Interview: Dr. Shaddad Attili

## PLO Advisor: Without Water, No Viable State, No Peace



A status report on the acute water shortage situation in occupied Palestine, and especially in Gaza, was presented June 14, 2007 at the Palestine Center in Washington, D.C., by Dr. Shaddad Attili, Policy Advisor on Water and Environment, for the Negotiations Support Unit, of the Palestine Liberation Organization, Negotiations Affairs Department (PLO-NAD). Dr. Attili was part of a panel addressing the topic, "The Palestinian Water Crisis: Bilateral and Regional Perspectives." Trained as a geologist, Dr. Attili was recently appointed as the head of the Palestinian delegation on the Steering Committee of the Red-Dead Canal Feasibility Study. He was involved in negotiating the 2005 agreement for the study, which will commence this September.

Dr. Attili documented the parameters of today's water shortages in the region, and gave the decades-long history of the inequitable allocations of scarce water in the Jordan Basin. But he stressed that, "by nature," water is a "peaceful means" for dealing with human relations. Tackling the water supply crisis cooperatively can be done, and is essential for economic- and statehood-viability, and peace. However, neither the Road Map process, nor the Quartet interventions are addressing water in a coherent fashion.

Lyndon LaRouche has made expanding the water resource base of Southwest Asia, beginning with his Oasis Plan, a top priority among development projects in strategic parts of the world. In 1975, after a visit to Baghdad, LaRouche issued, from Berlin, his proposal for an International Development Bank, to fund these strategically vital projects. In his Oasis Plan concept, LaRouche proposes the construction of infrastructure for water desalination, including nuclear plants, water conveyance routes, and other systems to, in effect, create new "man-made" rivers and oases for water supplies, for national economic growth, and population increase.

In Gaza at present, the extreme lack of potable water is now part of a worsening humanitarian emergency under renewed strife and Israeli military attacks. But even before the present crisis, the impact of the shortage of decent water was manifest in widespread chronic illness. This was documented in an August 2005 fact sheet issued by the PLO-NAD entitled, "Disengagement vs. the Environment: Stripping the Gaza Strip."

Forced reliance on saline, unsanitary, and insufficient wa-

ter accounts for 60-70% of all diseases among the 1.5 million Gaza residents. Fifty percent of the children have parasitic infections. Children and adults suffer diarrhea. Consumption of saline water leads to salt levels in humans that cause kidney dysfunction, heart failure, neurological symptoms, lethargy, and high blood pressure. Excessive levels of fluoride are toxic, causing gastritis, ulcers, kidney failure, bone fluorisis (bone fractures and crippling), and teeth fluorisis (black lines around gums and tooth decay). High nitrate levels cause blue baby syndrome, also known as methaemoglobinaemia, and gastric cancer.

Certain of the key points of Dr. Attili's June 14 presentation were developed in a follow-up interview with *EIR* reporters, Marcia Merry Baker, Lawrence Freeman, and Michele Steinberg, excerpted below. The graphics shown are by the PLO Negotiations Affairs Department, used in a recent presentation by Dr. Attili in London.

**Freeman:** Dr. Attili, at the Palestinian Center, you made the point very forcefully, that there could not be a two-state solution if there's not a viable Palestinian state. And you've raised the question, that we essentially have to have a water policy, so that there can be a viable state. Would you elaborate on that?

Attili: Yes. I'm coming from a conflicted region. We're now commemorating 40 years of occupation, that started in 1967. And we're looking to have our Palestinian state. The Palestinians have already made their concession, after their mutual recognition between the PLO and Israel. And we're supposed to have an agreement between Israelis and Palestinians, especially on those major issues—the refugees, Jerusalem, borders, the settlements, and water, right after the five years of the interim period.

In light of the Road Map, and Mr. Bush's vision of a twostate solution, with an independent Palestinian state, we are still looking to achieve that. We don't believe that a future Palestinian state will be viable without reallocation of the water resources. This is not only necessary to create a viable state, it is in accord with international law.

This is why we're saying that, resolving the water conflict between Israel and the Palestinians is a must, in order to make water available to the Palestinian state. Without water, we

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cannot actually build a state. We cannot have sound, economically advanced agriculture. We need water for agriculture, we need water to absorb the returnees coming back to the future Palestinian state. We need water to address the humanitarian crisis in Gaza Strip. Moreover, we need our legitimate water rights. This is why we believe that without water there can never be a state that stands and is viable.

**Steinberg:** How many Palestinians are living in the Occupied Territories at this moment?

Attili: All territories are still occupied. Even though Israel disengaged from Gaza, Gaza stayed under occupation. This is the legal definition. This is how the Palestinians, the PLO, identified Gaza after the disengagement. Gaza is still occupied, because Israel controls the whole border, and even the air sphere, and the airports, and so on. This is the legal definition. The PLO identified Gaza after the disengagement. And we are still suffering from the occupation policies—the settlements, the wall, the closure, and all Israeli activities in the territories, including East Jerusalem.

You asked me about the population: 1.5 million Palestinians are living in Gaza; and 2.3 million Palestinians are living in the West Bank, including East Jerusalem.

**Baker:** In Gaza right now, would you underscore the point that you documented about how little the volume is, in cubic meters, of water that is available?

**Attili:** Thank you for this question; this is really important. In Gaza, we have 1.5 million Palestinians living in a stretch of 365 square kilometers, which means, around 5,000 per square kilometer. This makes Gaza one of the most populated areas of the Earth.

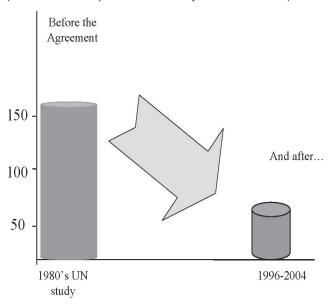
And those are relying on the aquifer under their feet, that provides them with only 50 million cubic meters (MCM) of water. But what is happening actually, is that Gazans are extracting 160 million cubic meters, because they don't have alternative resources. The only way—or the only source for Gaza, is just the water, the aquifer underneath their feet. So basically, the aquifer can give only 50 MCM, with an extraction exceeding 160 MCM, meaning that there is 110 MCM coming from the seawater intrusion, which makes the water saline and brackish. Moreover, because we don't have functioning sewage water treatment plants, the sewage and untreated water comes back to the aquifer on the order of more than 50 MCM. This is widely documented.

So basically, what people are drinking in Gaza is the water that is: 50 MCM recharged naturally by rain; 50 MCM mixed with sewage; and the rest coming from the sea, which means, according to the Palestinian Water Authority, that all Gaza's water—80% of it—is unsuitable for human needs, for human use. And in many cases, even unsuitable for agriculture.

This is why 60% to 70% of diseases in Gaza are waterrelated. And if we want to save Gaza, we want to make available today 100 MCM of extra water we have to supply to FIGURE 1

## Oslo Interim Agreement for Water Allocation To Palestinians Reduced Their Water Rights

(Palestinian Per-Capita Water Availablity Cubic Meters/Year)



Source: Palestine Liberation Organization, Negotiations Affairs Department, Negotiations Support Unit.

them. The question now is, from where? We are supposed to have the Americans building the region's desalination plant. Unfortunately, all American water projects in Gaza have been postponed since 2003. And we don't have the ability—because of the problem of the water rights between the Israelis and the Palestinians—to not take *any drop* of water from the Jordan River.

So, if we want now to create a viable Palestinian state, then Palestinians have to get their water rights from the Jordan River, from the aquifer of the West Bank, and the coastal shared acquifer. At that time, we can send part of that water to save Gaza and to save the aquifer there.

**Baker:** The resource base for water run-off and the aquifers is very limited in the Jordan Basin. Today's situation is acute because of the unjust use of the water, but decades ago—perhaps by the 1950s—there was already too little water overall, even if it had been fairly shared. Is that the case?

Attili: Yes. Actually, the whole region faces the problem of water scarcity. But unfortunately, the existing water, since the early 1950s, has been utilized in an inequitable and unreasonable fashion. Israel in 1964 completed the National Water Carrier and diverted [the Jordan River], without agreeing with the other riparian countries as international law related to joint water courses demands. Following that, the occupation of the West Bank enabled Israel to control all water resources, and

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TABLE 1
Annual Water Consumption in Occupied Palestinian
Territories Is Far Below Israel, Mid-1980s

(Estimates of the Total and Per-Capita Annual Water Consumption in the Occupied Palestinian Territory and Israel, mid-1908s)

	West Bank		Gaza Strip		Israel
	Palestinians	Settlers	Palestinians	Settlers	
Total Annual Water Consumption (million cu m)	125	45	103	6	1,770
Irrigation	95		80		1,320
Households	27		20		325
Industry	3		2		125
Per-Capita Water Consumption (cu m)	139	1,143	172	2,326	411
Irrigation	106		133		307
Households	30	85	35	85	75
Industry	3		3		29

Sources: Palestine Liberation Organization, Negotiations Affairs Department, Negotiations Support Unit; United Nations document A/46/263, annex, table 1, Benvenisti and Khayat, p. 26; Roy, 1987, p. 69; ILO Director General's Report, 1990, vol. 2, pp. 38-39.

exercise the occupation power over the water resources, preventing the Palestinians from developing or having access to water. So Palestinians have been denied access to the Jordan River since 1967, up to today, 2007. Even after we signed the Oslo Agreement, we were not allowed to reach the river. We're not allowed to take even a drop of water from the Jordan River, and according to the Oslo agreement an additional quantity of water (80 MCM) is supposed to be made available to the Palestinians during the interim period of five years. Today, 12 years after the signed agreement, less than 30 MCM has been made available, due to Israel's veto of water well development in the Western Aquifer of the West Bank.

And you ask also about the whole Jordan River Basin. The mismanagement of the Jordan River, the diverting of the water, led to a catastrophic situation, like the shrinkage of the Dead Sea. Because the parties weren't able to sit around the table and discuss reasonable management—joint management—of the Jordan River Basin, in the region. We're having a lot of problems: Syrian and Jordanian problems over the Yarmuk River allocation; Syrian and Israeli, over the Golan Heights and the water there; Lebanese and Israeli, over the Wazani River; Palestinian and Israeli, over the water resources in general. The hostility in the region, in fact, shows in the environment and the water, where we're having this deeply inequitable allocation among the different parties in the Basin.

**Freeman:** Regarding desalination—if populations grow naturally, you're going to need more water each generation, even if it's equitable.

Attili: Yes. To address actually the water issue in the region, first, the natural water resources should be allocated equitably. The second thing is, to face the demand on the water: The people, the parties in the Basin, have to come into agreement about the use of the water, the re-use of the water, building the desalination plants, in order to make water available. We do believe that in the medium term and the long term, water could be used as the means to promote peace in the region, and this is why introducing the idea of regional cooperation and settlement of water conflict in the region is important. For example in the long term, having water from Turkey, providing it to Syrians. Syrians could give some water to Jordanjust increasing the cooperation among the parties of the region. This is needed in an orderly fashion: the equitable allocation of natural resources and cooperation in developing new resources. The region and the third parties involved should start

dealing with water to promote peace, because water is, by nature, a peaceful means. And it should stay at that level, and not be used as an element for future confrontation, or as an element to promote war. If you come to the region, you hear people say that the Third War would be water-related. This is why we are calling to intervene and start addressing water, both bilaterally and multilaterally in an interlinked manner, to address conflict and scarcity.

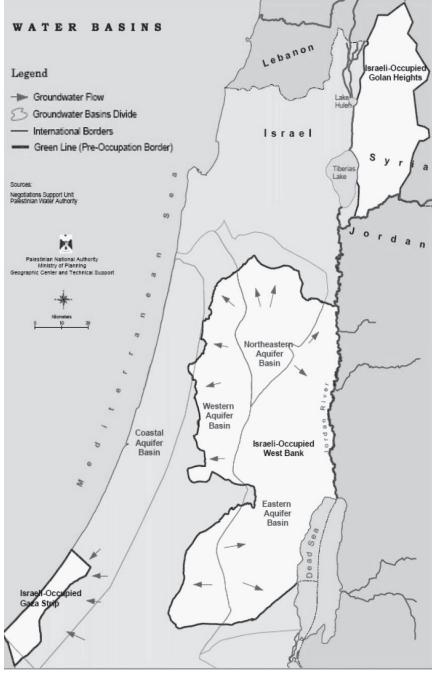
**Steinberg:** From what you discussed in your slide show, I, as a lay person, was most impressed by the very clear economic and geographical sense, that you take the water where it is closest. Could you describe that for our readers: that the aquifers are right there where the Palestinians are; the desalination is by the sea, where the Israelis are?

**Attili:** This is an excellent question. Thank you for bringing this up. Actually, this is what we are asking for: that the Palestinians should get their rightful share from the shared water resources—either from the Jordan River, or the shared aquifer resources of the West Bank, and the coastal aquifer.

But unfortunately, what is happening is that Israel is building the desalination plant, and they are saying that there is no extra drop of water that they can sell to the Palestinians. Instead, they say, "We are willing to sell to the Palestinians water that we are developing in Ashkelon," or they are thinking of constructing a plant in Hedera/Caesarea. The Israeli proposal is that they are going to pump water from the coast—zero level—up the hill to 900 meters to the area in Jenin and Nablus. So we told them: Why don't you leave the water underneath our feet to us, and you take the water that you are

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FIGURE 2
Water Basins in the Greater Jordan Basin Region



Source: Palestinian Liberation Organization, Negotiations Affairs Department, Negotiations Support Unit.

developing along the coast for the coastal cities? This is really pragmatic and logical. Moreover, it is economically feasible.

But vice versa—taking our water from the West Bank and the Jordan River, sending it to the coastal cities, and in the meanwhile, you're proposing pumping this water you develop in Hedera/Caesarea, up the hill to the Palestinians: This isn't sound and is unacceptable.

Baker: You were involved in successfully concluding the 2005 agreement for a feasibility study of the proposed Red-Dead Canal. What is the status of that?

Attili: First, I attended recently the World Bank meeting of the short-listing of the company backed for doing the feasibility study. We're supposed to have a feasibility study for two years, on the Canal, or the conduit, that goes from the Red Sea to the Dead Sea. It's to study the feasibility, the social assessment, and the environmental assessment of the project.

This has come after two and a half years of negotiations between the Jordanians, the Israelis, and the Palestinians. It was difficult negotiations that we went through. The Palestinians were engaged in this, because first, they are riparians of the Dead Sea, which is part of the Jordan River Basin. According to international law, no one can do anything without having the agreement of the others. This is what we have been saying about the National Water Carrier and the Jordan River Basin: Israel can't do that project in the Basin without other parties agreeing. And this [the Red-Dead Seas conduit] is the same.

At first, the Palestinians weren't included in the project. But Israel and Jordan realized that they cannot go ahead with such a project, which needs huge funding—we're talking about \$5 billion. The World Bank mediated between the parties. And the Palestinians have been approached in order to agree on the terms of reference, after managing that the Palestinians will be treated equally—the same as the Jordanians and the Israelis for the terms of reference. We kept negotiating the term of reference of the feasibility study, until we came up with the language that says that we are equal partners in this

project—equality that is given to us by international law.

Then we negotiated every sentence involved. We established a steering committee, where decisions are to be taken on a consensus basis, not on a majority or a voting system.

The project has been criticized widely. First, the Arabs criticized the project. The Palestinians believed that this is a

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"By nature," water is a "peaceful means" for dealing with human relations, Dr. Shaddad Attili points out. In this photo, Palestinian youngsters are shown filling bottles with scarce drinking water.

Zionist project, because Theodore Herzl adopted the idea of the canal linking the Mediterranean to the Dead Sea.

Actually, the idea comes from the British. When they tried to compete with the French, after the French managed to build the Suez Canal, the British tried to build a canal from the Med to the Dead through the Jordan Valley. After the French satisfied the British, giving them certain control over the Suez Canal, the British dropped the idea.

But the idea was picked up by Herzl because he was planning on creating the Zionist state, and looking at the water resources for that state, he realized that water should be made available. He adopted the idea in the late 1800s.

Then Israel started officially looking at the idea in the late 1970s. At that time, there was no peace agreement between the Arab countries and Israel. So Jordan led the effort against Israel for building such a canal, and managed to get the UN statement asking the international community not to help Israel to make such a canal. Jordan said, "We will build a canal between the Red Sea and the Dead Sea." Israel was saying, "We're going to build a canal from the Mediterranean to the Dead Sea."

The UN said that the parties have to make their minds up about one canal, because building two canals will be too much. So after Jordan signed an agreement with Israel, they agreed on the canal coming from the Red Sea, the Gulf of Aqaba, to the Dead Sea.

They went with the idea to the Johannesburg Summit in 2002, and it was refused by the Palestinians and the Egyptians, because the Palestinians weren't on board. And the Egyptians feared such a canal's impact on the Suez canal before they understood that the canal is largely different from

the Suez. It is small, with a combination of open channels and pipes.

In 2003, the Palestinians had been approached and then there were negotiations. In 2005, the parties reached an agreement about setting up a feasibility study. So if the project proves feasible, then the parties at the World Bank will start to look for around \$5 billion to build such a canal. If it proves feasible.

From the Israeli side, the NGOs criticized the project because it doesn't address alternative feasibility studies. Alternatives are what the Palestinians asked for. When we signed, Israel and Jordan put reservations in the text calling for alternatives. The World Bank, according to operational procedure and World Bank policy, has to study alternatives. So the project has been promoted to save the Dead Sea. And if the canal proves unfeasible, then what's the alternative? For Israeli NGO Friends of the Earth, the alternative is that they have to stop diverting the water out of the Jordan Valley, and move it down through the Valley again.

For Jordan, they don't want to study alternatives, because they believe that alternatives have been studied previously. And Jordan wants the project to save the Dead Sea, and for energy and water production to face the demand for both.

But for the Palestinians, we said, the project should not prejudice the outcome of the permanent status talks, mainly on borders and water rights. Palestinians believe that the project is interesting. For the long term, it could be good, because it could give water and energy. But alternatives should be studied to address the management of the basin jointly.

So what is the project about? The project is just to take water (2 billion cubic meters) pump it for 100 meters, then by natural flow for 180 km, and then drop the water from 100 meters to minus 400 meters [below sea level], using the difference in elevation to produce energy, and then use part to desalinate water. In the meanwhile around 1 billion will be left to flow to the sea for restoration.

**Baker:** Do you have enough pressure in the drop, so that you have enough pounds per square inch that you do not have to use more energy to desalinate the water adequately?

**Attili:** Yes, and the feasibility study will address that. You have to have the energy. You have to use the energy to desalinate the water, to pump the water up.

Let's assume that the Dead Sea water came back to its shape after 15 or 20 years, then we will manage to reduce the flow, instead of taking 2 billion, we will take only 1 billion, just to keep the facilities producing energy and desalination, and [account for] evaporation, and this will make the project feasible.

But we still don't know what the feasibility study will say about the project. The study will start in September, and last

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for two years.

**Steinberg:** This project sounds to me like it fulfills a number of needs. It refurbishes the Dead Sea, it provides a certain amount of drinking water, and it provides electricity.

**Attili:** And, most importantly, the parties, even within the hostility period, were able in 2005—for three years, to sit around the same table, negotiating—and reached an agreement, which shows that the parties *can* reach an agreement.

**Steinberg:** The members of the Quartet, who mapped out the timeline for certain progress—which, of course, we all see has not been made—have the members of the Quartet received this very clear explanation on the water issues that you have presented?

Attili: Unfortunately, the water issue has not been dealt with seriously at the political level. The people are addressing the major issue of the conflict as being the refugees, the settlements. And unfortunately, they are not looking at water as an issue of the current conflict, but they address regional cooperation without addressing the conflict of inequitable allocation in the region. Unfortunately, it seems that the Palestinians have to compromise again instead of reaching a simple end of the conflict by resolving all issues based on international law, which, in my opinion, is the most pragmatic approach to any conflict in the world.

**Freeman:** The idea that you could use water as the basis for peace, I think is very intriguing, because, if you had Israelis and Palestinians working together for building the future sources of water, through desalination, then you are establishing common interest links between two peoples, around a common interest of everybody's right to water to live. This is a far better idea to work on than some of the nonsense we get from my government.

Attili: I agree totally with you. You saw the proposal that the Palestinians developed. The positive-outcome proposal or call it the win-win proposal. It addresses the water conflict in a way that does not harm anyone, and enhances the ability to cooperate and develop new resources. We, the Palestinians and Israelis, are sharing the same resources with a mutual concern to save the resouces for future generations. Our intention to keep these resources to serve all. We are all human beings, and we have to have the access and the right to water in the region. We would call upon the Israelis to come and talk about joint management of the shared water resources, the equitable and reasonable allocation, and that we work together toward addressing the future demand in the region, and we can show the example that we can reach a deal on water. We can educate other people who are actually negotiating or worrying about the other issues of the conflict. We can show them that we can strike a deal on the water issue. And this is why it is important that the international community should intervene, by setting up the positive-outcome scenario.