Policies of denial: Lack of access to water in the West Bank

December 2008
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Executive Summary

The summer of 2008 was a time of drought in the West Bank. Yet water shortages in the West Bank are not solely the result of natural phenomena but are exacerbated and perpetuated due to both the acts and omissions of the State of Israel. Israeli policy and practice in the West Bank since the occupation in 1967 has been to expropriate and assert control over Palestinian water resources, maintain an unequal and discriminatory allocation of water resources to benefit both Israeli citizens living in Israel and those living in illegal West Bank settlements, and prevent Palestinians from developing their resources. This has been achieved primarily through the issuance of military orders subsequent to the occupation, which transferred the power over water resources and water resource management to the occupation authorities. The Oslo peace process only served to formally institutionalise this arrangement. Under the terms of the Oslo II Agreement of September 1995, Israel was allocated nearly six times more water from transboundary underground aquifers. Moreover, Israeli citizens consume on average 4.6 times more water than a Palestinian living in the West Bank.

Israel has also actively prevented the construction and maintenance of water and sanitation infrastructure in the West Bank. This has primarily been achieved through Israel exercising its effective veto through the Joint Water Committee, which is mandated to approve all water and sanitation projects in the West Bank. In areas of the West Bank that remained under direct Israeli control following Oslo (around 61 per cent of West Bank territory) a further layer of bureaucracy exists, as the Israeli Civil Administration must grant a permit for any construction, including water and sanitation projects. The vast majority of applications for a permit are denied, and any structure built without a permit faces the risk of demolition by the Israeli authorities. As well as prohibiting the construction of wells necessary for Palestinians to secure additional quantities of water to support population growth and socio-economic development, such policies have denied communities access to water and sanitation facilities, including water and sewage networks and cisterns for rainwater harvesting.

Israeli 'security' measures inside the West Bank such as roadblocks, checkpoints and the construction of the Wall have also obstructed Palestinian access to water resources, services and facilities. Areas that have been designated closed military areas, nature reserves and 'settler only' roads have left large areas of the West Bank inaccessible to Palestinians, or movement within these areas highly restricted. Such measures isolate Palestinian communities from their springs, wells and water points, force Palestinians to travel long distances to access water, and obstacles to movement have hindered water tankers and sewage disposal trucks from accessing certain areas, causing them to make long detours which due to increased time and fuel costs have rendered such services unaffordable in many cases.

The policies and practices outlined above have restricted the ability of the Palestinian authorities to provide an adequate service to the Palestinian population, and in some cases prevented humanitarian organizations from providing aid and assistance to vulnerable communities. As an occupying power, Israel is primarily responsible for the welfare of the
Palestinian population in the West Bank and is under an obligation not to obstruct the Palestinian authorities from carrying out their duties in areas for which they responsible, including water and sanitation provision.

**Key recommendations:**

- Ensure that adequate quantities of water are available to enable the satisfaction of basic personal and domestic needs as well as ensure realisation of the rights to food and livelihood, particularly for subsistence farmers.
- Remove all obstacles to water and sanitation service provision, including facilitating access for water tankers and sanitation removal trucks at checkpoints, and opening extra filling points in communities that are not connected to the network.
- Implement a moratorium on the demolition of water and sanitation infrastructure and facilities and remove restrictions to permit requirements for cistern and network construction and rehabilitation.
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Introduction
Water is a resource that many take for granted; they turn on a tap and it magically appears. Yet, many Palestinians living in the West Bank are under no illusion as to water’s true value. High-quality water is essential for sustaining human life and, together with adequate sanitation, is necessary to protect health. Adequate quantities of water are also necessary to ensure food security and enable people to generate income through work. Ultimately, water and sanitation are necessary to ensure life is lived in dignity and to enable socio-economic development.

This report focuses on three principal methods employed by the State of Israel that lead to violations of the Palestinians’ right to access water resources and water and sanitation services and facilities in the West Bank:

- The expropriation and discriminatory allocation of water resources.
- Denial of water and sanitation infrastructure, prevention of construction of water and sewage infrastructure, and prevention of existing infrastructure rehabilitation.
- Hindering water access through ‘security measures’ such as roadblocks, closures and checkpoints in the West Bank, and the construction of the Wall.

This list is not intended to be exhaustive and the report also documents other violations of the right to water and sanitation, as well as other human rights that are dependent on access to adequate water and sanitation provision. The report highlights violations of international humanitarian law, and the lack of compliance by Israel with major principles of international water law. Whilst it is recognized that East Jerusalem constitutes a fundamental part of the occupied West Bank, this report excludes East Jerusalem from its scope. That is not to say that residents of East Jerusalem are not subject to violations of their right to water and sanitation; they are, but as they are subject to different laws and policies, the issues affecting residents of East Jerusalem are distinct from those pertaining to the rest of the West Bank.

This report is based on research carried out in the West Bank between July and September 2008. The Centre on Housing Rights and Evictions (COHRE) visited a number of Palestinian communities and met with individuals in order to understand the day-to-day reality of their lives. COHRE also met with and interviewed representatives from non-governmental organizations both Palestinian and Israeli; the Palestinian Water Authority; United Nations agencies and other individuals who have expertise on the water situation. The lead author of the report was COHRE legal officer, Lara El-Jazairi who also undertook the primary research for this report. COHRE would like to thank Dr. Shaddad Al Attili, Tareq Talhama, Wesam Ahmed, Liana Nussiebah and Mohammed Ethman for facilitating field trips for the research underlying this report. The author is also grateful to David Phillips, Bret Thiele, Ashfaq Khaifan, Virginia Roaf, Michael Talhami and Sonkita Conteh for providing comments on the first draft of this report. All opinions expressed in this publication are attributable to the author and not necessarily endorsed by commentators. Most of all, COHRE would like to thank all the Palestinians who shared their stories with us. It is hoped that this report will support them in their struggle to have their human rights respected, protected and fulfilled.
2.1. The human right to water and sanitation

The right to water and sanitation is a component of the right to an adequate standard of living, guaranteed under Article 11 (1) of the International Covenant on Economic, Social and Cultural Rights (ICESCR) and is also inextricably related to the right to the highest attainable standard of health guaranteed in Article 12 (1) of the ICESCR. The right to water and sanitation is also explicitly recognized in the Convention on the Elimination of All Forms of Discrimination Against Women and the Convention on the Rights of the Child. Israel has ratified these treaties, and is therefore legally bound by their provisions in all territories under its effective control, including in the occupied Palestinian territory. The realisation of other human rights, such as the right to food, the right to adequate housing, the right to gain a living by work, and the right to take part in cultural life also depend on access to adequate water and sanitation.

The content of the human right to water and sanitation can be defined as follows:

- **Sufficient water.** An adequate water supply must be available for personal and domestic uses, which includes drinking, personal sanitation, the washing of clothes, food preparation, personal and household hygiene. The allocation of water resources must give priority to essential personal and domestic uses. Water sources must be protected to ensure safe water for present and future generations.

- **Safe water and sanitation.** Water must be free from hazardous substances that could endanger human health, and possess a colour, odour and taste that are acceptable to users. Sanitation must be hygienic and not pose a threat to the environment. It must be able to effectively prevent human, animal and insect contact with excreta, and the passage of diseases.

- **Accessible water and sanitation.** Water and sanitation services and facilities must be within safe physical reach, in or near the house, school, work place or health facility, in a secure location and address the needs of different groups, in particular threats to the physical security of women.

- **Affordable water and sanitation.** Water and sanitation services and installations, including their maintenance, must be affordable, without reducing the individual’s or household’s capacity to acquire other essential goods and services.

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1 States that have ratified this treaty have repeatedly declared that the right to an adequate standard of living includes access to water and sanitation. For example, the Programme of Action of the 1994 Cairo Conference on Population and Development, endorsed by 177 States, and Habitat Agenda, adopted in the framework of the Second United Nations Conference on Human Settlements (Habitat II), endorsed by 171 States.

2 Convention on the Elimination of All Forms of Discrimination Against Women (1981), Article 14 (h). This article obliges States to ensure that rural women have access to water supply and sanitation. All human rights treaties are available at www.ohchr.org, (click on ‘Your Human Rights’ > ‘What are Human Rights’ > ‘International Human Rights Law’).

3 Convention on the Rights of the Child (1990), Article 24 (2) (c), www.ohchr.org. This article guarantees children have the right to the enjoyment of the highest attainable standard of health and requires States to combat disease and malnutrition through the provision of adequate nutritious foods and clean drinking water.

4 In its concluding observations on Israel, the UN Committee on Economic, Social and Cultural Rights stated that the ICESCR applies to "all territories and populations under its effective control" and that "the applicability of rules of humanitarian law does not by itself impede the application of the Covenant or the accountability of the State under article 2 (1) for the actions of its authorities". See Israel’s second periodic report submitted to the Committee on Economic, Social and Cultural Rights. (May 2003), para.5. at www.ohchr.org, (click on ‘Treaty Bodies’ > ‘CESCR’ > ‘sessions’ > ‘30’). Other UN Treaty Monitoring bodies have reached similar conclusions.

5 In 2002, the UN Committee on Economic, Social and Cultural Rights, an expert body mandated to monitor and interpret the ICESCR adopted General Comment No. 15: The Right to Water. In 2006, the UN Sub-Commission on the Promotion and Protection of Human Rights adopted Guidelines for the Realization of the Right to Drinking Water Supply and Sanitation (Sub-Commission Guidelines). Both of these texts taken together provide an authoritative interpretation of the scope and content of the right to water and sanitation.
States that have ratified the ICESCR, which includes Israel, hold obligations to respect, protect and fulfil economic, social and cultural rights without discrimination in regard to the people within their territory or otherwise under their effective control. Moreover, retrogressive measures that erode the existing enjoyment of the right to water and sanitation are strictly prohibited under the terms of the ICESCR. States which have the resources to do so should further facilitate realisation of the right to water in other countries, for example through provision of water resources, financial and technical assistance, and the provision of necessary aid when required. State parties also hold transnational obligations to respect the enjoyment of all rights guaranteed under the ICESCR and "refrain from actions that interfere, directly or indirectly, with the enjoyment of the right to water in other countries."

The International Court of Justice has ruled that the ICESCR is "applicable in respect of acts done by a State in the exercise of its jurisdiction outside its own territory. In the case of the International Covenant on Economic, Social and Cultural Rights, Israel is also under an obligation not to raise any obstacle to the exercise of such rights in those fields where competence has been transferred to the Palestinian authorities". The responsibility for the water and sanitation sector has officially been transferred to the Palestinian Water Authority, but Israeli policy and practices in the occupied Palestinian territory have in many cases obstructed the Palestinian Authority from providing an adequate service to the population. Consequently, Israel as an occupying power is ultimately responsible and accountable for ensuring the realisation of the right to water and sanitation for the Palestinian people in the occupied territory.

2.2. The right to food and livelihood (right to gain a living by work)

The United Nations Committee on Economic, Social and Cultural Rights is responsible for monitoring implementation of the ICESCR and issuing General Comments which provide authoritative interpretations of substantive provisions and guide States on the Covenant's implementation. General Comment No. 15 (2002): The Right to Water makes clear that whilst the right to water prioritises the allocation of water for personal and domestic uses, water is also necessary to produce food and secure livelihoods. It states:

7 General Comment No. 15, para. 19.
8 General Comment No. 15, para. 34. The Sub-Commission Guidelines state "developed countries should provide sufficient financial and technical assistance to supplement the resources of developing countries with a view to ensuring everyone has access, as promptly as possible, at least to basic water and sanitation services," section 10.2.
9 General Comment No. 15, para. 31.
10 International Court of Justice, Legal Consequences of the Construction of a Wall in the Occupied Palestinian Territory, p.49, para. 112, at www.icj-cij.org, (click on 'Cases'> 'Advisory Proceedings').
11 General Comment No. 15, para. 6.
"The Committee notes the importance of ensuring sustainable access to water resources for agriculture to realize the right to adequate food ... Attention should be given to ensuring that disadvantaged and marginalized farmers, including women farmers, have equitable access to water and water management systems, including sustainable rain harvesting and irrigation technology ... States parties should ensure that there is adequate access to water for subsistence farming and for securing the livelihoods of indigenous peoples."\textsuperscript{12}

General Comment No. 12 (1999): The right to adequate food states that obligations to fulfil the right to food "means the State must proactively engage in activities intended to strengthen people's access to and utilization of resources and means to ensure their livelihood, including food security."\textsuperscript{13} Thereby, Israel is responsible for ensuring that the necessary quantities of water are available to fulfil all basic water needs, including agriculture and livestock farming, particularly where such activities represent peoples' means of subsistence.

2.3. The right to self-determination and permanent sovereignty over natural resources

The right to self-determination is a jus cogens or peremptory norm in international law, which means that it constitutes a fundamental and universal legal principle from which no derogation is permissible.\textsuperscript{14} It is enshrined in Article 1, paragraph 2 of the Charter of the United Nations. Likewise, common Article 1 of the International Covenant on Civil and Political Rights (1966) and the International Covenant on Economic, Social and Cultural Rights (1966) guarantee all peoples the right to self-determination, including control over their natural wealth and resources. Common Article 1 states:

1. "All peoples have the right to self-determination. By virtue of that right they freely determine their political status and freely pursue their economic, social and cultural development.

2. All peoples may, for their own ends, freely dispose of their natural wealth and resources without prejudice to any obligations arising out of international economic cooperation, based upon the principle of mutual benefit, and international law. In no case may a people be deprived of its own means of subsistence."\textsuperscript{15}

\textsuperscript{12} General Comment No. 15, para. 7.

\textsuperscript{13} General Comment No. 12, para. 15.

\textsuperscript{14} The right to self-determination has been found to be jus cogens by most scholars as well as by the UN General Assembly, the UN Commission on Human Rights, the International Law Commission and the International Court of Justice. See, UN General Assembly Resolution, 3236; UN Commission on Human Rights Resolution 2003/3; International Law Commission on the work of its fifteenth session, Yearbook of the International Law Commission on 1963, vol. II (United Nations publication, Sales No. 63.V.2), pp. 198-199, document A/5509, chapter II, section B, article 37, and commentary, paras. (1) to (5); Legal Consequences for States of the Continued Presence of South Africa in Namibia (S.W.Africa) 1971, International Court of Justice 16, 89-90 (Ammoury, J., separate opinion).

\textsuperscript{15} Emphasis added.
The inalienable right of the Palestinian people to self-determination has been recognised in numerous UN General Assembly resolutions as well as by the UN Human Rights Council, and is considered to be the basic requirement for a just and lasting peace in the Middle East and the creation of a viable Palestinian state. The right of the Palestinian people to permanent sovereignty over their natural wealth and resources was affirmed for the first time by the UN General Assembly in December 1972 and has been re-affirmed numerous times since, most recently by the General Assembly in resolution 62/181 on 31 January 2008. The resolution confirms that the right of sovereignty of natural resources includes both land and water and calls upon Israel not to exploit or damage natural resources in the occupied Palestinian territory.

2.4. Water under international humanitarian law

The laws governing belligerent occupation applicable to the West Bank include The Hague Regulations of 1907, the Fourth Geneva Convention of 1949, and customary laws of belligerent occupation. These laws are intended to provide some protection to the civilian population living under the control of a hostile military power. While under military occupation, the occupying power exercises control over the territory and the powers of the legitimate government are suspended; the temporary nature of occupation means that no change in sovereignty occurs. Therefore, whilst the occupying power may create laws deemed necessary to realise its military objectives and to maintain and restore public order and safety, it may not make changes to institutions, laws or administrative practices in place prior to occupation that go beyond this scope. Article 43 of The Hague Regulations of 1907, provides that: "The authority of the legitimate power having in fact passed into the hands of the occupant, the latter shall take all the measures in his power to restore, and ensure, as far as possible, public order and safety, while respecting, unless absolutely prevented, the laws in force in the country." Moreover, while being the de facto administrator of the occupied territory, as opposed to the legitimate sovereign, under Article 55 of The Hague Regulations, an occupying power may not utilise the resources of the occupied territory for the benefit of its civilian population, and utilisation of the...

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17 UN General Assembly Resolution 3005 (XXXVII), (15 December 1972).
19 The Israeli Supreme Court of Justice in Ayyoub v. Minister of Defence ruled that The Hague Regulations are customary law, and therefore automatically part of municipal law and justiciable in Israel. Many of the provisions of the Geneva Conventions are considered customary international law, and the International Court of Justice has ruled that Israel is bound by both the Fourth Geneva Convention and The Hague Regulations in the occupied Palestinian territory. See, International Court of Justice, Legal Consequences of the Construction of a Wall in the Occupied Palestinian Territory: Advisory Opinion of 9 July 2004, (2004), p.40, para. 89. Customary laws are laws which have developed through State practice and the opinion of the international community and are binding on all States, regardless of whether they have signed a treaty or not.
20 Hague Convention IV Respecting the Laws and Customs of War on Land, (1907), Article 43, www.icrc.org, (click on "Info resources"> "IHLS databases"> "treaty database"> "treaties & documents by topic").
resources is strictly limited to military necessity and must not exceed normal use. The Hague Regulations further prohibit the confiscation of private property (Article 46) and pillage (Article 47).

Under international humanitarian law, an occupying power is responsible for the welfare of the civilian population and must ensure that civilians are provided with or allowed to secure the basics for survival including food, water, medical supplies and shelter. Internees and/or protected persons are guaranteed access to drinking water, water for personal hygiene and sanitation under the Geneva Conventions. Moreover, an occupying power is obliged to ensure public health and hygiene is maintained in the occupied territory, which necessitates the provision of clean drinking water and basic sanitation. The Fourth Geneva Convention states: "If the whole or part of the population of an occupied territory is inadequately supplied, the Occupying Power shall agree to relief schemes on behalf of the said population, and shall facilitate them by all the means at its disposal." The Fourth Geneva Convention prohibits attacks on, and destruction of, civilian property including drinking water installations, and prohibits the withholding of food or water that may lead to the forced movement of the population.

An occupying power further holds the responsibility to ensure that all persons in the occupied territory are treated equally. Article 27 of the Fourth Geneva Convention states: "all protected persons shall be treated with the same consideration by the Party to the conflict in whose power they are, without any adverse distinction based, in particular, on race, religion or political opinion."

2.5. International water law

Whilst both human rights law and international humanitarian law apply legally binding standards that States have a duty to uphold in relation to the population of territories under their effective control, international water law governs the relationship between co-riparian States and promotes cooperation in determining how transboundary watercourses should be divided. As water often flows across international borders (thus escaping the territorial jurisdiction of any one State), domestic implementation of the human right to water is commonly dependent on the utilisation of transboundary water resources.

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21 The article states: "The occupying State shall be regarded only as administrator and usufructuary of public buildings, real estate, forests, and agricultural estates belonging to the hostile State, and situated in the occupied country. It must safeguard the capital of these properties, and administer them in accordance with the rule of usufruct."

22 Fourth Geneva Convention, Article 85. All the Geneva Conventions and Additional Protocols can be found at http://www.icrc.org, (click on 'Humanitarian Law' > 'The Geneva Conventions'). See also Articles 89 & 127 relating to drinking water. See Article 56 relating to hygiene and sanitation.

23 Fourth Geneva Convention, Article 56.

24 Fourth Geneva Convention, Article 59.

25 Fourth Geneva Convention, Article 54.

In 1997 the UN General Assembly adopted the United Nations Convention on the Law of the Non-Navigational Uses of International Watercourses (WCC) by majority vote. Although the WCC has not as yet gained the required number of ratifications to have entered into force (and Israel has not signed it), it is widely considered that the main principles of the WCC constitute international customary law, and are therefore legally binding on all States regardless of the status of the convention. A key principle governing the lawful use of transboundary water resources is the principle of "equitable and reasonable utilisation" and riparian States are also under an obligation not to cause significant harm to another basin State. In determining what constitutes equitable and reasonable utilisation, Article 6 of the WCC lists factors to be considered, including the "social and economic needs of the watercourse States concerned" and the "population dependent on the watercourse in each watercourse State". Article 10 further establishes that "in the event of a conflict between uses of an international watercourse … special regard [should be] given to the requirements of vital human needs." In defining what constitutes 'vital human needs', it is generally understood that this includes sufficient water to sustain life, including both drinking water and water required for the production of food in order to prevent starvation. Customary international law also prescribes that all States bordering an international watercourse are under a general procedural obligation to cooperate and negotiate in good faith in the utilisation of transboundary watercourses. Customary international law is therefore broadly consistent with human rights principles, and can be used to realise the right to water and sanitation.

Further, as has been shown above, international obligations incumbent upon states that have ratified the ICESCR include refraining from actions that interfere with the enjoyment of the right to water and sanitation, as well as to refrain from actions that deprive another country of the ability to realise the right to water for persons in its jurisdiction. Excessive pollution of, or abstraction from, a transboundary watercourse in one country can affect the realisation of the right to water and sanitation in other

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27 In the case of the dispute between Slovakia and Hungary over the waters of the Danube River, the International Court of Justice based its ruling on the principles of the UN Convention on the Law of the Non-Navigational Uses of International Watercourses. Available at www.icj-cij.org. Also the International Law Association’s Helsinki Rules 1996 (governing the uses of international rivers) and the 1986 Seoul Rules (governing groundwater resources), provide authoritative statements on customary international water law. For all documents relating to international water law go to www.internationalwaterlaw.org/international.
28 WCC, Article 5.
29 WCC, Article 7.
30 Emphasis added.
31 WCC, Article 10 (2) and the accompanying "Statement of Understanding". See also the International Law Association, Berlin Rules on Water Resources, Article 14 and commentary. The Rules are a persuasive statement of customary international law prepared by international legal experts in the field.
32 WCC, Article 8.
countries that share the resource, i.e. through making water unfit for human consumption, or depleting resources to insufficient levels. Moreover, excessive abstraction may reduce quantities of water available for agricultural irrigation and livestock which require much higher amounts of water than those necessary to satisfy basic personal and domestic needs and, as shown above, are essential to ensuring the rights to food and work. \footnote{Water requirements to fulfill basic personal and domestic needs are around 50-100 l/c/d (litres per capita per day). However, the work of Peter Gleick shows that basic water requirements for food production could range from 2,964 l/c/d to 5,908 l/c/d and are subject to regional variations. See, Peter H. Gleick, ‘Basic Water Requirements for Human Activities: Meeting Basic Needs’, in Water Law International, 21 (1996) pp. 83-92.}
The Expropriation and Discriminatory Allocation of Water Resources Under Occupation
Israel’s occupation of the West Bank, the Gaza Strip, and the Golan Heights in 1967 significantly enhanced its hydrological status. In the West Bank, the three main aquifer basins (Western, North-eastern and Eastern) were brought under Israel’s control. These three aquifer basins are shared transboundary water resources, with 90 per cent of recharge occurring in the West Bank. These aquifer basins constitute the Palestinians’ only source of groundwater in the West Bank while Israel has access to additional aquifers that are not shared with the West Bank.\textsuperscript{34} Israel has also secured control of the surface waters of much of the Jordan River Basin.

3.1. Military orders and the establishment of a new water regime in the West Bank following the 1967 occupation

Soon after the occupation, Israel issued an order declaring that all water resources in the region were State property (Proclamation No.2: 1967). Three military orders were subsequently issued relating to water, which amended the Jordanian or British Mandate Law in place prior to 1967:\textsuperscript{35}

- **Military Order 92 (15 August 1967) Order Concerning Jurisdiction over Water Regulations**

  This order transferred all authority over water resources to an Israeli official appointed by the Area Military Commander. This individual had sole power to stop the operation of any existing water entities, establish new ones and appoint their members. This official was also granted responsibility for the production and supply of water, the establishment of water projects including the drilling of wells and granting permits and licenses for such projects, as well as fixing and levying fees and taxes.

- **Military Order 158 (19 November 1967) Order Concerning the Amendment to the Supervision Over Water Law**

  This order amended the Jordanian Water Law No. 31 previously in place. It forbade the unlicensed construction of any new water installation, including the drilling of wells, and invested the Israeli official with the power to deny any applicant a permit or revoke a permit at his discretion, and without the need to provide any explanation. Any water resources that did not have the required permit, could be confiscated by the authorities. Decisions made by the Israeli official in charge were not subject to appeal.

- **Military Order 291 (19 December 1968) Order Concerning Settlement of Disputes over Land and Water**

  This order declared that all prior settlements of disputes concerning water are invalid and any regulation in the law or any water transactions could be cancelled, even if ratified by civil courts.

\textsuperscript{34} These are: The Coastal Aquifer (shared with Gaza), the Carmel, the Naqab, and the Western Galilee.

\textsuperscript{35} For additional information on the extent of changes made to existing water legislation and practice following the 1967 occupation see the United Nations Economic and Social Council, Permanent Sovereignty over Natural Resources in the Occupied Palestinian and other Arab Territories: Report of the Secretary General, UN Doc. A/39/326 E/1984/111 (1984), www.domino.org.
Taken in their totality, the effect of these military orders was to transfer the power that local municipal authorities and village councils previously held over water resources and water management to the occupation authorities, and stifle Palestinian use of springs and groundwater development. The lack of Palestinian water resource development since 1967 is clear when one considers that not one permit has been granted for the drilling of new Palestinian controlled wells, in the largest and most productive of all the aquifer basins, the Western Aquifer, since the beginning of the occupation. The Palestinian share of groundwater from this basin ranges between 3 and 7 per cent of total abstraction (extraction). The lack of resource development has been compounded due to lack of Palestinian access to the Jordan River. In addition to preventing the development of new wells, in 1986 the abstraction quota of Palestinians from existing wells was reduced by 10 per cent.

3.2. Water under the Oslo Peace Process

In September 1993, with the signing of the Oslo Peace Accords, the Oslo peace process began. In the Declaration of Principles on Interim Self Government Arrangements (1993), the Israelis and Palestinians agreed to cooperate in the management of water resources in the West Bank and Gaza Strip, and both sides were called upon to submit proposals and studies for plans on the "water rights of each party, as well as on the equitable utilization of joint water resources for implementation in and beyond the interim period".

When the Israeli-Palestinian Interim Agreement on the West Bank and Gaza Strip (Oslo II) was signed in September 1995, no mention was made of the equitable and reasonable allocation of water resources. Under Article 40, Annex III of Oslo II, the basis for Israeli-Palestinian cooperation in the water and sewage sector was established. Israel recognized Palestinian water rights in the West Bank under Article 40, yet the agreement fails to define what these rights are, instead leaving them to be negotiated in the permanent status talks. It is important here to emphasise that the interim agreement was only meant to last for a five year period, during which time a permanent agreement would be negotiated leading to an independent Palestinian state. The Oslo II accord set the basis for Israeli and Palestinian utilization of water to meet the "immediate needs of the Palestinians in fresh water for domestic use," yet failed to make significant changes to the discriminatory allocation of water that has been a continuing feature of the occupation.

37 Ibid.
40 Israeli-Palestinian Interim Agreement on the West Bank and Gaza Strip (Oslo II) Annex III, Article 40 (1).
41 Oslo II Interim Agreement, Article 40 (7).
Under the terms of Article 40 the following allocation of ground water resources was agreed upon:

<table>
<thead>
<tr>
<th>Ground Water Resource</th>
<th>Total annual recharge rate</th>
<th>Israel’s annual allocation</th>
<th>Palestine’s annual allocation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Western Aquifer Basin</td>
<td>362 million cubic metres (MCM)</td>
<td>340 MCM (94%)</td>
<td>22 MCM (6%)</td>
</tr>
<tr>
<td>North Eastern Aquifer Basin</td>
<td>145 MCM</td>
<td>103 MCM (71%)</td>
<td>42 MCM (29%)</td>
</tr>
<tr>
<td>Eastern Aquifer Basin</td>
<td>172 MCM</td>
<td>40 MCM</td>
<td>54 MCM</td>
</tr>
</tbody>
</table>

The Oslo II agreement further provides that an additional 78 MCM "remaining quantities" of water are to be developed and made available to Palestinians from the Eastern Aquifer Basin, but it is generally believed that these quantities are not available.\(^{42}\) Today, thirteen years since the Oslo II accord was signed only 12.3 MCM/yr of additional water has been developed for the Palestinians.\(^{43}\) It is important to note that the quantities to be made available to the Palestinians under the Oslo II accord over a five-year period did not accurately reflect increased demand in the absence of a final settlement, due to factors such as population growth and socio-economic development. In fact as the population of the West Bank has increased by approximately 50% since the Oslo II agreement was signed, \(\text{per capita}\) availability of fresh water for Palestinians has significantly reduced since 1995.\(^{44}\) Article 40 recognises that in order to satisfy future Palestinian water demand there is a need to "develop additional water for various uses".\(^{45}\) The Oslo II accord states that the future water needs of the Palestinian State will be met from the Eastern Aquifer Basin or another agreed upon source. While the Palestinian’s understood this to be water from the Western and North-eastern Aquifer Basins the prevailing discourse has been to seek alternative sources of water such as treated waste-water or the construction of desalinisation plants in Israel. Certain institutional issues were also agreed upon; under the Oslo II agreement, the Israelis and Palestinians established a Joint Water Committee to implement Article 40 in the interim period.

### 3.3 Control over water resources in the West Bank

There are 325 Palestinian abstraction wells and 42 Israeli abstraction wells located inside the West Bank. Despite their inferior number, Israeli wells are much deeper than Palestinian wells and have a much higher pumping capacity, producing a total of 56.9 MCM/yr compared to the Palestinians' 65.5 MCM/yr.\(^{46}\) However, as the natural flow of groundwater carries the water to the coastal plain, Israel does not need to drill inside the West Bank to utilise water from the

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\(^{42}\) COHRE interview with Clemens Messerschmid, hydrologist, 7 August 2008.


\(^{45}\) Oslo II Interim Agreement, Article 40 (2).

\(^{46}\) Palestinian Water Authority, Water Resources in the Historical Palestine, Presentation.
Western and North Eastern Aquifer Basins. Instead, to enjoy this vital resource Israel only needs to prevent the Palestinians from developing their resources.\textsuperscript{47} The most productive area for development of the Western Aquifer Basin is in Israeli territory and just to the west of the Green Line (the 1949 Armistice Line). In relation to the three aquifers in the West Bank, Israel controls 67 per cent of water from outside of the West Bank, 18 per cent from inside the West Bank, and Palestinians control the remaining 15 per cent.\textsuperscript{48} Palestinians have no share of the major fresh surface water resource in the West Bank, the Jordan River. The diversion of the headwaters of the Jordan River by Israel’s National Water Carrier has caused downstream water levels to be greatly diminished and has constituted the main cause of the shrinking of the Dead Sea. The over-exploitation of this water (again, mainly by Israel) has contributed to high levels of salinisation and very poor water quality. In total, from all the transboundary water resources shared between Palestine and Israel (groundwater, the Jordan River, and runoff) Israel controls 89 per cent and the Palestinians control 11 per cent.\textsuperscript{49}

**Palestinian control over water resources for domestic drinking supply in the West Bank includes:**\textsuperscript{50}

**Wells that are operated by the Palestinian Water Authority (PWA):** There are eight wells owned and operated by the PWA, producing 7.8 MCM/yr. These are located in the Hebron and Bethlehem districts and the West Bank Water Department is responsible for their supervision, operation and maintenance.

**Wells of the Jerusalem District Water Undertaking for Ramallah and Al-Bireh:** There are five wells, producing 2.64 MCM/yr, which are controlled, managed and operated by the Jerusalem District Water Undertaking. These supply over 50 communities in the Ramallah and Al-Bireh Governorate, as well as a number of areas in Jerusalem.

**Agricultural Wells:** There are 320 agricultural wells in the West Bank, traditionally operated by private owners but brought under the jurisdiction of the PWA through the 2002 Water Law. These wells are generally of low-capacity, many of them having been drilled during the Jordanian period. Of these wells, around 21 are used for domestic supply in Palestinian communities that have no access to any other water source. The number of people dependent on agricultural wells as their sole water supply exceeds 30,000 in the West Bank. Many of these wells are located around Tulkarem, Qalqilya and Jenin. Reliance on agricultural wells for domestic purposes is increasing, due to population growth and the insufficiency of alternative water resources.

**Municipal and Local Council Wells:** There are around 29 wells that are operated by the municipalities and local councils. These have also been brought under the regulatory jurisdiction of the PWA, although the municipalities are responsible for their operation and for payment collection. They produce around 17.20 MCM/yr.


\textsuperscript{48} Palestinian Water Authority, *Water Resources in the Historical Palestine*, Presentation.


\textsuperscript{50} Much of the information in the following section is taken from, Palestinian Water Authority, *Water Supply in the West Bank, Palestine*, (April 2006).
Springs: There are about 17 springs utilised for drinking purposes, supplying 16 Palestinian communities. For some communities such as Jericho, these are the primary source of water. In other communities such as Salfit and Nablus they constitute an additional source of water supply. These springs produced around 44.8 MCM/yr in 2007 but being replenished by intermittent winter rains, they are not a reliable water resource.

Israeli control over water resources for domestic drinking supply in the West Bank includes:

The West Bank Water Department (WBWD) wells: The WBWD is responsible for the bulk water supply in the West Bank. Created by Jordanian Law No. 37 (1966), the WBWD was transferred to the control of the Civil Administration following the occupation, and partially turned over to the management of the Palestinian Water Authority (PWA) in 1996. The WBWD is responsible for operating and maintaining 13 wells producing 10.4 MCM/yr that supply water to Jenin Governorate, Bethlehem and Hebron. Whilst the WBWD is nominally under the control of the PWA some of the staff remain on the Israeli payroll, and these wells are effectively managed and controlled by the Israeli Water Company Mekerot. Israel has the final say on the operation of WBWD wells, including who should be prioritised in water allocation (e.g. Palestinian communities or Israeli settlements and military compounds).

Israeli Wells inside the West Bank: There are 42 Israeli wells inside the West Bank, which are owned and operated by the Israeli water company Mekerot. These are drilled mainly in the Eastern Aquifer Basin, near the Jordan Valley. Approximately 40 MCM/yr of the water from these wells serves the illegal Israeli settlements in the Jordan Valley, and supports their water-intensive agriculture, as well as Israeli military bases. The remaining 7.6 MCM/yr is supplied to Palestinian communities via the WBWD. Israel’s over-abstraction from the Eastern Aquifer Basin has caused the wells and springs in some Palestinian communities in the northern-Jordan Valley, such as Bardala, to dry up. Oxfam reports that whilst the 320 agricultural wells in the West Bank produced 45 MCM/yr of water in 1967, they now only provide 24 MCM/yr.

Water purchased from Israeli resources inside the Green Line: The WBWD also purchases and distributes around 23 MCM/yr of water supplied by the Israeli company Mekerot, which is extracted from wells located in Israel. This water is supplied to communities who are unable to meet their basic domestic needs.

In totality, water purchased from the Israeli water company Mekerot (from WBWD wells, Israeli wells inside the West Bank, and wells located to the west of the Green Line) and distributed by the WBWD constitutes approximately 52 per cent of domestic water supplies inside the West Bank. In 2007, the Palestinians in the West Bank purchased 49.4 million m3 of water.

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51 Information provided by Michael Talhami, Policy Advisor, Negotiations Support Unit, 24 November 2008.
52 COHRE interview with Clemens Messerschmid, hydrologist, 7 August 2008. The Israeli Civil Administration agreed to compensate the community in Badala and provides them with water at a reduced price.
water from Mekerot at a cost of 129 million shekels (US $34-35 million). Of this amount around 4.8 million m³ is sold to Bardala for agricultural use at a cheaper price as Israeli wells have dried up the local water source for this community. Some communities with insufficient water supplies are purchasing water from the Israeli settlements at very high prices.

3.4. Inequalities in water consumption

The inequalities in allocation of transboundary water resources between Israel and Palestine are reflected in per capita consumption. On average, a Palestinian in the West Bank consumes around 70 litres of water per day for domestic uses, whereas an Israeli citizen’s domestic consumption is around 320 litres per person per day, 4.6 times more than a Palestinian. However, throughout the West Bank there are wide regional discrepancies in water consumption levels, with some communities consuming well below the 50-100 litres that the World Health Organization recommends to ensure that all health concerns are met. Moreover, Mekerot often reduces or disconnects the supply to Palestinian villages in summer months, when the demand is high in Israel and the settlements. For example, in April 2008, the quantity of water supplied via the WBWD to six localities in Beit Jala, in the Bethlehem Governorate through Al Walajah water pipe was reduced by half; affecting 16,000 people. Also in the Bethlehem Governorate, the water supplied through the Herodeon connection was reduced by 60 per cent, affecting 7,200 people. As the reduction in supply led to a decrease in water pressure those living in high altitude areas did not receive any water.

Water consumption in the agricultural sector also reflects the bulk of power imbalance. In 2006 Israel's agricultural consumption of water amounted to 1,107.8 MCM (of which 519.3 MCM was fresh water). Palestine’s agricultural consumption of water in 2006 was 170.8 MCM, 83.4 MCM of which was in the West Bank. Israeli agricultural settlements in the West Bank, particularly those in the Jordan Valley, utilize high quantities of water. The NGO Peace Now reported that per capita, the irrigated areas of settlers were thirteen times larger than those allocated for Palestinians. Due to the economic decline of the West Bank as a result of Israeli-imposed restrictions on movement, lack of domestic and foreign investment, and prevention of Palestinians from working in Israel, more and more communities are increasingly dependent on agriculture for both their food security and income.

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55 Information provided by Michael Talhami, Policy Advisor, Negotiations Support Unit, 24 November 2008.
59 Figures from Israeli Water Authority data and Palestinian Water Authority Data and provided to COHRE by Michael Talhami, Policy Advisor, Negotiations Support Unit, 30 November 2008.
The Expropriation and Discriminatory Allocation of Water Resources Under Occupation

Impact of the illegal settlements on water

The Occupying Power shall not deport or transfer parts of its own civilian population to the territory it occupies.

Article 49 (6) of the Fourth Geneva Convention

According to Peace Now, approximately 260,000 people live in settlements throughout the West Bank (excluding East Jerusalem). Moreover, the expansion of settlements and Israel’s failure to remove unauthorized ‘outposts’ is in breach of Israel’s obligations under the Road Map to peace, UN resolutions and international law. Since the Annapolis summit, Israeli tenders and plans announced for construction in the occupied Palestinian territory amount to almost 30,000 Jewish-only housing units.

The existence of the settlers and the associated infrastructure that supports them is in violation of the prohibition incumbent upon an occupying power not to discriminate against residents in the occupied territory. This discrimination is particularly clear in the case of water. Israeli settlers use much deeper wells than Palestinians in the West Bank and despite controlling only 13 per cent of all wells in the West Bank, the settlers’ use of water accounts for approximately 53 per cent of groundwater abstraction. Mekerot supplies water to the Israeli settlements at a highly subsidized rate, enacting a discriminatory pricing policy as Palestinians who are sold water via Mekerot are billed by the WBWD at much higher tariffs. The settlers receive an unlimited supply of water all year round yet as has been shown above, Palestinian communities often face shortages in summer months.

Often the water supplied to Palestinian communities and the Israeli settlers flows through the same network, but the pipes leading to Palestinian communities are much narrower in diameter, only half an inch as opposed to two inches wide. Israel also inserts ‘unit roles’ into Palestinian pipelines that further reduce the flow of water and water pressure to Palestinian communities. Moreover, the valves that supply the water to Palestinian communities are often located within or adjacent to the settlements, and there have been numerous cases where the valve has been turned off by settlers preventing the supply of water reaching Palestinian communities. Settlers have also been known to destroy Palestinian water sources and infrastructure in an attempt to intimidate Palestinian communities living in the vicinity of settlements.

61 See, www.peacenow.org.il
63 Fourth Geneva Convention, Article 27. The International Convention on the Elimination of All Forms of Racial Discrimination (ICERD) guarantees that nobody should suffer from direct or indirect discrimination based on race, colour, decent, religion or national or ethnic origin. Withholding equal access to water and sanitation services for people of one ethnic group, amounts to racial discrimination and would be a breach of a States legal obligations under the ICERD.
66 Ibid.
3.5. The Wall and water

First of all, it has to be said unequivocally: this wall has nothing to do with security

Uri Avnery, Peace activist and former member of the Israeli Knesset

The construction of the Wall inside Palestinian territory has also been seen by many as an attempt to expropriate water resources and assert Israeli control over hydrologically sensitive areas. In the northern West Bank, the land to the west of the Wall constitutes the only area of the Western Aquifer Basin which has any significant future potential for well development and increasing water abstraction in the future. The hydrologist Clemens Messerschmid argues that whilst a large number of Palestinian wells have been expropriated by Israel due to the construction of the Wall, it is unlikely that control over these old agricultural wells was a major strategic goal; rather Israel has sought to assert its supremacy over future ground water development in this area. Yet, for the Palestinians the construction of the wall could cause them a significant annual water loss of their production from the Western Aquifer Basin, as well as the potential for future resource development in this groundwater basin.

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68 The Environmental Unit of the Israel Nature and National Parks Authority, West Bank Monitoring: Stream Pollution Evaluation (August 2008). Palestinian sources have given higher figures.

69 In April 2006, heavy rains caused the wastewater pipeline in the largest of the Israeli settlements, Ariel, to overflow, polluting the spring that the Palestinian communities of Salfit, Kafr ad Dik, Farkha and Burqin rely on as their only drinking water source. See Palestinian Hydrology Group, Water, Sanitation and Hygiene Monitoring Programme, Water for Life: The Dilemma of Development Under Occupation: The obstacles to achieving the Millennium Development Goals and water rights in the occupied Palestinian territory, (2006), p.35.

70 There are reports that Israel also sends hazardous and medical waste from within its territory to dumpsites in the West Bank.


73 Ibid.

In July 2004, the International Court of Justice (ICJ) issued an advisory opinion on the legal consequences of the construction of the Wall being built by Israel in the occupied Palestinian territory. It ruled that Israel's construction of the Wall in the occupied Palestinian territory is contrary to international law, and Israel is obliged to cease all construction, to dismantle the Wall and to make reparation for all damage caused by the construction of the Wall.\textsuperscript{75} The ICJ noted that the Wall made it increasingly difficult for Palestinians to access their sources of water and highlighted its concern at the annexation of the Western Aquifer Basin.\textsuperscript{76}

\textsuperscript{75} International Court of Justice, as above, para. 163.
\textsuperscript{76} Ibid. Para. 133.
The Palestinian Water Authority (PWA) was established in 1995 and is the regulatory body responsible for water resources, management and development in Palestine. Since its creation, the PWA has been working to restructure the water sector, build institutional and human resource capacity, and improve water governance. Whilst Water Law No. 3 (2002) explicitly recognizes water as a human right, and water and waste-water sector policies and strategies include a number of rights-based principles, the PWA faces a number of challenges in realising the right to water and sanitation for the Palestinian people particularly in extending access to water and sanitation services to un-served or underserved communities. The primary challenge is fulfilling its role as the manager of a resource that it does not control, and its lack of ability to implement projects without Israeli approval.

4.1. The Joint Water Committee: A model for Israeli-Palestinian cooperation or institutionalised discrimination?

The Joint Water Committee (JWC) established under Article 40 of the Oslo II agreement is mandated to deal with all water and sewage-related issues in the West Bank. This includes the coordinated management of water resources and water and sewage systems, including granting permits for drilling wells and water resource systems development; protection of water resources and water and sewage systems; setting abstraction quotas; resolution of water and sewage disputes; and cooperation in the field of water and sewage, including exchanging information. The JWC is comprised of an equal number of Israeli and Palestinian representatives, and "all decisions of the JWC shall be reached by consensus." It is a coordinating body, with the PWA responsible for the day-to-day operation of the Palestinian Water Sector. However, all infrastructure development works in the West Bank must be approved by the JWC and each of the parties may therefore veto any proposals.

Whilst theoretically, Israelis and Palestinians are given equal rights and responsibilities under the JWC, the JWC de facto discriminates against Palestinians. This is primarily because the Palestinians are the party who require major infrastructure development in the water and sanitation sector.

Donor policy in the occupied Palestinian territory

Donor policy towards the occupied Palestinian territory has also undermined the ability of the PWA to fulfil its mandate. Aid is often channelled in such a way that it bypasses the institutions primarily responsible for service provision. Further, donors are reluctant to invest in large water infrastructure projects, and instead restrict their funding to humanitarian and emergency projects that do not enable the much-needed development of the water and sanitation sector.

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77 Article 40 (12).
78 Ibid. See also Schedule 8 of the Appendix to Oslo II.
79 Article 40 (13).
80 Article 40 (14).
sanitation sector that has been badly neglected by the occupation authorities since 1967, and are the party needing to develop the additional supplies of water promised to them under Oslo. The second factor is that the JWC only has jurisdiction over water resources and water and sanitation development inside the West Bank. The Palestinians have no power to exercise their right to sovereignty over their natural resources, and are given no say in Israel's development of shared water resources inside Israeli territory or in the West Bank. Further, the Palestinians are not entitled to access information concerning transboundary resources located to the west of the Green Line. In fact, Israel has consistently exercised its veto power through the JWC by refusing to grant Palestinians permits, thereby stifling Palestinian water and sanitation development. As of July 2008, 145 Palestinian projects were pending JWC approval, including projects to rehabilitate old water supply networks, build new pipelines to connect communities un-served by the water network, and build cisterns for rainwater harvesting. Some projects have been pending JWC approval for over a decade including for wastewater treatment plants in Abu Dis and Tulkarem.

Israel, through the JWC, not only refuses projects on a technical level but also uses its power of veto as a political bargaining chip. For instance, in 1998, the PWA received funding from KfW (the German government-owned development bank) to build a wastewater treatment plant in the Salfit Governorate. The JWC made approval of the project conditional upon connecting the largest West Bank settlement, Aarial to the treatment plant. A similar situation occurred in the Qidron Valley, in the Bethlehem Governorate. Approval of a Palestinian project to construct a wastewater treatment plant was made conditional upon linking the illegal settlement of Ma'ale Adumim, located in occupied East Jerusalem, to the plant. There is only one modern, functional wastewater treatment plant in the West Bank, located in Al-Bireh, near Ramallah, and the lack of effective wastewater treatment is contributing to environmental pollution and contamination of water resources in both the occupied Palestinian territory and Israel. Yet, connecting the illegal settlements to wastewater infrastructure is a demand that the Palestinians are unable to comply with, since it legitimises the existence of the settlers and creates 'facts on the ground' that prejudice the Permanent Status negotiations. As one PWA representative told COHRE, "The mandate given to the PWA is based on Article 40; the settlements are not our file. As an occupying power, Israel should take responsibility for wastewater treatment inside the settlements and send it to the wadi as treated water."

4.2. Obstacles to water and sanitation provision in Area C

Under the Oslo II Accord, the West Bank was split into three separate jurisdictions or areas. Area A, mainly urban centres, was placed under the control of the newly created Palestinian Authority (PA); Area B was placed under PA civil administration but Israeli security control; and

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82 Information provided by the PWA, 'Pending Water Supply Projects in the JWC', Updated 28 July 2008.
84 COHRE interview with Yousef A. Awayes, General Director of International Coordination, Palestinian Water Authority, 8 September 2008.
Area C which covers the Jordan Valley region, settlements and their surrounding areas, remained under full Israeli control and constitutes approximately 61 per cent of West Bank territory.

If permission is sought to drill a well or build any other water or sewage infrastructure that is located in Area C, the Civil Administration of the Israeli Defence Forces must approve the project (this includes building cisterns and bringing in pipes made of steel, iron or aluminium which are between 50mm to 200mm in diameter). This is a long and protracted procedure that often results in permission being denied. One such case is in Jiflek, in the Jordan Valley north of Jericho, where a project to construct a water network has been pending for three years, despite the funds for the project being available. As many water and sanitation projects transport water or sewage from one place to another, the vast majority of water and sewage infrastructure projects pass through (or close to) Area C and require the authorisation of the Civil Administration.

Aid agencies also face significant constraints to implement infrastructure projects in Area C. Organisations have the option to apply to the Joint Water Committee through the PWA or to apply directly to the Civil Administration, or through the Israeli District Liaison Officer. The second and third option may be quicker, but only serves to undermine the ability of the PWA to assert its authority over water and sanitation infrastructure development. In the absence of permits being granted swiftly (or at all), many organisations are then faced with the dilemma of failing to provide necessary humanitarian support to those most in need, or implementing their projects without official approval and risk demolition and loss of donor investment.

**Demolition of water and sanitation infrastructure projects in Area C**

Between November 2001 and February 2005 the UK’s Department for International Development funded the Hebron Water Access and Storage Project (HWASP). The project aimed to improve infrastructure in a number of villages in the south Hebron region as well as work with the communities to improve health and sanitation through education. HWASP built 686 cisterns and rehabilitated an additional 117 and also co-financed the construction of 1,136 toilets and rehabilitated an additional 81. The project further improved 45 dwellings and four schools, connected 19 communities to electricity and built a village access road.

Halfway through the project the Israeli Defence Forces lodged a complaint with the British Embassy that HWASP was encouraging illegal building in Area C, and that 13 structures would be demolished. On 28 April 2004 two toilets were demolished in Um Fagarah, three in Isfey Tihta and four in Tabban along with two houses. The estimated cost of the damage was US $8,250. The destroyed toilets were subsequently replaced with fully or semi-portable galvanised metal structures instead of being built from breezeblocks. On 3 June 2004, one toilet and three cisterns were destroyed in Um Sidreh, and on 5 July 2004, four group toilets, one single toilet and one sheep pen were destroyed in Zenuta, and one toilet and one sheep pen were destroyed in Dir Si’deh. The demolished cisterns were repaired and the toilets replaced later in the year by the HWASP.86

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85 According to Yousef A. Awayes, (as above) the reason for refusal was that a number of Roman artefacts had been discovered in the area. The PWA had to cancel the contracting procedure whilst an investigation of the artefacts was carried out and was required to pay 92,000 NIS (around US $24,500) to the Israel archaeological team.

86 Information provided to COHRE by Sharon Kelsey, Programme Assistant, Palestine Team, Department for International Development, 28 November 2008.
4.3. Palestinian communities not connected to the water network

In the West Bank, approximately 14 per cent of communities are not connected to the water distribution network.87 This translates into more than 400,000 people.88 The urban population centres in the central West Bank that fall in Area A, have good network coverage. The northern Governorates (which include a much greater number of rural communities) have much lower network coverage, as does the south Hebron region, where numerous small, scattered communities reside. However, a major contributing factor to the lack of access to the water network is also that these communities tend to be located in Area C, often close to settlements or the Wall. Israeli restrictions on water infrastructure development have played a crucial role in denying these communities access to the water network. In addition, lack of permits being issued by the Israeli authorities to rehabilitate existing networks, many of which are old and in a bad state of disrepair, leads to high water losses. Pipe leakage and illegal connections together cause a loss of 39 per cent of water supply through the network, although this percentage varies from place to place.89

Communities that are not connected to the water network are dependent on rainwater harvesting and cistern storage at the household level, and/or purchasing water from tankers for domestic consumption. As this sector remains unregulated, water from tankers is often of dubious quality and generally sold at very high prices. Many are turning to untreated agricultural wells for water for domestic use. Whilst rainwater harvesting theoretically should be a safe source of water, denial of permits to rehabilitate cisterns in Area C has lead to unsafe water storage and contamination. Out-breaks of water-borne disease is highest in communities that lack access to the water network.

Only 32 per cent of communities in the West Bank are connected to the sewerage network, primarily those which reside in the population centres in Area A; the remaining 67 per cent of "Water Theft"

The problem of illegal connections and water theft causes a reduction in the supply of water to a number of communities. In some areas, individuals have been stealing water from the pipelines, creating a shortage in communities downstream in the water network and then generating income through selling water back to these communities at high prices. In a recent report, the Governor of Hebron stated that from 2,000m3 of water supplied to Yatta, via a new water network, only 650m3 reached the town due to illegal connections.90 The Palestinian Authority and local municipalities must take action to prosecute those responsible for water theft in areas under their control.

90 This was reported in Al Quds newspaper, and cited in a Needs Analysis Framework for CAP 2009, water and sanitation sector, August 2008, on file with the author.
the population are dependent on cesspits and septic tanks. A very minor percentage of people in the districts of Tubas, Jericho, Jerusalem and Hebron practice open defecation. There are approximately 18,500 people in the West Bank with no access to sanitation, mainly Bedouin in remote rural areas. A major problem in the West Bank is the lack of proper disposal of waste from cesspits causing them to overflow leading to environmental pollution (including of water resources) and constituting a health hazard to local residents. In August 2008, the village of Artas, near Bethlehem, suffered from an outbreak of water-borne disease (diarrhoea). It was found that sewage from an unauthorized cesspit had leaked into the water network system causing the contamination of the community’s main water supply.

The human right to sanitation

The right to adequate sanitation requires that sanitation services must be safe, effectively preventing human, animal and insect contact with excreta and the passage of disease, and that adequate facilities for waste water disposal are in place. Toilets should be physically accessible as well as services such as removal of wastewater and sewage or latrine desludging; and access to sanitation, including maintenance should be affordable. Israel, as an occupying power, should not engage in actions (such as prevention of sanitation infrastructure development, or hindering sanitation service access) that restrict enjoyment of the human right to sanitation for the people in the territory that it occupies. As an occupying power, Israel also holds duties under international humanitarian law to ensure that public health and hygiene is maintained in the occupied territory.

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92 Ibid. p.34.
94 Fourth Geneva Convention, Article 56. All the Geneva Conventions and Additional Protocols can be found at www.icrc.org, (click on ‘Humanitarian Law’ > ‘The Geneva Conventions’).
Restricting Water Access
Israel’s ‘security’ measures inside the West Bank restrict Palestinian access to water resources, services and facilities. A major problem is the restrictions on movement and access in the West Bank due to roadblocks (including earth mounds and trenches), checkpoints and ‘settler only’ roads. As of September 2008, there were 630 obstacles restricting Palestinian movement in the West Bank. These obstacles to Palestinian movement are often established near the settlements, in order to ‘protect’ their inhabitants and enable the settlers to move with ease throughout the West Bank. For Palestinians, they serve to humiliate and degrade and mean that the time taken for a journey can be doubled, tripled or even quadrupled in length. Today around 40 per cent of the West Bank is off-limits to Palestinians, or access is highly restricted, due to settlements, outposts, bypass roads, military bases, closed military areas and areas Israel has declared as being a nature reserve. For Palestinian communities that are not connected to the water networks, many communities have been cut off from their nearest water filling point and must travel long distances to fetch water.

Obstacles restricting movement and access have also caused significant price increases in water provided by tankers, as large detours add to time and fuel costs. In the West Bank, tankered water costs on average 14.23 NIS/meter cubed compared to 2.60 NIS/meter cubed for piped water supply although the price for tankered water varies greatly according to region. The Palestinian Hydrology Group reports that the cost of private tanker water in 319 communities in the West Bank has increased by 101-153 per cent since the outbreak of the second Intifada. In some areas the price of tankered water has increased to as high as 37.50 NIS/meter cubed (in excess of US$ 10/meter cubed). Also, roadblocks and checkpoints have hindered access for sewage disposal trucks, which has caused a rise in prices, rendering sanitation services unaffordable for some communities.

Construction has finished on around 57 per cent of the Wall. When complete, the Wall will be 723 kilometres in length with 87 per cent located inside the West Bank (including East Jerusalem), annexing around 10.2 per cent of the Palestinian territory. Through its annexation of land, the route of the Wall serves to incorporate approximately 83 per cent of the settler population into Israel, whilst ‘cleansing’ the area of Palestinians. Some 15,000 Palestinians have so far been displaced by the Wall. Once completed, an estimated 35,000 Palestinians will be trapped in a ‘closed zone’ between the Wall and the Green Line. No one may leave or enter the closed zone without an access permit. Access permits are notoriously difficult for individuals from these communities to acquire; the opening and closing of the gates is highly controlled; and Palestinians are often subject to humiliation and abuse by the Israeli Defence Forces. The closed zone includes some of the most fertile land in the West Bank, and is rich in water resources. Many communities are now isolated from their water supply.

101 Ibid. at 38.
Case Studies of Palestinian Communities in the West Bank
6.1. Living in the shadow of the Wall: The case of Jayyus and Falamy

Jayyus and Falamy are villages located in the Qalqilya/Tulkarem district of the northern West Bank. Both communities are highly dependent on irrigated agriculture as their main source of livelihood. Construction of the Wall in this area began towards the end of 2002. In Jayyus, around 70 to 90 per cent of the community's land (including thousands of citrus and olive trees) as well as six groundwater wells and the water networks which support them, are now located to the west of the Wall and farmers must apply for a permit to access this area. In Falamy, villagers are also now located to the east of the Wall, whereas their major groundwater well is located to the west. Whilst these water sources are agricultural wells, the communities of Jayyus and Falamy are also dependent on this water for domestic purposes; the wells are privately owned and operated by members of the community.104

By denying access to water resources the impact of the Wall has been devastating on these rural communities. Agricultural productivity has severely declined as farmers cannot work their land, and crops have failed through lack of water for irrigation.105 Lack of access to water has also reduced consumption for domestic and personal uses. Jayyus shares its water with the neighbouring village of 'Azzun, using a well located between the two villages. This meets less than 50 per cent of Jayyus's basic water needs and water is rationed to about two hours per day in summer months.106 Domestic water consumption in Jayyus has fallen to 23 litres per capita per day well below World Health Organization levels that stipulate 50-100 litres are necessary to ensure all health concerns are met.107 In Falamy, the construction of three of the village's five wells received funding from the Government of France. These wells not only supply Falamy but also nearby villages, which were connected by an extensive water network, also part of the French project. The construction of the Wall caused the destruction of a large part of this water network, as well as locally built water pipes. Following repeated diplomatic intervention by the French, Israel agreed to repair the damage but only for French-funded water pipes.

104 Julie Trottier argues that the construction of the Wall has had a severe impact on changing power structures relating to water access, management and allocation. Most of the confiscated wells were privately owned and managed, and water was distributed as part of a communal property regime. The Wall has affected this traditional form of water management, as control over water management has now shifted to the PWA who did not lose wells during the first stage of the Wall’s construction. It is notable that under the right to water an obligation to respect includes not to interfere with customary or traditional arrangements for water allocation. See, ‘A wall, water and power: the Israeli ‘separation fence’, Review of International Studies (2007) 33, pp. 105-127.

105 The United Nations Relief and Works Agency (UNRWA) reports that 200 families in Jayyus are now dependent on humanitarian support. See, UNRWA, ‘Profile of Jayyyus-Farmers loose land, wells and greenhouses’, www.un.org/unrwa (click on ‘Emergency Relief’ > ‘West Bank Barrier’).

106 Ibid.

My name is Mohammed Tahar Jabar, I am the Governor of Jayyus. There are 4,000 people living in Jayyus and eighty per cent of the people in this area live from agriculture. Before 2002, the people’s life was easy, the relations were good and there was social unity. They lived a very good life. After the Wall was built, their life changed to one of poverty. The Wall has been built on Jayyus’s land; from the west it enters 4 km from the Green Line into Jayyus’s land, from the south west it enters 6 km into Jayyus’s land. Now around 9,200 dunums of our land are located behind the Wall. This land was used for growing fruit and vegetables and was where water resources were located for agriculture. After the Wall, the people were separated from the water and their agricultural lands.

The Israelis don’t allow the people to enter their land, except through a gate in the south and a gate in the north. These gates are operated according to a very fixed schedule, they open at 7.30 in the morning and close at 8:30 am; then they open again at 12:30 pm and close at 1:30 pm; then they open at 4:00 pm and close at 5:00 pm until the next day. Before 2002, everyone went to work on their land, but now eighty per cent of farmers cannot enter their land. This has created a lot of unemployment in Jayyus - around 75 per cent. There are around 670 families in Jayyus, but no more than 80 can work on their lands, and the rest are without work. They have to live from the help of others. A large number of people, especially the young men have left to Sweden, Germany and Norway and many of them are in Jordan or the Gulf countries. There are no opportunities here for them at the present time without their land, without their water, and without being able to work in Israel. What can they do? They want to leave. This is our problem.

Before the Wall we used to drink the water from our wells, the water was clean and did not need to be purified. Now we have to bring the water from Azzun well to Jayyus. The well in Azzun is located 250 metres from a site used by Israeli settlers to dump their toxic waste. In reality this water is polluted. The people that drink from this water suffer from many illnesses. There are high cancer rates and many people suffer from kidney stones. People also suffer from diseases related to the difficulty of their situation such as high blood pressure. Because of the wall, 250 families are living below the poverty line in Jayyus. A number of us have graduated from the university, I am one of them, but the loss of our land and our water is the reason for our ill health and poverty.

We asked the Israelis for permission to bring water from wells behind the Wall to Jayyus for drinking and domestic uses. Since 2002 we have been applying for a permit, but the Israelis refused. The international community should put pressure on the Israeli side because we are not allowed to drink from our own water on the other side of the wall, and the water we get from Azzun and other places is of poor quality. No person can bear what we have had to bear since the Israelis occupied our land. We have applied to the Palestinian Ministry to build a pipe to bring the water from the other side of the Wall, but the problem is still that the Israelis will not give us the permit. Everything is ready; we only wait for the permission.
In 2003 and 2005, the Association for Civil Rights in Israel (ACRI) submitted petitions to the Israeli High Court of Justice, calling for a re-routing of the Wall near the villages of Jayyus and Falamya. ACRI argued that the Wall had cut villagers off from agricultural land and water resources, and negatively impacted on the lives and livelihoods of villagers. ACRI also put forward the case that the route of the Wall had nothing to do with security imperatives, but in fact served to accommodate the expansion of the nearby Zufin settlement. In June 2008, the State of Israel announced that it would dismantle 2.4 km of the Wall in this area and change its route. Yet the Wall is not to be re-routed along the Green Line, and much of the most agriculturally productive land will remain inaccessible to villagers without a permit.\textsuperscript{110} Moreover, four of Jayyus’s wells will remain cut off by the Wall.

\textbf{Testimony of Rashid Abu Daher, farmer and resident of Falamya\textsuperscript{111}}

In 1993, France provided funding to build an artesian well in Falamya that would provide water to the villages of Falamya, Jayyus and Kafr Jammal. The well was to provide water for 1,400 dunums of land, on which between 4,000-5,000 people are dependant for their livelihood. The Israelis didn’t like this project and began to work against it. However, we continued with this project, but when the well was near completion we saw that the well had been destroyed and had been filled with stones and wood and the pumps had been ruined. No one knows who was responsible for damaging this project, whether it was the Israeli military or the settlers. The police came to investigate, but never determined who was responsible.

Then the Wall came on 21 September 2002. The well is now located 20 metres on the other side of the Wall. The Israelis also destroyed over 700 metres of pipes when they built the Wall in this area. Now we need a permit to dig a new well, which we cannot get, even though we have tried many times. We also need a permit to bring a professional to fix this well, which has been denied.

From the 1,400 dunums of land we have, we can only farm half because there is not enough water. The water comes from other wells in the area. All of us have suffered because of this. Many farmers have started to leave the land, because the quota of water we are allocated is not enough. Without water we cannot plant anything. In these three villages, 90 per cent of the population are farmers. Many left the villages to work illegally in Israel and were imprisoned.

Before the Wall came we were our own bosses. For those who had a farm, this was his main income. I used to grow aubergines and tomatoes, and before 1948 many Jews would come and work on our land. Now it has become difficult to buy food or milk for our children and we cannot afford to send them to the university. Before they destroyed this project we were independent; now we are forced to work for others, even though our land is next to us. Where else in the world would you be able to see your land and not enter it? If the Israelis would give me a permit, I would sell myself to get the well to work.

There used to be a swimming pool in Falamya and people from the whole area used to come here to enjoy their time. Now our children don’t know how to swim. Even the water we drink is from a very small agricultural well, and we need to purify the water with chlorine and filters. We are better off than Jayyus where they drink the water from the agricultural well directly. However, as the village gets bigger, this well is not enough to support us all. We haven’t been given a permit to dig a well for 11-12 years.

\textsuperscript{110}See, ACRI, ‘Following ACRI Petition, State to Change Barrier Route near Jayyus’, www.acri.org.il.

\textsuperscript{111}COHRE interview with Rashid Abu Daher, resident of Falamya and farmer, 14 August 2008.
6.2. Not enough water - drought or intent? The case of the south Hebron Hills

Communities located in the arid zone of the south Hebron Hills were some of the worst affected by the drought in the summer of 2008. By July 2008, 90 per cent of communities in this area had no water left in their cisterns.112 There are numerous small, scattered Bedouin communities in this region, living in tents and shacks, and dependent on livestock for their livelihood. Many of these Bedouin are refugees who were forced to flee the Negev/Naqab (what is now southern Israel) following the creation of the Israeli State. In 1967, two thirds of the land to which they had relocated was declared a 'closed military area' and the other third a 'nature reserve' by the occupation authorities. Following the Oslo II agreement, this area remained under Israeli control, located in Area C. Communities are not officially permitted to live in the closed military areas or build any permanent structures. As a result they are impoverished, lack basic infrastructure and services, and residents are subject to widespread forced evictions, demolitions of their homes and resulting displacement. Moreover, Bedouin living in this area are severely restricted in terms of movement and lack access to a large portion of the land with disastrous consequences for those whose culture is semi-nomadic and livelihoods are dependent on moving with their herds for grazing.113

In the Bedouin village of Al Kheir Al Faqir water is purchased from Mekerot and supplied to the community via pipes running from Karmel settlement. Located next to Al Kheir Al Faqir, the neat rows of white houses and vibrant green gardens of the settlers provide stark contrast to the poverty-stricken Bedouin village where children play on dusty, barren land. The water pipe supplying the Bedouin community is very narrow in diameter and passes over-ground, which causes the water to reach high temperatures in the summer months. The pipe is in desperate need of repair, but requests by UNDP and KfW to implement a project to rehabilitate this pipe have been refused by the Civil Administration. The prioritisation of water allocation in the Hebron Hills is a patent example of discriminatory practices; for instance, before reaching the community the pipe first supplies chickens belonging to the settlers. There have also been accusations that settlers have disconnected the water supply to this community on a number of occasions.114 There is a lack of toilets for female residents of this community, as settlers have encroached on the land in which the toilets are located, which creates the risk of out-breaks of water borne disease and prevents women from being able to defecate in privacy and dignity.115 Another Bedouin village located nearby has no water network. The community is dependent on a sole filling point that suffers from low water pressure, and people are restricted to 25 litres per person per day. One elderly resident of the community told researchers that surrounding villages were without drinking water due to the drought and were now collecting water from this filling point. "How can we refuse them," he asked, "water is life."

The communities of Masafar Yatir are fellabeen (farmers). Accessing this area is extremely difficult, due to an absence of roads, and closures and checkpoints. The settlements and

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112 Information gathered at meeting of EWASH-OCHA, Hebron, 22 July 2008.
113 In the 1970s, schools and clinics were built in the town of Yatta to encourage the Bedouin to resettle there. Now Yatta has a population of 40,000. It is one of the poorest localities in the West Bank as having lost their lands, herds and traditional way of life, Bedouin found it difficult to cope with the urbanisation that was forced upon them.
114 Whilst leaving this village, researchers witnessed Israeli soldiers harassing the children of the community. Upon our return, we were informed that the villagers had been issued with a warning not to leave their homes or they would be beaten and evicted from the area.
outposts in this area are connected to each other and to Israel by an extensive road network that has effectively isolated Masafar Yatir from the rest of the West Bank. There are around 2,000 people in this area with a unique way of life residing in caves carved from the rocky hillside; living without electricity, water networks, or other services such as health clinics and schools. Also located in a closed military area, any building work is strictly prohibited, and the residents of these communities have been subject to demolitions of their homes and water wells, as well settler violence (including the poisoning of cisterns) and expulsion from the area. These communities depend on traditional rainwater harvesting with water stored in cisterns - some of which date back to Roman times. Due to the lack of permission for maintenance and rehabilitation of cisterns, many have fallen into a bad state of disrepair. In 2006 and 2007 there were outbreaks of water-borne disease in this area. A combination of the drought in the summer of 2008 and the prohibition on developing their water resources means that residents of these communities are often dependent on travelling to water points to collect water, and are now spending up to 30 per cent of their monthly income on water. According to one woman in Isfey Forga "some of us still have water but many have finished their cisterns, now we have to look elsewhere, even to borrow water, this never happened before, the situation wasn't hard like this". Reliant on agriculture and livestock, their livelihood is highly dependent on a sufficient, regular water supply for survival. Each sheep consumes on average nine litres of water per day and some households possess in excess of 300 sheep. Because of a lack of sufficient fresh water, herders from Masafar Yatir have been taking their livestock to drink water from the wadis, which is highly saline.

Closures in this area, the lack of roads and lack of filling points have hindered humanitarian agencies from trucking water into these remote and vulnerable communities. One aid worker told COHRE; "We got money from ECHO and Italian Cooperation to bring in water. But with the quality of the road, it is impossible. Also the Israeli's are refusing to give us any filling points. We have the money, but no access to water. We have to bring in water from Kirya Arba settlement, 40 km away; 80 per cent of the costs are due to transportation." Aid agencies working in the south Hebron area also expressed their frustration that in order to supply many of the most at risk communities with minimum amounts of water necessary to ensure survival over the summer of 2008, they had to redistribute inadequate quantities of water, which caused a shortage in other localities.

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117 The Israelis also claim that rehabilitation work on these cisterns is prohibited because they are of archaeological value.

118 COHRE interview with Haja Famiheh, resident of Isfey Foga, 21 August 2008.

119 COHRE interview with residents of Masafar Yatir area, 21 August 2008. Similar accounts were also heard from herders in the northern Jordan Valley region.

120 COHRE interview with Tareq Talahma, Field Coordination Unit, South West Bank, OCHA, 21 August 2008.

121 Information gathered at meeting of EWASH-OCHA, Hebron, 22 July 2008.
Impact of lack of water on women

It is our responsibility to bring the water from the nearby cisterns. But when there is no water we cannot wash our children. Many of the small children are becoming sick, and because they are closing the roads, we cannot take them to the health clinics. We stay here because if we leave the settlers will take over our land. So we sacrifice our lives and our children’s lives - but what is our option?

Haja Famieh, resident of Isfey Foga

As is often the case globally, a lack of access to sufficient supplies of clean water has a disproportionate impact on women. In the occupied Palestinian territory, gender roles require that women spend much of their time in the home, nurturing children and caring for the needs of their families. Household responsibilities also require women and girls to attend to various household chores, including providing and using water for a variety of purposes. Women are often primarily responsible for caring for children who have become sick due to unclean water or inadequate sanitation. Collecting water from points that are located at a distance from the home also reduces the time available to women for engaging in other productive activities, and affects their access to education and ability to earn a livelihood. A lack of women’s participation in decision making relating to water and sanitation can mean that their voices are not heard, and their needs are seldom prioritised.

The Palestinian Hydrology Group held a series of lectures on environmental issues for household women in the Ramallah and Hebron Governorates. The women were asked to prioritise their concerns regarding water and the environment. In relation to water, the women ranked Israeli control over water resources as being the major problem they faced. Water scarcity was afforded second priority, with water pollution and high water prices being afforded less significance, although both seen as issues of concern. In terms of the difficulties women faced in relation to water, their main concerns were the limited amount of water available for domestic use, the low quality of water, and the long waiting time to receive water. Participants also confirmed the importance of the participation of women in decision making with regards to water allocation stating reasons as being: women’s greater awareness of water issues at the household level than men; women being the main consumers of water given their household duties; and women sharing in water consumption with men for agricultural, public and other uses.

Also located in the Masafar Yatir area is the village of Al Tuwani. The settlement of Ma‘on was built adjacent to the village in 1981 and two outposts are nearby, which together have expropriated over 1,500 dunums of land from the villagers. Many buildings in the village have a demolition order against them, including the health clinic built with foreign aid, as well as the community’s mosque. There is one school in Al Tuwani that serves 12 villages in the area. Children travelling to this school have frequently been victims of settler violence. None of the houses in Al Tuwani are connected to a water network. One cistern in the village, fed by a natural spring and recharged by the rain, serves some 120 people. All the other cisterns in the village are dry. Every morning and evening, the cistern fills with water and the villagers collect their water in buckets. The women and children responsible for water collection often queue for over an hour. The level of water in the cistern is very low due to the poor rains in 2008, and there is not enough water to meet the community’s needs. In 2005, the water of this village was contaminated when settlers threw dead chickens into two cisterns. In the past, humanitarian agencies would tanker water into the village, but now closures hinder access. The settlers have also prevented water tankers from entering the village on a number of occasions by putting spikes on the road to puncture the tyres and blocking road access with boulders.

122 COHRE interview with Haja Famieh, resident of Isfey Foga, 21 August 2008.
123 Palestinian Hydrology Group, Women and Water Issues, on file with the author.
124 COHRE interview with Ahmed Rubba, resident of Al Tuwani, 16 August 2008.
6.3. Restricted access, increasing costs: The case of the northern Jordan Valley

Unlike the Hebron Hills, the Jordan Valley is not a dry zone. Al Malih is a community 13 km to the east of Tubas, located in Area C, most of which has been declared a 'closed military area' by the Israeli authorities. Around 135 households (1,000 people) live in Al Malih area and 95 per cent of the community is dependent on livestock farming, with ten families working on four agricultural farms. Despite owning the land, around 40 per cent of the Al Malih area is now off-limits to the community and has been expropriated by five settlements, four Israeli military camps, and the security area that 'protects' the Jewish colonies. There is a lack of infrastructure in the community, including access to basic services such as water and sanitation. Many of the tents and barracks where the people live have been demolished and families evicted; many more have pending demolition orders against them. The children of the community travel 15 km to reach the nearest school on donkey or on foot, a journey which takes them well over two hours.

Testimony of Areef Daragmah, Head of Village Council, Al Malih

In the last two years, there was a huge reduction in the population for a number of reasons. The first is that it is far away for the children to go to school. Second, there is no land available to us, and no fodder for our livestock. Third, because of the Maskyyot settlement there has been a lot of violence from settlers, and harassment from the IDF. Yesterday, Israeli soldiers came and issued demolition orders for the sheep pens donated by FAO. Four to five years ago we had 30,000 sheep and 4,000 cows, but now we only have 17,000 sheep and 1,200 cows. This is because of the reduced grazing area, restricted access, and lack of water.

125 COHRE interview with Juma, resident of Al Tuwani, 16 August 2008.
126 The Jordan Valley runs down a strip of the eastern West Bank, bordering Jordan, and constitutes over a quarter of West Bank territory. Since the occupation in 1967, Israel has sought to annex this land and under the terms of the Oslo Accords the majority of the Jordan Valley was left under direct Israeli control (Area C). Since 2005, the Jordan Valley has been off limits to all Palestinians who cannot prove that they reside there, and for those that can, a strict regime of closures and checkpoints makes freedom of movement extremely difficult. The northern Jordan Valley is rich in agricultural land. A large number of small communities reside in this area, many of them Bedouin or felluqeen (farmers) dependent on herding livestock and agriculture for their livelihoods.
127 In September 2008, a large number of demolition orders were issued by the Israeli authorities against structures in Al Malih for "building without permission", including to homes and pens where livestock are kept.
128 COHRE Interview with Areef Daragmah, Head of Village Council, Al Malih, 26 August 2008.
The area of Al Malih was once rich in water springs. Today the discharge of the five springs on which the community depends for both domestic and livestock needs has been greatly reduced due to Israeli wells drilled in the area, and the springs now only meet 2 per cent of the water needs of the community. Residents of Al Malih travel to Ein Al Beida (13 km away) to collect water in their water trucks. The journey to Ein Al Beida is arduous. The shortest route to the filling point is on public roads that are off-limits to ‘agricultural tractors’. As a result, one member of the community told researchers that between January and August 2008 some people had received up to 25 fines, each one a minimum of 1,000 NIS (US$ 260) whilst transporting water. In Ein Al Beida the tanks (which hold three cubic meters of water) are filled illegally from private connections. As each family consumes on average 12 cubic meters of water per week, they make this journey four times every three days in order to meet their water needs for domestic consumption. Each trip can cost 150 NIS (US$ 39) for fuel. Forty families in Al Malih do not own a tractor to truck in water, and must rent one from their neighbours at a cost of 150 NIS each time. A reduction in household income and increase in water and fuel prices has meant that some households in Al Malih are now paying up to 40 per cent of their monthly income on water. This in turn causes households to reduce their consumption and expenditure on other basic needs. The NGO ACF found that for some vulnerable families in the Tubas district, water consumption had fallen to 20 litres per person per day. Household water storage poses additional problems for the residents of Al Malih. Due to the heat of the sun and poor quality storage tanks, stored water is often stagnant after the first day. The Civil Administration has repeatedly denied requests by NGOs and international agencies to open filling points in the area. Lack of access due to the closures and checkpoints have further prevented aid agencies from trucking-in water to Al Malih.

The nearby Bedouin community of Al Hadidiya faces similar problems. With no water network and no filling point in the community, residents must travel to the Mekerot filling point in Ein El Beida or Ein Shibli spring, to fill their water tanks. Ein Shibli is located closer to the community, but to reach this filling point they must cross the Hamra checkpoint which is notoriously difficult, as Israeli soldiers often delay the water tankers for long periods of time. One member of the community told researchers "It takes me at least three hours to fetch water from the filling point. But I am lucky and have a good tractor; it takes some people 4.5 hours." Nine of the 56 families living in Al Hadidiya do not own a tractor and must pay for a tanker to deliver water to them. High fuel costs and delays at checkpoints, however, mean that water tankers are increasingly reluctant to make the journey and families cannot cover the costs.

There are more than 20 wells in the area around Al Hadidiya, but none is functioning, as permission to rehabilitate them has been consistently denied. In 2002, a filling point was opened by Mekerot but this was closed a year later due to water theft along the pipes that connected the nearby Hamdat settlement to a military base, crossing through Al Hadidiya. Many of the homes in Al Hadidiya have demolition orders against them and members of the community reported that when demolitions were carried out in the past, the Israeli authorities also confiscated tractors and water tanks from villagers. The impact of lack of water on livestock, and therefore livelihoods, is as a central concern for the residents of Al Hadidiya.

130 COHRE interview with Abu Saker, Head of Community, Al Hadidiya, 26 August 2008.
6.4. Turning the taps off: The case of Al Auja

Every year, for more than 10 years, our problem was water ... we don't want assistance; we want the water from our land for our children and our own livelihood.

Faiysal Najoum, Resident of Al Auja and farmer

Located north of Jericho, Al Auja spring is one of the most important in the Eastern Aquifer Basin with a discharge rate of 6-8 MCM per year, thereby being a fresh water source with reliable quantity. The water from the spring is primarily used for agriculture, with a small quantity utilised for domestic purposes. Al Auja spring has been badly affected by the drilling of two Israeli wells upstream which tap the same aquifer (the upper aquifer system in the Eastern Aquifer Basin) resulting in reduced discharge, lower capacity, and reducing the available quantity of water in the spring. Al Auja canal is more than 35 km long, with the networks for irrigation being additional to this. A major problem is canal leakage, due to fissures and cracks. There is a great need to rehabilitate the spring, and also approximately 9 km of the main canal. Most leakage is in the first 1 km of the canal. However, as the spring of Al Auja is located in a closed military zone in Area C, requests to the JWC and the Civil Administration to rehabilitate the spring and first section of the canal have been repeatedly denied.

The town of Al Auja (population less than 5,000) is located in Area B, but is dependent on the water from Al Auja spring for domestic and agricultural use. Al Auja is an agricultural community, mainly reliant on water-intensive banana production. There are around 12 agricultural wells in Al-Auja but the water quality in these wells is poor and highly saline. Bananas utilise a lot of water, especially in the summer months of May, June and July when water is often scarce. This year, due to a lack of water, the banana crop of many farmers was ruined. As one farmer told COHRE, "the water in spring has finished, farming bananas has finished."

Attempts to convince the farmers of this area to change to less water-intensive crops have met with resistance. Bananas only grow in two areas of the West Bank: in Al Ajua and Jericho, and are profitable (a kilo of bananas fetches around NIS 5 whereas the profit from growing tomatoes barely covers the cost of water). Also, bananas are sold on the local market. Due to closures and restrictions on the movement of people and goods both within the West Bank and across borders, the export of produce has become increasingly difficult for farmers in the West Bank. The lack of access, both to water and to markets, has rendered this agricultural community destitute.

As the Al Auja spring is dry, the people of this area purchase water from the Israeli company Mekerot. However, in the summer of 2008, Mekerot closed the water supply to Al Auja. Requests for an additional water filling point for the area have been denied. The community suffers from an inadequate quantity of clean drinking water, and health problems are common.

131 COHRE interview with Abu Saker, Head of Community, Al Hadidiya, 26 August 2008.
132 COHRE interview with Faiysal Najoum, Resident of Al Auja and Farmer, 2 August 2008.
133 COHRE interview with Deeb Abdelgafor, Palestinian Water Authority, 2 August 2008.
135 COHRE interview with Imad, resident of Al Auja and farmer, 2 August 2008.
Violations of International Law as a Result of Israel’s Water Policy and Practice in the West Bank
7.1. Violations of international human rights law

The right to water and sanitation

Israeli policies and practices in the West Bank that have led to violations of the right to water and sanitation include:

- Reducing the accessibility of water and sanitation through denial of control over and development of water resources; denial of permission to construct water and sanitation infrastructure (particularly in Area C and through the veto of the JWC and Civil Administration); and hindering access to water and sanitation services and facilities due to closures, road blocks and checkpoints.

- Reducing the quantity of water for personal and domestic needs, including personal sanitation; the washing of clothes; food preparation and personal and domestic hygiene; including by deliberate destruction of infrastructure such as pipes, cisterns and wells.

- Reducing the affordability of water and sanitation, thereby requiring households to reduce their consumption of water or sacrifice on other items such as food and health care.

- Reducing water quality through the prevention of network and cistern rehabilitation; restricting access to safe water supplies; and not disposing adequately of wastewater and solid waste emanating from the illegal settlements. This has rendered communities vulnerable to outbreaks of water-borne disease, and also constitutes a violation of the right to health.

Not only has Israel failed to facilitate the realisation of the right to water and sanitation in the West Bank, it has undertaken measures which have actively restricted the enjoyment of the right. The lack of resource and infrastructure development, as well as restrictions on access, and interference with traditional and customary arrangements for water allocation have contributed to a severe retrogression in enjoyment of the right to water and sanitation.

The right to food and livelihood (right to gain a living by work)

Lack of access to water resources and prohibitions on developing water infrastructure have severely undermined the ability of many Palestinian communities to secure the necessary quantities of water required for agricultural production or livestock farming. That many communities are dependent on such activities for basic subsistence and survival renders this denial particularly invidious.

The right to self-determination and permanent sovereignty over resources

Israel has asserted its hegemony over all of the ground-water aquifers in the West Bank, and continues to deny Palestinians their rightful share of the surface water resources of the Jordan River. The construction of the Wall inside the West Bank has also contributed to the de facto annexation of the Western Aquifer Basin. Lack of Israeli respect for Palestinian sovereignty
over natural resources has led to the unequal and discriminatory allocation of water resources, to the detriment of Palestinians. It has also prevented the Palestinian Authority from being able to implement the right to water and sanitation in the West Bank, particularly through restricting the PWA's ability to manage the resources and infrastructure necessary for water supply to Palestinian communities. In this regard the UN Committee on Economic, Social and Cultural Rights, in its periodic review of Israel strongly urged that Israel "take immediate steps to ensure equitable access to and distribution of water to all populations living in the occupied territories, and in particular to ensure that all parties concerned participate fully and equally in the process of water management, extraction and distribution."\(^{136}\) Whilst the power of the JWC is so heavily skewed in Israel's favour and the Civil Administration has the ultimate say in all water development projects in Area C, Palestinians will be denied their right to full sovereignty over their water resources, as well as their right to full and equal participation through their representatives in decision making which directly impacts upon their lives.

7.2. Violations of international humanitarian law

Israel as an occupying power has violated a number of provisions guaranteed under the Fourth Geneva Convention relative to the Protection of Civilian Persons in Time of War, the Hague Convention of 1907, and customary international law in the occupied Palestinian territory. Israel has violated its legal obligations to:

- Respect the institutions, laws and administrative practices in place prior to the occupation, and not to introduce laws that go beyond the requirements of military objectives or the maintenance of public order and safety. The introduction of a series of laws and military orders following the 1967 occupation that significantly changed water allocation and distribution, as well as prohibiting Palestinian water and sanitation sector development, violated the laws of belligerent occupation and cannot be seen to contribute to either military necessity or public order and safety.

- Comply with the prohibition of utilising resources for the benefit of the occupying power's civilian population, as well as the prohibitions on the confiscation of private property and pillage, through the expropriation and utilisation of water for the benefit of Israeli citizens in Israel and in the occupied West Bank.

- Ensure that all persons in the occupied territory are treaty equally, due to the discriminatory preferential treatment afforded to the settlers on the basis of national identity, religion and ethnicity in terms of water access, distribution and affordability.

- Ensure that civilians are guaranteed access to drinking water, water for personal hygiene, and sanitation.

- Ensure that public health and hygiene is maintained in the occupied territory.

Comply with the prohibition on the destruction of civilian infrastructure, including drinking water installations.

Permit and facilitate the delivery of humanitarian relief to the occupied territory.

It is highly arguable that the denial of water to Palestinian communities, in particular in Area C, is part and parcel of an Israeli policy of constructive forced eviction and forced transfer (ethnic cleansing) of the population, through creating conditions on the ground that impose intolerable living conditions on the population and destroy their means of subsistence, making it increasingly difficult for them to stay on their lands and in their homes.

7.3. Violations of customary international law regarding the transboundary allocation of resources

Israel continues to violate the principle of 'equitable and reasonable utilisation' of transboundary water resources through denying Palestinians their rightful share, and over-abstracting water from shared resources. Through reducing the quantities of water available to Palestinians for domestic use, food production, protection of livelihoods, and ultimately socio-economic development, Israel's over-utilisation of shared water resources has had a significant negative impact on the satisfaction of vital human needs. Through its dominance in the JWC, Israel has further failed to comply with the obligation to cooperate and negotiate in good faith on the utilisation of transboundary watercourses.

7.4. The right to remedy and restitution

International law guarantees that victims of gross violations of human rights and serious breaches of international humanitarian law have the right to both remedy and reparation. The UN General Assembly has stated that reparation includes restitution, compensation, rehabilitation, satisfaction, and guarantees of non-repetition.137 In this regard, UN General Assembly resolution 62/181 reaffirms the right of the Palestinian people to "claim restitution as a result of any exploitation, damage, loss or depletion, or endangerment of their natural resources resulting from illegal measures taken by Israel".138 Likewise, the advisory opinion of the International Court of Justice stated that Israel is obliged to make reparation for all damage caused by the construction of the Wall,139 and this must be taken to include the loss of water resources and the impact this has had on lives and livelihoods in communities affected by the Wall.

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137 For more information of the legal elements of reparation and requirements of duty holders, see UN General Assembly, Basic Principles and Guidelines on the Right to a Remedy and Reparation for Victims of Gross Violations of International Human Rights Law and Serious Violations of International Humanitarian Law, (2006), UN Doc. GA/RES/60/147, para.4, www.un.org/English, (click on ‘Documents, Maps’> ‘General Assembly Resolutions’> ‘60th - 2005’).


139 Para. 163.
Conclusions and Recommendations
The continuing occupation of Palestinian territory and the policies and practices of Israel in the West Bank have resulted in widespread human rights violations, first and foremost amongst them being the right to self-determination. The right of Palestinians to full sovereignty over their natural resources, and joint sovereignty over shared resources including the Western, North-eastern and Eastern Aquifer Basins and the Jordan River, is a key aspect to achieving the right to self-determination. Addressing the expropriation and inequitable distribution of water resources is one of the principle issues to be settled in the context of the Permanent Status Negotiations. Any settlement agreed on between the parties needs to ensure that water resource allocation and utilisation is equitable and reasonable, and gives due regard to water requirements necessary for domestic, agricultural and industrial uses in order to ensure socio-economic development, and support the population dependent on shared water resources in both Palestine and Israel. Prioritisation in allocation needs to ensure that basic needs are satisfied, in particular water for personal and domestic uses, and to ensure food security. Any final negotiated settlement should be founded on recognising the rights of the co-riparian States as well as the human rights of the population. In this regard, addressing remedy for past violations of human rights resulting from Israeli water policy and practice in the occupied Palestinian territory should be a key feature of the final settlement. The agreement needs to ensure that institutional mechanisms that govern water sharing and cooperation on transboundary water resources rectify current power imbalances, so that both sides may equally and meaningfully participate in and benefit from joint resource management.

In the interim, Israel as an occupying power must immediately and without delay take the following actions to ensure the right to water and sanitation for Palestinian people in the occupied West Bank:

- Ensure that adequate quantities of water are available to enable the satisfaction of basic personal and domestic needs as well as ensure the realisation of the rights to food and livelihood, particularly for subsistence farmers.
- Remove all obstacles to water and sanitation service provision, including facilitating access for water tankers and sanitation removal trucks at checkpoints, and opening extra filling points in communities that are not connected to the water supply network.
- Implement a moratorium on the demolition of water and sanitation infrastructure and facilities, and remove restrictions to permit requirements for cistern and network construction and rehabilitation.
- Remove restrictions that impede the ability of aid agencies to provide humanitarian assistance to vulnerable communities.
Comply with the Advisory Opinion of the International Court of Justice and cease construction of the Wall; dismantle the Wall and make reparation for all damage caused by the Wall.

- Remove barriers that restrict the PWA in addressing its duties and responsibilities in the water and wastewater sector.

- Ensure Palestinians get the allocations of fresh water cited in the Oslo II agreement, until the Permanent Status negotiations secure equitable and reasonable volumes.
Established in 1992, the Centre on Housing Rights and Evictions (COHRE) is an independent, international, non-governmental human rights organization committed to ensuring the full enjoyment of economic, social and cultural rights for everyone, everywhere, with a particular focus on the human right to adequate housing and adequate public services for all. COHRE is registered as a not-for-profit foundation in the Netherlands. COHRE has an international secretariat based in Geneva, and regional offices for Africa, North America, South America and Asia/Pacific.

The COHRE Right to Water Programme (RWP) was established in 2002. It advocates for reforms in international, national and local governance to achieve the right to water and sanitation for all, based on research, training and advocacy. COHRE RWP works at the national level in co-operation with national and local groups. At the international level, COHRE RWP aims to catalyse and support action by governments, international agencies and NGOs through publications, training and advocacy for stronger international standards for the right to water and sanitation.

This publication documents violations of the right to water and sanitation resulting from Israeli policy and practice in the occupied West Bank, particularly in relation to lack of Palestinian access to water resources and water and sanitation services and facilities. The report calls for Israel, as an occupying power, to assume responsibility for ensuring that the right to water and sanitation, and other internationally recognized human rights, are respected, protected and fulfilled for Palestinians in the West Bank, and not to obstruct the Palestinian Authority from carrying out its duties and responsibilities in relation to the water and wastewater sector.