.129

Ownership: The main shareholders are Vanguard Group, Inc. (5.65%); Pennant Capital Management, LLC (4.32%); Goldman Sachs Group, Inc. (3.24%); TCW Group, Inc. (3.22%); AllianceBernstein, L.P. (2.91%); State Street Corporation (2.86%); Morgan Stanley (2.83%); BlackRock Institutional Trust Company, N. A. (2.79%); and BlackRock Fund Advisors (2.65%).
The CEO is Ronald M. DeFeo.

Subsidiaries / Partners: Terex distributes its products in Israel through three representatives: excavators, loaders and Terex Amida floodlights are distributed through Efco Equipment (1991), articulated and rigid trucks through Comasco and Terex Demag cranes through ROM Aerial Work Platforms.
Terex brands and subsidiaries include Fantuzzi, Genie, Loegering, Powerscreen, Terex Advance, Terex American, Terex Amida, Terex AVS, Terex Bendini, Terex Benford, Terex Bid-Well, Terex Canica, Terex Cedarapids, Terex Cifali, Terex CMI, Terex Comedil, Terex Demag, Terex Fermec, Terex Finlay, Terex Franna, Terex Fuchs, Terex Hydra Platforms,

**Global Presence:** Terex operates in more than 170 countries worldwide and has facilities in Australia, Austria, Brazil, China, the Czech Republic, France, Germany, Hungary, India, Ireland, Italy, Malaysia, South Africa, Spain, Switzerland and the United States.

**Traded in:** The New York Stock Exchange (NYSE)

**Revenue:** USD 7.1 billion (in 2013)

**Location of Head Office:** 200 Nyala Farm Road, Westport, CT 06880, USA.
Volvo Group (AB Volvo)

A Swedish-based, multinational public company, which manufactures trucks, buses, construction equipment and marine and industrial engines.

The Volvo Group provides heavy machinery used for the demolition of Palestinian houses in the West Bank and East Jerusalem, construction of Israeli settlements and construction of the Separation Wall.

In the South Hebron Hills area, Volvo wheel loaders were used to demolish houses in the Palestinian village of Umm al-Khayr and to block roads.130

Volvo track excavators and wheel loaders were also used for house demolitions in the Palestinian neighborhoods of Tzur Baher, Silwan, Wadi Qaddum, Sheikh Jarrah, Beit Hanina and Issawiya in East Jerusalem.131

The company’s equipment was used for the construction of the Har Gilo settlement and the Barkan Industrial Zone. Volvo trucks were used for the construction of the Huwwara checkpoint, Route 443 (a West Bank road for Israelis only) and the Separation Wall near the Palestinian village of Al-Walaja.132

Volvo Group excavators and loaders were also used for the demolition of houses of Palestinian citizens of Israel inside the Green Line. Volvo heavy machinery was used in multiple demolitions in the city of Lod. In addition, the company’s wheel loaders were used in numerous attempts to evict the Bedouin community of Al-Araqib from its land in the Negev desert.133

Volvo Buses, a subsidiary of the Volvo Group, owns 26.5% of Merkavim, which operates armored buses for Egged lines in the occupied Palestinian territories. The rest of Merkavim is owned by Mayer’s Cars and Trucks, which is the exclusive distributor of Volvo in Israel. Volvo Group buses are also used by the Central Company for the Development of Samaria and the Company for the Development of the Binyamin Council in the West Bank, for transportation services to the settlements.

130 Ibid.
131 Ibid.
132 Ibid.
133 Ibid.
The Samaria Regional Council also owns and operates a Volvo licensed garage.134

Two additional Volvo certified garages operate in the occupied Palestinian territories, in the industrial zones of Mishor Adumim and Atarot.

In response to a freedom of information request by Who Profits, the Israel Prison Service confirmed that the Volvo Group and its subsidiary Merkavim provide services to the Israel Prison Service, including buses for the transportation of prisoners.135

In addition, the Volvo Group supplied maintenance trucks to the Jerusalem Light Rail project, which connects settlements in the Jerusalem area with the city center.136

Ownership: The Volvo brand comprises Volvo AB and Volvo Cars. In 2010, Volvo Cars, which was held by Ford Motors, was sold to the Chinese corporation Geely. Volvo AB includes Volvo Trucks, Volvo Buses, Volvo Penta, Volvo Construction Equipment, Volvo Financial Services and Volvo Holdings.

Major shareholders: Industrivärden (20.2%); Cevian Capital (11%); Norges Bank Investment Management (6.3%); SHB (5.8%); and Alecta (4.4%).

Subsidiaries / Partners: Subsidiaries of Volvo AB include Volvo Penta (Sweden), Volvo Construction Equipment (the Netherlands), Volvo Financial Services (Sweden), Volvo Holdings (Sweden), Volvo Group Japan, Volvo China, Volvo GB, Volvo Holding Mexico, Volvo Norway, Volvo Malaysia, Volvo Italy, Volvo Russia, Volvo Singapore and Volvo Latvia.

The company’s brands include Volvo Trucks, Volvo Buses, Volvo Construction Equipment, Volvo Finance Service Vostok, Renault Trucks, UD Trucks, Prevost, Mack Trucks, Eicher (a fifty-fifty joint venture with Eicher Motors, India), Volvo Penta, Nova Bus, SDLG (Shandong Lingong, China), Volvo Rents and Volvo Aero.

Global Presence: The Volvo Group has production facilities in 19 countries and sells its products in more than 190 markets worldwide.


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136 Volvo Trucks Israel’s publications are on file with Who Profits.
Revenue: SEK 272.62 billion, approximately USD 41 billion (in 2013)
Location: SE-405 08, Gothenburg, Sweden
Conclusion

As detailed in this report, the scope and diversity of the use of heavy construction machinery within the framework of the Israeli occupation are overwhelming. Two troubling aspects of the distribution of civil and military engineering tools in the Israeli market must be addressed: the growing importance of engineering tools to the Israeli army’s military tactics and the large-scale complicity of the Israeli construction sector in demolitions and construction operations in the occupied Palestinian territories.

The central role played by heavy engineering machinery in the last two decades – in the attacks on Gaza and in urban warfare in West Bank refugee camps – stems from a rationale that puts the protection of Israeli soldiers and settlers above all, while the significance of the rights and lives of Palestinian civilians is steadily declining. Unmanned, armored and armed D9 bulldozers razing Palestinian neighborhoods to the ground and extra-judicial killings executed by demolishing a house over a suspect’s head – are clear manifestations of this “minimum risk” doctrine. The sheer size and power of construction tools grant maximum protection to their operators and enable movement with little regard to the terrain. This is why the Israeli army considers them to be a strategic weapon. Thus, providing such tools to the Israeli army and the joint development of unmanned versions of heavy engineering machinery could be described as falling into the category of arms trade.
Examining the use of civilian engineering machinery in the systematic expansion of the settlements and their infrastructure, the construction of the Separation Wall and the checkpoints and the demolition of Palestinian houses – highlights the deep involvement of the Israeli construction sector in the daily maintenance of the occupation and in perpetuating the colonization process. The Israeli government may plan and fund the settlement enterprise and the varied control systems used to oppress the Palestinian people, but often the executing bodies, those implementing the policies and de facto changing the landscape, are private Israeli construction companies.

In the absence of a local heavy machinery industry, the construction sector in Israel uses imported construction equipment for operations inherently linked to human rights violations and repeated breaches of international law. The complicity of the Israeli construction sector in the occupation is a given, a characteristic of the local market. Considering the ingrained ethical problems interwoven with operations in the Israeli market under the current circumstances, international manufacturers of heavy engineering machinery must address the devastating acts and human right violations performed using their products in the occupied Palestinian territories.
For more than 10 years, Caterpillar has actively engaged in discussions and dialogue with a wide range of faith groups, nongovernmental agencies and other organizations from around the world who have expressed interest in the Israeli-Palestinian issue as shareholders of the company. As a public company, we recognize the importance of our shareholders and their concerns. In addition to the meetings, teleconferences and written correspondence, one of the most important methods of engaging with companies is through the submission of shareholder proposals. Valid proposals submitted by shareholders are included in our proxy statement, which is delivered to all shareholders for review and consideration. While proposals specifically seeking to change the company’s policies related to human rights have consistently received limited shareholder support, the conversation regarding human rights continues to be important to Caterpillar.

Each day, it is typical for millions of shares of Caterpillar stock to be traded by individual and institutional investors. As a publicly traded company, we recognize and respect the fact that investors may

have a wide range of criteria they use in making decisions to buy or sell Caterpillar stock.

As a values-based company, Caterpillar has deep respect and compassion for all persons affected by the political strife in the Middle East and support a peaceful resolution to the Israeli-Palestinian conflict. However, we believe it is appropriate for such a resolution to be reached via political and diplomatic channels. Caterpillar’s products are designed to improve quality of life. The vast majority of the three million plus Caterpillar products in operation around the world are playing a positive role in advancing global economic development and improving standards of living. Understandably, Caterpillar cannot monitor the use of every piece of its equipment around the world. However, we recognize the responsibility companies have to encourage the constructive use of their products.

Further complicating the Middle East situation, Caterpillar and its related companies are subject to strict anti-boycott requirements under two U.S. laws – the Tax Reform Act of 1976 and the Export Administration Act. These laws are intended to stop U.S. and U.S. related companies from supporting or participating in boycotts not sanctioned by the U.S. government. Penalties for violations of the U.S. anti-boycott laws can be severe - they may include significant civil and criminal penalties and prohibitions on future exporting privileges and denial of tax benefits.

It is also important to understand that Caterpillar sells its machines to the U.S. government through the Foreign Military Sales (FMS) program. The U.S. government transfers ownership of equipment to Israel, which is one of about 150 countries or groups taking part in the FMS program. Furthermore, Caterpillar does not weaponize machines sold to the U.S. government and transferred to Israel.

Caterpillar recognizes its role in being a productive corporate citizen, including the role the Caterpillar Foundation plays.
Caterpillar Inc. supports the Caterpillar Foundation, which has invested more than $550 million since 1952 to boost economic growth and quality of life around the world. The Foundation most recently shifted its focus to turning the spiral of poverty in impoverished communities into a path to prosperity by investing in those proven to yield the best results — girls and women.

In fact, since 2010, the Foundation has committed more than $28 million to fund projects throughout 19 countries in Africa and the Middle East. Those projects focus on disadvantaged girls and women, as well as benefit hundreds of thousands of people by providing access to education, clean water, sanitation and microfinance. Specifically in Yemen, Lebanon and Jordan, Caterpillar Foundation investments of $4.5 million are helping provide training and employment opportunities to unemployed youth. CHF International, another Foundation-backed program, has worked in Iraq, Jordan, Lebanon, the West Bank and Gaza, and Yemen on programs to address key constraints facing youth, including quality of education, child labor, civic engagement and access to finance. The list of Foundation investments in the Africa and Middle East region goes on to include other organizations including the UN Foundation’s Girl Up program, One Campaign, Opportunity International, World Food Programme, International Youth Foundation, Charity: Water and more.
Facts on the Ground
Heavy Engineering Machinery and the Israeli Occupation

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