

The World Water Crisis: Ramifications of Politics Trumping Basic Responsibilities of the International Community

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ABSTRACT *The international community has limited support for Third World countries that apply politically unacceptable measures to their water crises. For political reasons, the community also selectively dismisses international instruments governing military actions, the United Nations Charter and the International Law on Water, worsening the crises. The Middle East conflict offers testimony where instruments have been continuously violated, allowing expropriation of the water of weaker nations and groups. Israel, with a population twice that of the Palestinian territories, uses 95% of the fresh water utilized in Historic Palestine, leaving 5% for the Palestinians. Though alarmed with Aral Sea conditions, the community ignores the polluted lower Jordan River, the declining Dead Sea and the destruction of the Palestine aquifers. Middle East agreements will set precedents for addressing international water crises. The community must reverse its past silence and provide equitable, effective reallocation of the Middle East's resources. It cannot afford to leave a destabilizing legacy.*

Introduction

The international community (community) has been heavily involved in water resources matters since World War II, and rightly so. It has a responsibility in the wise stewardship of these resources, critical to all. It has the responsibility to help developing countries utilize these resources to meet their social, economic and security needs so they may join the more advanced. This includes the equitable sharing of international waters.

Initially, the community focused on water-related development in the poorer countries. United Nations (UN) agencies such as the UN Development Programme, the World Meteorological Organization and the Food and Agriculture Organization instituted data collection, investigations and advisory programmes. The World Bank, associated regional banks and bilateral agencies provided policy, technical and financial assistance. Substantial improvements were made in the areas of urban and rural water supply, irrigated crop production, hydro energy and public health, simultaneously strengthening the borrowers' agencies.

In the late 1970s, international efforts became more diversified as the developed countries examined their own environments. The community raised questions about the negative impacts of water projects *per se*. They provided

assistance to developing countries to establish agencies to formulate environmental standards and analyse proposed water resources undertakings. Though for decades the water crisis had been clearly exhibiting a dangerous upward trend, the environmental opposition to increasing supplies in the developing countries occupied the international debate. In time, pressures from international groups and new criteria adopted by the international lenders dramatically reduced water development in client countries. The valid attention to the environmental issues effectively diverted support away from the urgent campaign to expand basic water supply.

India's Narmada basin development, formulated in 1965 by the national and state governments, became a rallying call in the early 1980s. As a result, the community halted its support of the Narmada, citing delays in resettling 100 000 people and environmental issues. This stymied the construction of reservoirs and delivery systems to serve an additional 20 million to 30 million urban inhabitants in the state of Gujarat and a slightly smaller number of rural, village and town inhabitants on the 2.4 million hectares to be irrigated, as well as urgently needed clean hydropower. At the time, India was adding 20 million to its population each year; additional people in need of water and employment. The findings of a UK-funded study of environmental impacts contradicted the opponents (HR Wallingford, 1993). Yet, the effective embargo on community support continues, with the undertaking now 12 years past its completion date.

Neither the community's development agencies nor non-governmental organizations (NGOs) offered viable alternatives for the region's water crisis; then or now. In 2002, several million desperately poor farmers and urban inhabitants in Gujarat again suffered devastating drought, further enflaming tensions evident among the unfortunate that led to the state's bloodletting.

Many in the community remain adrift. International agencies are entangled with policy studies, new strategies and unending meetings on water. Decades of promoting markets, privatization, marginal pricing and 'virtual water' have done nothing to increase supplies. The World Commission on Dams (2000) study of the environmental impacts of dams ignored decades of hard data on the huge benefits to urban life, economic growth and poverty alleviation, indeed tax revenues supporting other government programmes too, that the developed countries have realized from like undertakings. It did not note that all of these supply dams remain in place. As a result, the report manacled or gave cover to international and bilateral agencies to shelve actions to address the escalating water crisis. International politics shifted the public's attention to the Aral Sea to the exclusion of the water supply crisis.

Fortunately, the media has recently expanded coverage of the world's rapidly growing crisis. The situation can no longer be ignored. The community will be forced, though belatedly, to change its focus yet again as evident in the 2003 policy directives of international agencies. Except now the crisis demands immediate actions. The inevitable droughts will grow in frequency and to previously unencountered levels of human disaster as countries reach the absolute limit of available supplies. Now, the community will have to deal with both expanded infrastructure investments and demands for emergency humanitarian assistance until additional supplies become adequate.

In addition to the resources stewardship function and funding assistance for water supply, the community must face up to a more contentious long-held responsibility. This is the application and enforcement of the pertinent inter-

national instruments for allocating and managing international bodies of water. There are hundreds of situations where more than one country has rights to a body of 'international' water. The more serious affect tens, in some cases hundreds, of millions. Over 400 million inhabit the Ganges/Brahmaputra basin lands within India, Nepal and Bangladesh.

Beginning early in the 20th century, the world's political leaders and legislatures saw the need for international instruments in the resources area—and acted. They sought order, equity, human rights and security. The community rigorously defined for all nations acceptable behaviour and means for enforcement. It understood the instruments' value and insisted on each nation's unquestioned acceptance as a condition for membership in the UN. The community demonstrated responsibility by settling international disputes in the Indus, the Mekong, eastern Europe and many other basins, averting military conflicts and inequalities.

Yet, elsewhere leaders and legislatures of the community have seen fit to apply selectively or ignore outright these instruments. Neglect allowed military actions or implicit military threats by the powerful against the weak. National politics have over-ridden national and international measures of right and wrong and, indeed, laws.

The weakened condition of many countries as a result of World War II and the confrontation among the remaining leading powers diverted the world's attention and allowed the mightiest to dictate community actions then (and now) focused in the UN. They allowed a unilaterally forced water reallocation in the Middle East that would set world-wide precedents for the future. The violations allowed would weaken all international instruments defining responsible behaviour and give licence to pursue like military strategy in other disputes. The community cannot afford to set such precedents, now of even greater consequence as the world's water crisis worsens.

This paper will summarize the Middle East situation. Information is provided on the resources, unilateral actions and content of governing international instruments. The material and discussion are intended to promote reasoned debate and, hopefully, effective actions by the community to recapture the status expressed in the instruments that bear on the ownership, allocation and management of water resources. The community has an obligation to address this issue constructively and with vigour. Without question, the community as a whole has the political and financial means, as it has repeatedly demonstrated.

Middle East Water Issues and the Community

Numerous questions pertaining to international instruments are evident in the Israel/Palestine conflict. Certainly, not since the adoption of current international instruments have unilateral military actions openly determined the control and radical reallocation of resources to the extent found in the Middle East. The applicable international instruments include the Hague Convention on War (1907) (HC), the United Nations Charter (1945), the International Court of Justice (1945) (ICJ), the Fourth Geneva Convention on War (1949) (GCW), the International Covenants for Economic, Social and Cultural Rights (1966) (ICR), the Helsinki Rules on the Uses of the Waters on International Rivers (1966) (HR), the Law of International Watercourses (1997) (LIW) and numerous UN General Assembly and the Security Council resolutions.

Questions that should be answered by the community include the following.

- May a nation selectively confiscate long-established water use rights by creating two classes of citizenship?
- May a nation expropriate water by removing owners of water rights from access to their water and preventing its transfer to their new, imposed place of residence?
- May an occupier expropriate water of an occupied land?
- Did UN Resolution 181 allocate the water of Palestine?
- With respect to an international watercourse, may a nation (1) expropriate water already committed in a watercourse, (2) unilaterally divert waters out of a basin, (3) destroy valid water diversions of other riparians, (4) divert salt-laden drainage into the supply of other riparians and (5) over-exploit resources causing irreparable environmental damage?

Background

A nation's viability depends on the adequacy of its water supply. Sovereignty over water in the Middle East climate constitutes sovereignty over land, over the economy and over the life and future of the area's inhabitants. Documents confirm that water was a key factor in the 1922 British Mandate for Palestine, the provisions of UN Resolution 181, and subsequent actions of the parties. Disputes over land receive the media's attention; however, water is of greater consequence. A summary of the Israeli/Palestinian conflict provides background to the discussions that follow.

'Historic Palestine' is used herein as comprising Israel, Gaza and West Bank territories lying west of the Jordan River. The Israeli/Palestinian situation of 2003 evolved through political and physical actions by the world powers beginning in 1917 with the Balfour Declaration. The events since 1947 reflect the consequences of power politics and unevenly enforced international instruments devised by the community. UN Resolution 181 imposed a Jewish state on lands already inhabited. The lands were situated within a water-constrained region where riparians with high population growth were commencing to expand their economy.

In 1948, the community recognized a state of Israel while no state of Palestine or Palestine Trust land was established. In 1964, Israel commenced to divert the Jordan River to its lands outside the basin, effectively closing the lower Jordan. By 1967, Israel had increased its area designated under UN Resolution 181 from 55% to 78% of Historic Palestine and expanded occupational control over all the remaining water resources of Historic Palestine and the Golan Heights; the situation today. These radical changes occurred in a mere 20 years.

Under the military administration introduced in 1967, Israel constructed within the occupied territories wells and pipelines to serve expanding Jewish settlements within the territories and to export water to Israel. Simultaneously, Israel restricted water use by the Palestinian inhabitants. Persistent serious water shortages in the occupied territories and in the neighbouring riparian countries began in the early 1970s, only 30 years after UN Resolution 181. By 2000, Israel's water export reached 75% of the total withdrawals from the aquifers underlying the occupied territories, greatly exceeding recharge and drying sources long utilized by the Palestinians.

Today, three million Palestinians live in the occupied territories and six million Israelis live in the remainder of Historic Palestine. Israel consumes over 95% of the fresh water used in Historic Palestine and limits the Palestinians to the remainder. The UN and World Bank confirm that the Palestinians receive the least amount of water per capita of any in the Middle East: insufficient for essential domestic uses and viable economic activities.

Prime Minister (PM) Sharon has set water-related conditions for Israel to allow the creation of a Palestine state. Israel demands sovereignty over all water resources of the state of Palestine. Israel would have authority to allocate and physically control the Palestinians' use of their (the Palestinians') underlying aquifers and surface supply. No portion of the water sources now used by Israel, regardless of how it was obtained, would be subject to negotiation. No water disputes, past or future, may be submitted for resolution to the ICJ or other third parties. PM Barak stipulated the same demands in December 2000.

The Palestinians rejected PM Barak's proposal. The state of Palestine would not be viable under the proposed water provisions. The Palestinians propose a resolution in accordance with applicable international principles and legal instruments. The 'Road Map to Peace' is unspecific.

Scope of Discussion

Various international water-related instruments have been used to help resolve international water conflicts. The Israel/Palestine water issues, however, are without precedent. The 'starting' conditions for formulating a water agreement have repeatedly been changed by military force. Some do not consider Israel's sequence of actions as a 'war over water' (Wolf, 1999). The nature of the actions may be best judged by the level of compliance with international instruments. This analysis will begin with issues that pertain to international instruments governing military action and a people's rights, as these instruments have primacy. International water instruments will be introduced where appropriate, particularly concerning allocation and management of the waters.

As noted in a conference paper 11 years ago:

The current disproportional distribution of water resources is no longer sustainable. In the past, unsustainability has grown into conflict. Hopefully, today the use of force and military power to gain control of water resources is no more acceptable to the International Community. It is time for this Community to take action, reversing unjust water distribution and ensuring a fair and ecologically sound future. (Isaac & Hosh, 1992, p. 12)

The Region's Water Resources

International waters, by definition, are resources common to two or more riparian nations or occupied lands. Naturally occurring water originating and confined entirely within one country remains under the sovereignty of that country. The Jordan River basin is an international watercourse serving Lebanon, Syria, Jordan, Israel and the occupied territories. The average discharge of the system is 1600 million cubic metres (MCM) per year, of which 1200–1300 MCM is utilizable. Almost all of the river's utilizable water is derived

from rainfall and snowmelt on the greater Mount Hermon area shared by Lebanon and Syria. Excluding the Dan River, which issues from a spring just inside the Israel boundary and derives its entire discharge from the Mount Hermon area, Israel and the West Bank contribute only 3% and 2%, respectively (Elmusa, 1997; Applied Research Institute, 2000).

Groundwater is an important source of water to Historic Palestine. The coastal aquifer, a portion of which supplies Israel and Gaza, is replenished entirely outside the Jordan basin. The western segment of the mountain aquifer supplies Israel, the West Bank and Gaza. The entire eastern portion underlies the West Bank with springs flowing towards the Jordan River. All except the non-Gaza portions of the coastal aquifer are international waters. Lands riparian to the Mediterranean have that source for desalination.

Israel also has a huge quantity of fossil water underlying the Negev Desert, estimated to be equivalent to 120–240 years of sustainable pumping from the entire mountain aquifer (Adar, 2000). This is suitable for irrigation, though it is not reflected in the water quantities available to Israel. A second important error in the water figures is inherent in the accounting methods for water allocations. All figures in allocation tables are the initial diversions from primary sources. All return flows from those water diversions utilized within the basin should be counted again as they become available for reuse by other basin users. National water laws reflect these accounting principles. The seepage and return flows from water diverted/pumped by Palestinians on the West Bank return to the underlying aquifers. This water becomes part of the water subsequently pumped by both Palestinians and Israelis.

Israel diverts water from the Jordan River and the West Bank aquifer and conveys it out of those basins to areas where the reusable water only becomes available to Israel. The water is recovered in Israel's own aquifers or, after the initial use, is directly recycled for repeated reuse within Israel, unavailable to other riparians. Thereby Israel can utilize 70–90% of its 'diversions', whereas the Palestinians can only utilize perhaps 30–50%. Israel was already able to recycle 264 MCM of its diversions in 1999 (Government of Israel, 2003), water not included in present allocation accounts.

The current water allocations should reflect these additional quantities available to Israel. Indeed, it is for these reasons of potential reuse by other riparians that international water instruments stipulate that no individual riparian may unilaterally divert water out of international basins.

Expropriation of Water of Israeli Arabs

The first water resources issue pertains to the expropriation of water resources of non-Jewish citizens of Israel. For reasons explained later, only 150 000 Arabs remained in Israel following the 1948–49 war. Under UN Resolution 181, two sets of pre-1948 laws governed ownership of the land and the associated water rights of Israel's inhabitants. British Mandate laws were retained by Israel, allowing it to confiscate land, and its associated water rights, decreed necessary for 'public' or 'security' reasons. However, Israel abolished the existing water rights laws governing the resources of existing residents and nationalized all water.

Subsequently, Israel enacted numerous Basic Laws, which equate to a constitution. The laws created two statuses for Israeli residents: 'Israeli citizenship

(citizens)'; and 'Jewish nationality (nationals)'. Inhabitants who resided there before Partition and remained at the close of the 1949 war received Israeli citizenship status. However, only Jews are also eligible for the Jewish nationality status. The citizen and nationality status rights of Jews extend to every Jew in the world. The rights associated with these status distinctions are not stated in any one Basic Law. They only become apparent by connecting the various laws.

By 1960, through application of its basic and security laws, Israel had taken 1.2 million hectares and the vast associated water rights from Israel Arabs who had remained in Israel as citizens (Lilienthal, 1978). Further, land from which Palestinians were evicted during the wars, together with their associated water, also became state land. Israel state land may not be transferred to private owners.

Another law established a joint authority between the Israeli government and certain NGOs that would manage a number of government programmes and administer most of Israel's state water and land. Under their charters, the NGOs may only serve Jewish nationals. In this manner there is no 'direct' government action involved in setting two levels of basic services to citizens, depending on race and religion. The NGOs offer 99-year renewable land leases to nationals, many limiting any employment to nationals. This mechanism has freed essentially all land and associated water resources for use by existing and new Jewish immigrants to Israeli citizens, depending on nationality and religion.

The Basic Laws relating to water violate UN Resolution 181 and the UN Charter. UN Resolution 181 chapter 3 provides:

1. Citizenship: Palestinian citizens residing in Palestine ... , as well as Arabs and Jews who, not holding Palestinian citizenship, residing in Palestine ... shall, upon the recognition of independence, become citizens of the State in which they are resident and enjoy full civil and political rights.

UN Resolution 181 requires the new states to adhere to international instruments signed by the Mandatory. "2. International conventions: The State(s) shall be bound by all international agreements and conventions ... to which Palestine has become a party." "Any dispute about the applicability ... shall be referred to the International Court of Justice." The UK, the Mandatory of Palestine, was signatory to several international conventions, including the UN Charter, which pertain to this issue.

Provisions of the ICR, which Israel signed, explicitly prohibit the creation of different statuses of citizenship within a member country and stipulate rights:

PART I Article 1, Paragraph 2 ... In no case may a people be deprived of its own means of subsistence.

PART II Article 2, Paragraph 2. The States Parties to the present Covenant ... guarantee that the rights enunciated ... will be exercised without discrimination of any kind as to race, colour, sex, language, religion, political or other opinion, national or social origin, property, birth or other status.

Article 5, paragraph 2 "prohibits the use of subterfuge through internal laws of a Member State to discriminate".

The community is confronted with enforcement of the international instruments cited to rectify the water-related consequences of the Basic Laws for

non-Jews who remained in Israel. This should be addressed directly, as it does not rest on issues of the final peace settlement.

Expropriation of Water of Arab Residents Driven from Israel during the 1948–49 and 1967 Wars

A second issue is the expropriation of the water resources of the non-Jewish residents driven from the original UN Resolution 181 area and from the expanded area annexed by Israel military action during the 1948–49 and 1967 wars. Records confirm the results of the expulsion strategy. During the 1948–49 and 1967 wars, Israel expanded the area within its borders from the 55% granted under UN Resolution 181 to 78% of Historic Palestine. Israel forced 950 000 non-Jews to flee the area that became Israel and prevented them from returning. Most non-Jewish villages were destroyed as a further deterrent (Lilienthal, 1978; Khalidi, 1992; Morris, 2001).

The destruction of villages, which facilitated the expropriation of Palestinians' assets, including water rights, is described in several documents. The chairperson of the Israeli League for Human Civil Rights, Israel Shahak, recorded the number of Palestinian Arab villages destroyed by area. Shahak stresses that his documented list is incomplete, but it does show that of the 475 Palestinian villages included, all but 90 were destroyed (Schoenman, 1988).

Moshe Dayan confirmed the actions in his address to the Technion (Israel Institute of Technology) at Haifa, as quoted in the Israeli newspaper *Haaretz* on 4 April 1969: "Jewish villages were built in the place of Arab villages ... There is not one single place built in this country that did not have a former Arab population".

The provisions of the UN Charter, UN Resolution 181, the ICR and the HC, cited earlier, apply to this issue and will not be repeated. And it should be recalled that residents of Historic Palestine are also members of those international organizations to which the UK, Jordan and Egypt belonged.

Articles of the GCW prohibit the transfer/expulsion of residents of an area taken over by another entity by any means:

Art. 2 ... the present Convention shall apply to all cases of declared war or of any other armed conflict ... Although one of the Powers in conflict may not be a party to the present Convention, the Powers who are parties thereto shall remain bound by it in their mutual relations.

Art. 4. Persons protected by the Convention are those who, at a given moment and in any manner whatsoever, find themselves, in case of a conflict or occupation, in the hands of a Party to the conflict or Occupying Power of which they are not nationals.

Art. 6. The present Convention shall apply from the outset of any conflict or occupation mentioned in Article 2.

Art. 47 ... prohibits the transfer or deportation of residents of occupied territories.

Art. 49. Individual or mass forcible transfers, as well as deportations of protected persons from occupied territory to the territory ... of any other country ... are prohibited, regardless of their motive.

Some contend that the 950 000 Palestinians vacated their villages, land, homes and businesses voluntarily and without the intention of returning. This allegation has been used to justify the expropriation of their assets, including water. Israeli archives, however, record the intent and actions to expel the non-Jewish residents consolidated under Plan Dalet.

A Zionist transfer committee worked under guidelines approved by Ben-Gurion. These guidelines were called the 'Scheme for the Solution of the Arab Problem in the State of Israel' (Masalha, 1992). To that end, the committee's memorandum, 'Retrospective transfer', called for:

... preventing Arabs from returning to their homes; destroying Arab villages during military operations; preventing cultivation (and harvesting) of Arab lands; settling Jews in Arab towns and villages; instituting legislation barring the return of the refugees; launching a propaganda campaign designed to discourage the return of refugees; and campaigning for the resettlement of the refugees in other places. (Masalha, 1992, p. 189; Morris, 1998, p. 136)

By 1 June 1948, roughly 370 000 Palestinians had fled, a figure that would double by the end of the war of 1948. The Israeli Defense Forces (IDF) Intelligence Branch categorized the reasons for the Palestinians exodus as follows: "Haganah/IDF operations—at least 55 percent; ... operations by IZL [Irgun] and Lehi—15 percent; and... whispering campaigns (psychological warfare), evacuation ordered by IDF, and general fear—14 percent" (Masalha, 1992, p. 179). In the words of the Israeli historian Meir Pa'il, "one third fled out of fear, one third were forcibly evacuated by Israelis... [and] one third were encouraged by the Israelis to flee" (Masalha, 1992, p. 179).

Israel was admitted as a member of the UN on 11 May 1949 under three conditions: that it do nothing to change the status of Jerusalem (per UN Resolution 181); that it allow the Palestinian refugees to return to their homes or compensate those choosing not to return (per UN Resolution 194); and that it respect the borders established by UN Resolution 181 (55% of Historic Palestine to the Jewish state and 45% to the Palestinian state). These provisions of key international instruments were violated the same year. The UN Security Council unanimously adopted UN Resolution 242 on 22 November 1967, condemning Israel's pre-emptive military campaign (UN, 1994).

The Israeli actions to drive non-Jewish residents from areas granted to Israel by UN Resolution 181 and lands gained through military actions violate the international instruments cited. These violations warrant remedy. As a partial compromise, it could be argued that the quantity of water used by those not allowed to return to Israel under the final agreement should be reallocated in full to the areas and countries that were forced to receive those refugees, together with full compensation paid for the use of the resources for the intervening years, as called for in UN Resolution 181.

Expropriation of Water of the Occupied Territories and Neighbouring States

The issue of the expropriation of water resources of occupied lands arose from Israeli actions following the 1967 war. Israel's capture of Palestinian and Syrian lands resulted in one of the most consequential forced reallocations of the

region's water and accordingly warrants detailed information regarding the entire episode. A few of the many documents describing the actions are noted.

The Zionist policy to expropriate permanently the water of the whole of Palestine was documented in materials referenced earlier. The demands of PMs Barak and Sharon are consistent with the current platform of the Likud Party. The 1996 Likud Party platform, still in effect in 2002, confirms the objectives. Chapter 1 includes the following:

6. Israel will keep its vital water resources in Judea and Samaria [the West Bank]. There shall be no infringement of Israel's use of its water resources.

8. The Jordan River shall be the eastern border of the State of Israel, south of Lake Kinneret [Tiberias]. This will be the permanent border between the State of Israel and the Hashemite Kingdom of Jordan.

9. Israel will conduct peace negotiations with Syria, while maintaining Israeli sovereignty over the Golan Heights and its water resources. (Likud Party, 1996)

Acts of aggression along the Israel and Syria border escalated to a series of direct incursions by Israel that led to Israel taking a portion of the Golan Heights to control the area's water. Moshe Dayan admitted:

I know how at least 80% of the clashes there started—in my opinion, more than 80 percent ... We would send a tractor to plow some area where it wasn't possible to do anything, in the demilitarized area, and knew in advance that the Syrians will shoot. If they did not shoot, we would tell the tractor to advance further, until in the end the Syrians would get annoyed and start shooting. And then we employed artillery, and later the air-force also, and that is how it was. (Muslih, 1999, p. 47)

General Mattitahu Peled made similar statements (Muslih, 1999).

Israel justified the actions in the name of 'security' for what was an opening move to complete its control of Lake Tiberias, the groundwater resources of Syria's Golan Heights, Syria's Baniyas tributary to the Jordan River, Syria's lands accessing the Yarmouk River and the potential routes of Syrian water development of its Jordan headwaters. The 1967 war completed Israel's objective.

Many allege that military movements of the Arab neighbours triggered the war. Egyptian troops entered its Sinai Peninsula in the spring of 1967 and unilaterally dismissed the UN force that Egypt believed to be ineffective in protecting Arab rights in the Jordan watercourse. Israel 'officially' interpreted this action as putting Israel in danger of annihilation. On 4 June its Cabinet decided pre-emptively to go to war.

Israel attacked Egypt, Jordan and Syria in a war that ended six days later. At the war's conclusion, Israel had captured the West Bank from Jordan, the Gaza Strip and Egypt's Sinai Peninsula from Egypt, and additional areas of the Golan Heights from Syria. One million Palestinians, many of them earlier refugees from what became Israel, and their land and water resources came under Israeli rule, now the government or occupier of all Historic Palestine and the Golan Heights. Interviews with prominent Israeli leaders are informative for evaluating whether Israel initiated the 1967 war to claim additional territory and water or to thwart annihilation.

Yitzhak Rabin, the head of the army, said "I do not believe that Nasser [President of Egypt] wanted war. The two divisions which he sent into the Sinai on May 14 [1967] would not have been enough to unleash an offensive against Israel. He knew it, and we knew it" (*Le Monde*, 28 February 1968).

General Peled of the IDF general staff said:

All those stories about the huge danger we were facing because of our small territorial size, an argument expounded once the war was over, had never been considered in our calculations prior to the unleashing of hostilities. To pretend that the Egyptian forces concentrated on our borders were capable of threatening Israel's existence does not only insult the intelligence of any person capable of analyzing the situation. (*Le Monde*, 3 June 1972)

General Mordichai Hod, commanding general of the Israeli air force, said "Sixteen years' planning had gone into those initial eighty minutes. We lived with the plan, we slept on the plan, we ate the plan. Constantly we perfected it" (Lilienthal, 1978, p. 558).

As to the importance of the water supply to Israel captured with the Golan Heights in the 1967 war, Zaslavsky (2002) believes that Israel would have to surrender approximately one-third of its total Jordan River fresh water to Syria if its border was returned to the pre-1967 location.

The war violated the UN Charter, UN Resolution 181 and the GCW. The UN Security Council unanimously adopted UN Resolution 242 on 22 November 1967, condemning Israel's actions and calling for the "withdrawal of Israel armed forces from territories occupied in the recent conflict" and "termination of all claims or states of belligerency and respect for and acknowledgement of the sovereignty, territorial integrity and political independence of every State in the area and their right to live in peace within secure and recognized boundaries free from threats or acts of force".

Israel, however, proceeded with its water strategy. Immediately upon conclusion of the 1967 war, Israel established a military administration in the occupied territories. This "assumed legislative, executive and judicial powers, and introduced over 2,000 military orders, amending, changing or repealing virtually every piece of existing legislation in the occupied lands" (Palestinian Academic Society for the Study of International Affairs, 2002). By military decrees, Israel nationalized the water of all occupied lands and classified all water resources data as Israeli state secrets.

Israel began the construction of Jewish settlements in the West Bank and east Jerusalem, though it had ample land and groundwater in the Negev. An investigation related specifically to the water expropriation and decrees restricting water use by Palestinians found that:

Under conditions of Israeli military occupation, however, water resources of the occupied Palestinian territory are being diverted and used at an alarming rate by Israel, the occupying Power, at the expense of the Palestinian people. Severe restrictions on drilling for water, planting and irrigation and such Israeli practices as the felling of productive trees and the destruction of crops have diminished or maintained at a low level the amount of water made available to the Palestinian population. Israeli policies ensure that most of the water of

the West Bank percolates underground to Israel and settlers are provided with increasing access to the water resources of the occupied Palestinian territory. As a consequence, a 'man-made' water crisis has been brought about which undermines the living conditions and endangers the health situation of the Palestinian people. In areas where water resources originating in the West Bank are over-exploited in Israel as well as in most of the Gaza Strip, the imminent threat of the permanent environmental destruction of groundwater reserves, aquifers, has been reported. (UN, 1992, p. 2)

Israeli reports in 2000 confirmed that severe contamination and destruction of usable groundwater by Israel had reached serious levels (Schwarz, 2000).

"Disregarding the wishes of the Palestinian people, the Israeli water authority has been working for over a decade on the integration of the West Bank water system into large regional plants linked up with the Israeli water system. In 1982 ... [the West Bank water system] was handed over to the Israeli national water company, Mekorot, to carry out the 'take-over' ", stated Mr Benvenisti, former mayor of Jerusalem, in his 1986 report on developments in the West Bank (Benvenisti, 1986, cited in UN, 1992). Water charges to Palestinians were increased dramatically, becoming 3.5 times higher for municipalities and 7 times higher for individuals than those of the Jewish settlers. The per capita water quantities of Palestinians on the West Bank were 25% of the unit quantity received by adjacent settlers and Palestinians in Gaza received 8% of the unit quantity received by adjacent settlers (Libiszewski, 1995). Israel has its hand on the very spigot of the Palestinians' water.

The US Department of State (1991, p. 1492) states:

Israeli law has been extended to cover most activities of Israeli settlers who live in the occupied territories, while Palestinians live under military occupation law. Under the dual system of governance, Palestinians, both Muslim and Christian, are treated less favorably than Israeli settlers on a broad range of issues, including the right to due process, right of residency, freedom of movement, sale of crops and goods, land and water use.

Gaza lost its good-quality water supply in the early 1950s. Israel intercepted the groundwater flow that historically served Gaza by constructing wells on lands lying east of Gaza to serve immigrant populations. Salination of the Gaza well water has dramatically reduced yields from its long-established citrus industry, forcing Palestinians to purchase bottled water for domestic uses (Roy, 1995).

A UN report of 25 November 1980 by the Security Council Commission, focusing on water resources, concludes that the changes of a geographical and demographic nature in the occupied territories, including Jerusalem, brought about by Israel, constitute a violation of the GCW and of the relevant decisions adopted by the Security Council in the matter (UN, 1992).

The 1980 UN report continued:

Available evidence shows that Israeli occupying authorities continue to deplete the natural resources, particularly water resources in the occupied territories for their advantage and to the detriment of the Palestinian people. As water is a scarce and precious commodity in the area, its control and apportionment means control of the most vital means of survival. It would seem, therefore, that Israel employs water

both as an economic and even political weapon to further its policy of settlements. (UN, 1992, p. 24)

In Resolution 38/144 of 19 December 1983, the General Assembly condemned Israel for its exploitation of the natural resources of the occupied territories, including Jerusalem, and reaffirmed the rights of the Palestinian people to restitution and full compensation for the exploitation, depletion and loss of, or damage to, its resources (UN, 1992).

However, Israel continued its strategy and ignored the international community. A military order in 1982 issued by the commander of the Israeli forces in the West Bank stated:

... in order to preserve the water resources and the agricultural production the Administration has prohibited the planting of fruit trees without a permit from the military government. Trees already planted have to be registered within 90 days and a permit obtained for each of them. Moreover, government inspectors have the power to make searches and to uproot unlicensed trees at the expense of the owners. Subsequent orders pertained to vegetables. (UN, 1992, p. 15)

The documents pertaining to the 1967 war and resulting occupation are clear, as are the extent and nature of violations. The resolution of the water issues will rest most upon the community's application of adopted international instruments pertaining to military action, the expropriation of resources, the treatment of the occupied people, universal rights and UN instruments, many already cited. These include the HC, the GCW, the UN Charter, UN Resolution 181, conditions for Israel's admission to the UN, the ICR and various UN resolutions. Provisions of the instruments relating directly to water within international watercourses also come into play.

The powers for remedial actions under both the GCW and the UN Charter are comprehensive and fully adequate to rectify such a situation. These have been utilized on numerous occasions. Precedents to release long occupied territories previously annexed to countries (the former USSR) and to pay compensation for expropriated assets and economic losses incurred by selected groups in World War II are still being enforced today.

Management of the Jordan Watercourse and Palestine Aquifers

Some Israel/Palestine water issues are most appropriately addressed under the LIW and related instruments, such as the HR and the Bellagio Draft on groundwater. This discussion of its applicability to the dispute includes clarifying the views of some participants of the convention proceedings. The narrower issues will be considered in the course of discussing individual articles of the law. However, three issues require more extensive analysis and will be presented separately.

Some in Israel contend that the LIW does not apply, given its date of adoption. However, there is a firm basis to refute that claim. The issues under dispute are linked to military actions or threats of actions that continue. Indeed, it could be argued that Israel has delayed addressing water issues until military actions had further altered conditions in their favour. As a result of these actions the

precondition of peace for negotiations under international water instruments has not existed.

Israel/Jordan negotiations were conducted under pressure after Israel gained control of Syria's lands opposite Jordan's on the Yarmuk and remain 'efforts in progress'. The Palestinian and Israeli discussions have been conducted under a state of military occupation since 1967. There are no serious contacts with Syria. After resolution of the issues arising from military actions, the LIW would apply to the analysis and negotiation of remaining issues and any proceedings of the ICJ.

Though the entire LIW applies to the international waters involved, certain articles carry particular weight. Eight will be of greatest consequence.

- Article 5. Equitable and reasonable utilization and participation.
- Article 6. Factors relevant to equitable and reasonable utilization.
- Article 7. Obligation not to cause significant harm.
- Article 20. Protection and preservation of ecosystems.
- Article 21. Prevention, reduction and control of pollution.
- Article 27. Prevention and mitigation of harmful conditions.
- Article 29. International watercourses and installations in time of armed conflict.
- Article 33. Settlement of disputes.

McCaffrey (2001) describes the formulation of the law. The legal precedents and practical considerations discussed provide reasoning for its application. Linkages with other international 'water' instruments are evident. For example, "The doctrine of equitable utilization was applied to international watercourses as the basic, governing principle by the ... Helsinki Rules. Its status was confirmed by the decision of the International Court of Justice ... and as an overarching principle [of the LIW]" (McCaffrey, 2001, p. 324).

McCaffrey (2001, p. 349) continues: "States have an obligation to 'prevent the causing of significant harm' to other states sharing the watercourse". Its importance is emphasized by "its placement in the General Principles". He notes: "there is indeed little doubt that the ... no-harm principle is broadly recognized as a general principle of international law".

McCaffrey (2001) discusses the responsibility to avoid serious pollution and links it in part to the 'no harm' obligation: "Agenda 21 calls upon states to take a variety of actions directed towards water pollution prevention and control" (p. 384); "in the case of the obligation to prevent significant harm under Article 7 the obligation to 'protect' the ecosystems of international watercourses implies a duty to guard those ecosystems against significant threats of harm" (p. 395).

Articles 7 and 20 apply to the conditions of the lower Jordan River. Due to Israeli upstream diversions, by 1970 the West Bank, with a Jordan River border the same length as Israel's, had lost all access to usable water: less than 1% of the virgin annual flow remained. Further, the Jordan water quality has deteriorated due to Israel's export of water out of the basin and its diversion into the downstream Jordan of large saltwater springs originating within Israel. Under previous conditions, the salts of these springs were diluted in the river flow. From 1960 to 1996, the Dead Sea water surface has dropped 18 metres and now consists of two separate bodies of water.

Article 9 of the law states that "Watercourse States shall on a regular basis exchange data and information on the conditions of the watercourses, in

particular that of a hydrological ... [and] hydrogeological ... nature". Article 12 of the law states that "Before a watercourse State implements ... measures which can have significant adverse effects upon other watercourse States, it shall provide ... timely notification ... accompanied by available data and information". Israel's Jordan River diversion violates these provisions.

As McCaffrey (2001, p. 311) notes with respect to sharing data, "It is virtually impossible for a State to satisfy itself that its utilization of an international watercourse is equitable and reasonable vis-à-vis other watercourse states unless it receives information ... [and] on a regular basis ... for a downstream State to optimize its uses".

Articles 9 and 12 will have to be fulfilled to create the database for resolving the Jordan River allocations and the execution of past and future development by the Jordan River riparians. Israel's collection and retention of basic West Bank water data as state secrets and the confiscation in 1967 of West Bank records violate these provisions. The Palestinians' remaining legal land and water records, fundamental to Palestine's future civil and technical administration of its resources, were seized and computers destroyed by the Israeli military in the Ramallah Palestine Authority government buildings during a 2002 incursion.

McCaffrey (2001) and Tanzi & Arcari (2001) describe the evolution of the law from their experience and participation in its formulation. Their discussion amplifies those of others and also stresses the obligation for constructive co-operation among the watercourse states.

The Region's Historic Water Utilization and Commitments

The Israeli/Palestinian, indeed greater Middle East, situation is unusual. Israel, created by the community in 1948, was granted a generous quantity of water through the provisions of UN Resolution 181. Its unilateral actions to export additional Jordan watercourse water seriously harmed the existing riparians. Documents record the consequences of Israel's ongoing interception of Gaza groundwater and constraint of the West Bank residents' use of their resources while exporting to Israel water underlying the West Bank and Golan Heights. The majority of this water is used for highly subsidized agriculture. Israel has taken these actions to the detriment of all other riparians, while its large Negev aquifer and desalination of its brackish water and the Mediterranean remain in reserve. A case can be made that Israel's actions violate the 'reasonableness' and 'no harm' principles, among others.

The pre-1948 water availability and use by the riparians of Historic Palestine's international resources should be the reference for applying the LIW and other water-related instruments to the dispute. There is substantial information upon which past and anticipated uses by the historical riparians can be calculated.

People of Historic Palestine, Lebanon, Jordan and Syria diverted surface water from the Jordan River system for centuries. Wells, springs and surface flows were tapped to supply irrigation and village and city uses in the more rugged areas of the region, the major valleys and the coastal areas. Droughts were common.

The tax records of the Ottoman Empire and the official reports of the Mandate record the economy during their reign. Within Historic Palestine, the coastal plain comprised a large area of high-value crops exported by the Palestinian community prior to 1947. The inhabitants had devised an economy that best

utilized the available erratic supply: a blend of rain-fed and irrigated cropping, together with commercial and industrial enterprises. A quantity of Jordan River water, largely floods, passed unused to the Dead Sea. The then unused reserves were to be captured in reservoirs and Lake Tiberias to meet increasing demands by the expanding economies, improved incomes and growing populations of the existing communities within the Jordan basin (Khalidi, 1991).

This situation was confirmed by the findings of the Zionists, the UN and several others (eight studies prior to 1946 and 14 from 1946 to 1964). In 1919, two years after the Balfour Declaration, Chaim Weizmann wrote to UK PM David Lloyd George:

The whole economic future of Palestine is dependent upon its water supply for irrigation and for electric power, and the water supply must mainly be derived from the slopes of Mount Hermon, from the headwaters of the Jordan and from the Litani river ... [We] consider it essential that the northern frontier of Palestine should include the valley of the Litani, for a distance of about 25 miles above the bend, and the western and southern slopes of Mount Hermon. (UN, 1992, p. 25)

In the 1930s, the Jewish doubters of the Zionist plans for displacing the Palestinian inhabitants remarked upon the thriving Arab economy and population already existing on the lands utilizing the Palestinian water sought by the Zionists. Shertok expressed his views on the proposed displacement at the World Zionist Congress, 22 April 1937, in Jerusalem:

... the Arab reaction would be negative because they would lose everything and gain almost nothing ... They would lose the richest part of Palestine; ...the orange plantations; the commercial and industrial centers and the most important sources of revenue for their government which would become impoverished... It would mean that they would be driven back to the desert [and lack adequate water] ... Those villages which live more than others on irrigation, on orange and fruit plantations, on livestock and property ... Where would they go? What would they receive? This would be such an uprooting, such a shock, the likes of which had never occurred. (Masalha, 1992, p. 59)

In 1941, Yosef Weitz, chairman of the second transfer committee to relocate the Palestinians, toured the hilly region of Palestine and in his diary recorded seeing "Large [Arab] villages crowded in population and surrounded by cultivated land growing olives, grapes, figs, sesame, and maize fields" (Masalha, 1992, p. 133). He confirmed that the mountainous areas, just like the coastal zone, had a very advanced agriculture-based economy fully dependent on the area's water resources.

The UN knew of the situation before it acted. In 1947, the UN General Assembly convened to consider the Partition and its Sub-committee 2 found that "Palestine is already over-populated ... poor in economic resources and far from self-sufficient" (Khalidi, 1987, p. 668). Sub-committee 2 opined that "It is the duty of the governments [of the world powers]... to make provision for the return of genuine refugees and displaced persons [from World War II] to the countries of which they are nationals" and "where such repatriation proves impossible, the solution should be—resettlement in the territories of the mem-

bers of the United Nations which are in a position to absorb a proportion of the persons concerned" (Khalidi, 1987, pp. 668–669).

Every party to UN Resolution 181 knew that the water resources of Historic Palestine and the adjacent countries, by commonly accepted measure, were fully utilized or committed in support of the society living on the region's diverse classes of lands. The studies, including those of the UN, confirmed that significant immigration to the proposed Jewish state would worsen the situation facing the natural population growth. These conditions preceded Israel's aggressive immigration policies.

The resolution of the water disputes and the allocation of water should recognize the long-established rights for economic and social benefit of the then existing inhabitants. In particular, the application of articles 5, 6 and 7 of LIW should be upheld. The rights of existing riparians preceded the creation of Israel and its subsequent unilateral actions in violation of international instruments, including UN Resolution 181. It should reflect that Israel has the Negev and limitless sources for desalination to meet the needs of its migration policy.

Allocation of the Jordan Watercourse under UN Resolution 181

Can an allocation be inferred by the provisions of UN Resolution 181 for the purposes of addressing water-related issues? UN Resolution 181 does not explicitly allocate water resources among the partitioned parties. The record of deliberations and the content of UN Resolution 181 indicate that the General Assembly was absorbed with the political issues and the rights of the residents.

However, during this period, the Zionist movement successfully promoted its Lowdermilk Plan for demarcating the Partition boundaries. Immanuel Newman, president of the Zionist Organization of America, stated that "Those who had responsibility for working out details of the United Nations Partition plan, were familiar with the basic aspects of the Lowdermilk–Hays project and took it largely into account in drawing the boundaries of the new state" (Saliba, 1968, p. 20). Indeed, silence on questions of specific water allocations proved to be its best strategy. By the application of basic principles and provisions of international law, however, it can be argued that UN Resolution 181 did in effect transfer, with explicit conditions, the water resources residual in each granted area of Historic Palestine. It did recognize existing uses and users.

Boundaries and population have always been fundamental considerations for allocating water resources under international instruments and precedents pertaining to water. LIW articles 5 and 6, particularly items a, b, d, f and g, are examples. HR article V, particularly items c, d, e and f, describes the key factors, all related to the boundaries of the parties. The 'factors' cited in the referenced instruments that were considered in making the allocations were those in existence on the effective date of UN Resolution 181, 1947.

Indeed, UN Resolution 181 went a step further. UN Resolution 181 stipulated that the land and water rights of existing residents would be honoured in full. Land ownership by the individuals residing on land that became Israel and those residing on land that became part of the intended Palestine state conveyed the water rights of long standing.

This is the foundation for arguing that in this climate and area of severe water constraint, the historic water use rights held by the Arabs remaining in Israel and the historic basin water rights of those forcibly expelled should be recog-

nized. In the latter case, the associated water should be reallocated from Israel to the adjacent areas that were forced to receive those refugees. This is physically feasible, since all parties draw from common sources. The expulsion of one million Palestinians to areas of severe water shortages without their domestic, commercial and irrigation water is of far greater consequence than is common in refugee crises. The taking of water rights is more important than the taking of many other assets, though that is also illegal.

Such action will still leave Israel with the largest proportionate share of total resources. Israel was awarded the largest area of irrigated lands of the two primary parties, though this assumed that existing private ownership by Israeli Arabs would remain. It gained control over additional smaller groundwater aquifers through its expansion during the 1948–49 war. It has ready access to both the sea and substantial brackish water suitable for desalination close to its major urban centres. Israel also has the huge, untapped Negev aquifer. LIW article 6a and areas paragraph (g) notes this situation as a factor in determining ‘equitable and reasonable utilization’.

Two other Israeli policies distort demand. Of its own choosing, it is actively recruiting immigrants. This is an unnatural population growth and does not justify the taking of the water of the Palestinians or that of the riparians to the Jordan. This is recognized under the LIW. Secondly, Israel has pursued an agricultural policy to expand irrigation in the Negev. High subsidies have paid for the excessive costs. In 1998, agriculture accounted for 63% of the nation’s total water consumption (Soffer, 2000). Other riparians contend that this activity is only a mechanism to claim and place a large quantity of water in reserve for future urban use. LIW article 10 states: “In event of a conflict between uses... it shall be resolved with reference to Articles 5 to 7, with special regard being given to the requirements of vital human needs”. A small portion of irrigation water could readily meet existing and future Israeli urban demands, freeing the rightful water rights of other riparians.

Substantial adjustments to the Israeli expropriation of water are required to comply with the intent and stated provisions of UN Resolution 181. The quantity of water expropriated by Israel from Palestinians by its actions in violation of international instruments would include the following.

- Water expropriated, though the application of Israel’s Basic Laws, from Palestinian irrigated and rain-fed agriculture among the 150 000 who remained in Israel.
- Water expropriated from the 950 000 Palestinians driven from their homes, businesses and irrigated and rain-fed agriculture in Israel. As a minimum, this water should be transferred along with the refugees whom Israel subsequently forced to settle in the occupied territories, Jordan and other riparians.
- Water expropriated from the occupied territories—Gaza, the West Bank and the Golan Heights—since 1967, for export and service to settlers and Israel proper.

The reallocation should include the annual quantities and compensation for the total quantities used during the period of violation. The many UN instruments, the HC, the GCW and the ICR cited earlier and the international water instrument the LIW would apply. These adjustments would also pertain to the water resources of the Jordan watercourse expropriated by Israeli military actions or threats.

Trans-basin Diversions from the Jordan Basin

Historically, the boundary of Palestine followed the centre line of the Jordan River from the northern to the southern extremes, just as it still does in the lower portion. However, UN Resolution 181 retained the 24-year-old British Mandate border, which unilaterally relocated the eastern international boundary of Historic Palestine extending from the Yarmouk River to the northern border. By this action, one-third of the Tiberias eastern shoreline was located only 10 metres inside Israel and from Tiberias to the northern border the Jordan River was only 50–400 metres inside Israel. The lower channel of the Dan tributary, which issues from a spring adjacent to the Syrian border, was included in Israel. Syria reclaimed its lands bordering the Jordan during the 1948–49 war, but lost them again during later skirmishes in the 1967 war. This remains a contentious issue in any peace negotiations (Frisch, 2000; Hof, 2002).

This border configuration was sufficient for Israel to control this extraordinary resource and exclude Syria from its historic access. However, the continuing conflict in this area between Israel and its neighbours prompted UN and bilateral concerns. The USA offered the Johnston Plan in 1953 for allocating the Jordan River. The plan called for the construction of reservoirs on the Jordan/Yarmouk system, the development of Arab lands on both sides of the lower Jordan (in large part to help resettle Palestinian refugees) and a suggested allocation among the riparians.

Though never formalized, most riparians viewed the plan as the *de facto* allocation of the Jordan watercourse. Indeed, Israeli officials stated that the plan provided for an equitable apportionment of the primary watercourse surface waters (McCaffrey, 2001). The proposed allocations under the plan and actual uses, however, differ substantially (Elmusa, 1997).

In 1994, Israel exceeded its allocation by 290 MCM, while the West Bank received none of its 215 MCM allocation. Further, the 1949–67 transfer of one million Palestinians from Israel—over 60% of its existing population—to the neighbouring riparian countries was not reflected in the formulation of the plan. The associated huge reduction in the internal water demand for Israel was an uncompensated increase upon Jordan, the West Bank and their neighbours.

Other important features of the plan were not followed. Israel commenced work to divert the upper Jordan River and part of the Yarmouk to lands outside the basin. Later, Israel frustrated the irrigation developments and reservoirs identified in the plan designated for refugees and other riparians. It took military action to halt Syria from constructing diversions from its tributaries for use by Syria and Jordan and later captured full control of the Baniyas River in Syria.

Israel's work to divert unilaterally the upper Jordan as an 'out-of-basin' transfer from the Jordan basin ignored 'in-basin' uses. LIW article 8 states: "Watercourse States shall cooperate on the basis of sovereign equality, territorial integrity, mutual benefit and good faith". LIW articles 5–7 apply to the uses. Israel commenced to divert most of the Jordan River's waters to Israeli lands and, by 1970, the West Bank had access to less than 1% of the virgin annual river flow. The timing as well as the validity of the uses are important. LIW article VIII, paragraph 3, notes that "A use will not be deemed an existing use if at the time of becoming operational it is incompatible with an already existing reasonable use".

The application of the LIW would adjust the Johnston Plan water allocation

and other management aspects of the Jordan watercourse. Articles 5, 'Equitable and reasonable utilization and participation', 6 and 7, 'Obligation not to cause significant harm', would apply. Syria's diversion would be justified under LIW article 7 as a case where the full harm cannot be corrected. An equitable remedy would be a reduction in Israeli diversions from the Jordan River and Israel drawing any deficits from the Negev aquifer, desalting brackish and sea water and reducing deliveries to irrigated lands developed after 1948. The polluting salt springs would be remedied, the occupied territories would receive its share of the Jordan and there would be a minimum ecological flow to the Dead Sea.

Venues for Resolution of the Israel/Palestine Water Resources Dispute

The provisions of the resolution to the water dispute of Historic Palestine and the greater Jordan watercourse are critical to all countries. Dominant concerns are whether international conventions of war and people's economic, cultural and social rights will be enforced, whether the UN Charter and its resolutions will be fully or only selectively applied and whether the LIW will become an effective, reliable instrument. Several international water disputes are pitting, or will also pit, the powerful against the weak.

The international community has the responsibility to enforce the provisions of its many legal instruments, proclamations and commonly accepted principles of international behaviour. It will be difficult to fully remedy all violations in this situation. Nevertheless, it must address issues with a sense of equity and confidence, understanding its responsibilities.

How may this be executed in a fair and equitable manner both in fact and in the eyes of people throughout the world? The ICJ is the only independent venue. All UN members are signatories. It has the authority and capacity to address all issues raised in this paper, indeed all matters to which the primary international instruments apply. LIW article 33, paragraphs 2 and 10, calls for arbitration or submittal of a dispute to the ICJ. It is well to refer to portions of three articles of the UN Charter.

Article 92. The International Court of Justice shall be the principal judicial organ of the United Nations.

Article 93. 1. All Members of the United Nations are *facto* parties to the Statute of the International Court of Justice. 2. A state which is not of the United Nations may become a party to the Statute of the International Court of Justice on conditions to be determined in each case by the General Assembly upon the recommendation of the Security Council.

Article 94. 1. Each Member of the United Nations undertakes to comply with the decision of the International Court of Justice in any case to which it is a party. 2. If any party to a case fails to perform the obligations incumbent upon it under a judgment rendered by the Court, the other party may have recourse to the Security Council, which may, if it deems necessary, make recommendations or decide upon measures to be taken to give to the judgment.

Can the parties negotiate directly? The sentiments among the parties and decades of violence have proved insurmountable. During this period, the UN

General Assembly, the Security Council and the community, in practice, have granted Israel veto powers over the creation of a state of Palestine. Israel has stated its position that without a state, the Palestinians have no rights under international law (Palestine Water Authority, 1999). The Israeli negotiating positions to allow a state of Palestine cited earlier preclude a viable state of Palestine. Frisch (2000, p. 99), after disputing the wisdom of addressing Palestinian claims, stated, at a conference sponsored by the Israeli Begin-Sadat Center Institute for Strategic Studies, that "The present article assumes that Israel must continue to regard water as a resource that not only provides sustenance of life itself, but also enhances the State's political and strategic power"—"water seems to provide one more reason not to make peace with Syria" (Frisch, 2000, p. 116).

Can a world power equitably mediate negotiations between Israel and the Palestinians? The USA has insisted on the lead role for decades while conditions have worsened. Its position is fully documented. It has not effectively sought to enforce the many UN resolutions still in violation. The 15 June 1999 Meeting on Enforcement of the Fourth Geneva Convention on War cited actions of the USA (financing construction of settlements and access roads and providing financial aid through tax-exempt mechanisms) that were counter to enforcement actions of the GCW (International Red Cross, 1999). Questions arise as to whether the 'Road Map to Peace' can produce a truly economically viable, vibrant Palestine with the full sovereignty accorded nations.

Can involvement of the UN General Assembly or Security Council assure an equitable settlement? Fifty-five years of inaction by the UN bodies, in spite of regular reports on the situation in the occupied territories, are illustrated by the report of the International Red Cross at the Conference of High Contracting Parties to the Fourth Geneva Convention, Geneva, 5 December 2001:

2. In accordance with... resolutions adopted by the UN General Assembly and Security Council and by the International Conference of the Red Cross and Red Crescent, ... the ICRC [International Conference of the Red Cross] has always affirmed the *de jure* applicability of the Fourth Geneva Convention to the territories occupied since 1967 by the State of Israel... This Convention, ratified by Israel in 1951, remains fully applicable ... in the current context of violence ... Israel is also bound by other customary rules relating to occupation, expressed in the Regulations annexed to the Hague Convention respecting the Laws and Customs of War on Land of 18 October 1907.

3. ... the Fourth Geneva Convention protects the civilian population of occupied territories against abuses ... by ensuring that it is not discriminated against ... and that despite occupation and war, it is allowed to live as normal a life as possible, in accordance with its own laws, culture and traditions ... the Occupying Power must not interfere with its original economic ... structures, ... legal system or demography ... This also implies allowing the normal development of the territory.

5. ... the ICRC [International Conference of the Red Cross] has repeatedly noted breaches of various provisions of international humanitarian law, such as the transfer by Israel of parts of its population into the occupied territories, the destruction of houses ... Certain practices

which contravene the Fourth Geneva Convention have been incorporated into laws and administrative guidelines ... the ICRC has regularly drawn the attention of the Israeli authorities to the suffering and the heavy burden borne by the Palestinian population... In particular, the ICRC has expressed growing concern about the consequences in humanitarian terms of the establishment of Israeli settlements in the occupied territories, in violation of the Fourth Geneva Convention. The settlement policy has often meant the destruction of Palestinian homes, the confiscation of land and water resources. (Conference of High Contracting Parties to the Fourth Geneva Convention, 2001)

Conclusions

Information confirms that all parties to UN Resolution 181 knew full well that the water resources of Palestine and the Jordan River basin were limited, heavily utilized and fully committed and that the imposition of outside demands on the resource would cause severe shortages. Evidence documents the long planned and efficiently executed expropriation by Israel of the water resources rightfully belonging to the Palestinians resident within Israel and in the lands allowed the Palestinians under UN Resolution 181. Military force has been applied to expropriate the water resources of neighbouring countries while imposing an additional burden on their resources by the forced immigration of Palestinian refugees. During these 55 years international agencies diligently reported the actions, cited the violations and described the privation of the occupied to the international community. Yet, the community allowed continuing violations of all international instruments without restraint or punishment.

The record confirms that politics within the community and within member countries have over-ridden the rules of behaviour set forth in the early and middle parts of the 20th century. Neither the parties to the conflict nor the powers that have participated are capable of helping resolve the issues in a timely and equitable manner. Fifty-five years of effort testify to the futility.

There is little alternative for securing a resolution but for the UN to assign the matter to the ICJ. Only in this way can facts and fair judgement be sought and politics avoided. The approach selected and the provisions of the final agreement will demonstrate the level of political will and wisdom of the international community to apply its adopted international instruments. Without a dramatic reversal of its past silence, the international community will leave an unconscionable, destabilizing legacy with ramifications far beyond water conflicts. Wars by any name would be inevitable.

References

- Adar, E. (2000) *Interview of Professor, Ben Gurion University by Jewish Press-Heritage* (San Diego, CA, Jewish Press-Heritage).
- Applied Research Institute (2000) *An Atlas of Palestine: The West Bank and Gaza* (Jerusalem, Applied Research Institute).
- Benvenisti, M. (1986) *1986 Report: Demographic, Economic, Legal, Social and Political Developments in the West Bank* (Jerusalem, West Bank Data Base Project).
- Conference of High Contracting Parties to the Fourth Geneva Convention (2001) *Statement of the International Red Cross, Geneva, 4th Geneva Convention, 5 December 2001*.
- Elmusa, S. (1997) *Water Conflict: Economics, Politics, Law and the Palestinian-Israeli Water Resources* (Washington, DC, Institute for Palestine Studies).

- Frisch, H. (2000) Water and Israel's national security, in: B. Rubin (Ed.) *Efficient Use of Limited Water Resources: Making Israel a Model State* (Ramat Gan, Begin-Sadat Center for Strategic Studies, Bar-Ilan University).
- Government of Israel (2003) *Wastewater Treatment and Reuse* (Jerusalem, State of Israel) (available at www.mini.gov.il).
- Hof, F.C. (2002) The line of June 4, 1967, *Middle East Insight*, September–October.
- HR Wallingford (1993) *Sardar Sarovar Projects, Command Area Environmental Impact Assessment* (Wallingford, HR Wallingford).
- International Red Cross (1999) *Plenary II: Enforcement of the Fourth Geneva Convention*, 15 June 1999, Cairo.
- Isaac, J. & Hosh, L. (1992) Roots of the water conflict in the Middle East, *The Middle East Water Crisis: Creative Perspectives and Solutions, Proceedings* (Ontario, University of Waterloo).
- Khalidi, W. (1987) *Haven to Conquest: Readings in Zionism and the Palestine Problem* (Washington, DC, The Institute for Palestine Studies).
- Khalidi, W. (1991) *Before the Diaspora. A Photographic History of the Palestinians 1876–1948* (Washington, DC, Institute for Palestine Studies).
- Khalidi, W. (1992) *All that Remains. The Palestine Villages Occupied and Depopulated by Israel in 1948* (Washington, DC, Institute for Palestine Studies).
- Libiszewski, S. (1995) *Water Disputes and Arab–Israeli Struggle: A Conglomeration of Differing Conflict Settings*, ENCOP Occasional Paper 13, Center for Security Policy and Conflict Research, Swiss Peace Foundation, Zurich.
- Likud Party (1996) *Likud Party Platform* (Chevy Chase, MD, American–Israeli Cooperative Enterprise Jewish Virtual Library).
- Lilienthal, A.M. (1978) *The Zionist Connection* (New York, Dodd, Mead).
- Masalha, N. (1992) *Expulsion of the Palestinians. The Concept of 'Transfer' in Zionist Political Thought, 1882–1948* (Washington, DC, Institute for Palestine Studies).
- McCaffrey, S.C. (2001) *The Law of International Watercourses: Non-navigational Uses* (Oxford, Oxford University Press).
- Morris, B. (1998) *The Birth of the Palestinian Refugee Problem, 1947–1949* (Cambridge, UK, Cambridge University Press).
- Morris, B. (2001) *Righteous Victims: A History of the Zionist–Arab Conflict 1881–2001* (New York, Vintage Books).
- Muslih, M. (1999) *The Golan: The Road to Occupation* (Washington, DC, Institute for Palestine Studies).
- Palestine Water Authority (1999) *A Technical Framework Regarding the Water Issues: Final Status of Negotiations* (Ramallah, Palestine Water Authority).
- Palestinian Academic Society for the Study of International Affairs (2002) *Palestine Facts & Figures, Government and Administration* (Jerusalem, Palestinian Academic Society for the Study of International Affairs) (www.passia.org/Palestine_facts).
- Roy, S. (1995) *Gaza Strip: The Political Economy of De-development* (Washington, DC, Palestine Institute).
- Saliba, S.N. (1968) *The Jordan River Dispute* (The Hague, Martinus Nijhoff).
- Schoenman, R. (1988) *The Hidden History of Zionism* (Santa Barbara, CA, Vertias Press).
- Schwarz, J. (2000) Water resources development and management in Israel, in: B. Rubin (Ed.) *Efficient Use of Limited Water Resources: Making Israel a Model State* (Ramat Gan, Begin-Sadat Center for Strategic Studies, Bar-Ilan University).
- Soffer, A. (2000) Mapping special interest groups in Israel's water policy, in: B. Rubin (Ed.) *Efficient Use of Limited Water Resources: Making Israel a Model State* (Ramat Gan, Begin-Sadat Center for Strategic Studies, Bar-Ilan University).
- Tanzi, A. & Arcari, M. (2001) *The United Nations Convention on the Law of International Watercourses* (The Hague, Kluwer Law International).
- UN (1992) *Water Resources of the Occupied Palestinian Territory* (New York, UN).
- UN (1994) *The United Nations & the Question of Palestine* (New York, UN).
- US Department of State (1991) *Country Reports on Human Rights for 1990* (Washington, DC, US Department of State).
- Wolf, A. (1999) Water disputes: cooperation not conflict, *Science Record*, Spring (Corvallis, OR, Oregon State University).
- World Commission on Dams (2000) *Dams and Development: A New Framework for Decision-making* (London, Earthscan).
- Zaslavsky, D. (2000) Definition of Israel's water problems or water as a metaphor, in: B. Rubin (Ed.) *Efficient Use of Limited Water Resources: Making Israel a Model State* (Ramat Gan, Begin-Sadat Center for Strategic Studies, Bar-Ilan University).

