

## **Waterbag technology may help solve water crisis in Middle East**

With the Middle East one of the most arid regions in the world, where water supply is always an issue causing trouble to all, waterbag technology stands as a promising means to transport water from Turkey to the region given its time and cost-related advantages, but only if politicians on both sides agree and pave the way for it to be utilized to serve that purpose.

This technology allows for large volumes of water to be transported over oceans. Huge fabric cases filled with water and turned into a modular and fabric pipeline by being connected to one another are used for that purpose.

Among the people of the Middle East who suffer from insufficient amounts of water resources are the Palestinians, who lag behind others and consume only 78 liters per capita per day, a direct result of the fact that the Palestinian territories are two of the poorest areas in the world in terms of fresh water availability. What worsens their situation is the fact that 48 percent of total consumption does not meet the quality of drinking water required by the World Health Organization (WHO), not to mention the significantly increased number of people without access to water due to Israel's 22-day-long assault on the Gaza Strip at the end of last year.

Speaking to Today's Zaman on Thursday, Shaddad Al Attili, head of the Palestinian Water Authority (PWA), said he would like to meet with Turkish Environment and Forestry Minister Veysel Eroglu to discuss the prospects of transporting water from Turkey to Palestine.

However, Al Attili told Today's Zaman that the project he has in mind is the construction of a pipeline, as it is presently the most common approach to the transportation of water, despite the fact that it is more costly and takes more time than using waterbag technology.

### **Spragg & Associates project**

Terry Spragg, the founder of Spragg & Associates, a worldwide group of over 50 corporations, groups and individuals involved in developing and testing waterbag technology, is planning to go on a demonstration voyage from Turkey to Gaza and Israel in the last quarter of this year and is looking for a Turkish partner for the project. Spragg told Today's Zaman that their main intention is to establish a permanent delivery system connecting the two sides of the Mediterranean Sea, a move that will be significantly cheaper than transporting water through a conventional pipeline systems.

Mar 21 2009

## Palestinian Water Authority wants to import water from Turkey

Shaddad Al Attill, head of the Palestinian Water Authority (PWA), said Palestinians need to import water from a third country, such as Turkey, in order to allow both Palestinians and Israelis to achieve water security, a precious resource especially in the arid Middle East.

Speaking to Today's Zaman at the 5th World Water Forum in Istanbul, Al Attill said he requested a meeting with Turkish Minister of Environment and Forestry Veysel Eroglu and is waiting for a response to discuss the matter. He added that they, along with Turkish officials, will explore whether a pipeline project to transfer water from Turkey's Seyhan and Ceyhan Rivers can be realized. "We believe that the potential for creating new water sources is there, through desalination, wastewater reuse, bulk importation and increased efficiency in water use.

This can be realized through regional cooperation, not unilateral development," he said, adding that they will use the water forum venue to address the topic during a presentation and debate session on March 20 called "Trans-boundary cooperation over the Jordan River Basin: A regional positive-sum outcome."

Al Attill said Israel currently uses 90 percent of the available shared fresh water resources while Palestinians use only 10 percent. With 78 liters daily per capita water consumption, Palestinians are among the lowest level of countries in the world in terms of fresh water availability.

"To make matters worse, an estimated 48 percent of total consumption does not

meet the WHO [World Health Organization] recommended standard when it comes to the quality of drinking water. Our water is of extremely poor quality," he said, noting that the WHO's standards state that a minimum of 150 liters daily per capita consumption is essential for the basic survival needs of humans.

"In Israel, the per capita domestic water consumption is 295 liters a day," he said. This discrepancy is due to Israel's control over the trans-boundary water resources, so the inequitable distribution of water between Israelis and Palestinians forces Palestinians to routinely ration water during the summer and face shortages in supply, which might last for weeks.

In addition, approximately 256,000 Palestinians in the West Bank are not connected to a water supply network and they have to purchase water brought in from Israel. Then the issue of cost arises, as most Palestinians live on 2 euros a day. Palestinian officials at the 5th World Water Forum said one-third of a 1,000 euro monthly salary goes toward purchasing drinking water, which is a luxury in the Palestinian territories.

Al Attill calls himself a "virtual minister" because he says he does not have control over water due to the Israeli restrictions over water, mostly in the West Bank.

"I am a minister of virtual water so I am a virtual minister," he said and added that Palestinians have proposed more than 140 projects, such as wastewater treatment plans, that are awaiting approval from the Israeli authorities.

"As a result, there is water intrusion and there are wells everywhere. Sewage gets into aquifers and people have to use that untreated water. Seventy percent of diseases are water related in Palestine," he said.

Israel's assault on the Gaza Strip from Dec. 27 of last year until Jan. 18 made life even more difficult for the Palestinians as more than 1,300 Palestinians were killed, including more than 300 children. And the number of people without access to water has increased in Gaza, one of the most densely populated regions of the world -- a population of 1.5 million in 365 square kilometers. Palestinian officials said the Beit Kahliya wastewater treatment facility located in the northern part of the Gaza Strip was also hit.

## "Don't use water as a tool in conflict"

Al Attill said he will read Palestinian President Mahmoud Abbas' message for the ministers attending the 5th World Water Forum on March 22, UN World Water Day.

"The message is about the right to water, which is a basic human need. It should not be used as a tool in conflict. Water infrastructures should not be targeted during conflict," he said. "Everybody agrees that water has a peaceful nature. We use water to extinguish -- not to light -- fires."

Also on March 22, when the 5th World Water Forum ends, more than 156 ministers from various countries of the world participating in the forum are expected to address this issue in a declaration, which will say that governments should do more to ensure that people in conflict zones have safe access to clean water.

Al Attill also said the World Bank wrote a report about the restrictions on water development in the occupied Palestinian territories, based on their on-the-ground evaluation of the situation, and they are expected to release it on March 22 as well.

19 March 2009, Thursday

YONCA POYRAZ DOĞAN - ISTANBUL

## ICRC addresses right of access to water in conflict

As tens of thousands of people participate in the 5th World Water Forum in Istanbul, there are close to 400 million people living in war torn countries who are having serious water problems, said Robert Mardini, head of the Water and Habitat Unit at the International Committee of the Red Cross (ICRC) based in Geneva.

"This is the main reason why the ICRC is present in Istanbul. We put these problems forward here on behalf of the people who lack access to safe water and sanitation," he told Today's Zaman.

The ICRC is active in 43 countries to run water and sanitation programs, and 15 million people benefited in 2008 from its water, sanitation and construction projects. Among them are people who live in Gaza. During the 23-day assault on the Gaza Strip by Israel, an ICRC aid worker's eyewitness account had told the world via an international news agency about the horrors that the Gazans experienced.

"It is because the ICRC speaks on behalf of the victims of armed conflicts that we speak purely on a humanitarian basis. We seek dialogue with both of the parties to the conflict because they are both responsible for the situation. We also conduct confidential dialogue with both parties about how they need to respect the rules stated clearly in the Geneva Conventions," Mardini said.

Water and sanitation problems in Gaza were pervasive even before the latest attack, he added, because people have been subject to repeated assaults over the years.

In addition, the shrinking availability of natural resources to the Palestinians in the arid Middle East, rapid population growth and infrastructure projects that are put on hold because of the constant threat of conflict are all serious problems.

To address the problem, the ICRC is convening a session on March 19 called "Water management during and after disasters/conflicts" with the participation of the Japan International Cooperation Agency (JICA), the World Bank and the Palestinian Water Authority (PWA). The meeting is closed to the press.

"We are trying to put aside all of the political dynamics, which we know are extremely sensitive, and are trying to find solutions more sustainable in the long term," Mardini said.

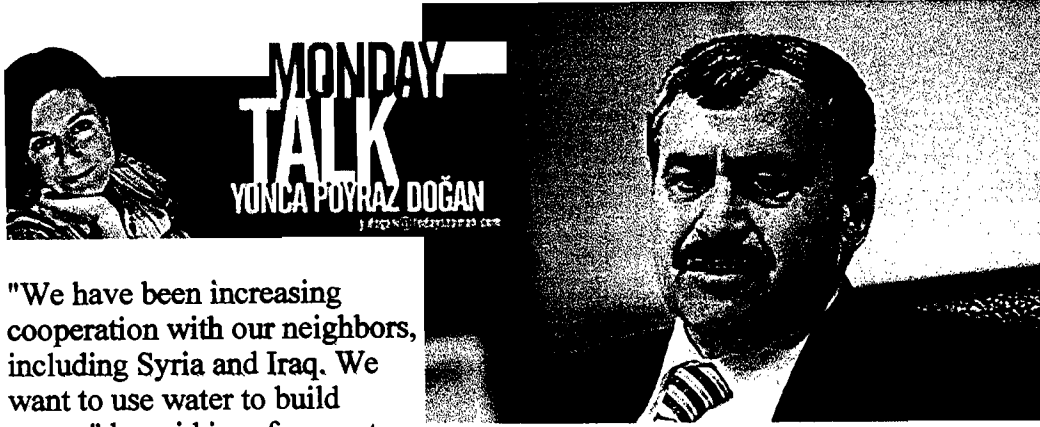
Financing for the projects is available under emergency recovery aid, but he said the challenge is how to get the badly needed materials into Gaza, not only for reconstruction and new projects but also for keeping every pumping station open and running.

"The ICRC calls for free passage of whatever equipment is necessary to make this happen," Mardini added.

Mardini also said that at the preparatory committee meeting which took place on March 2-3 in Paris prior to the 5th World Water Forum, delegates agreed to put the phrase "the need to respect international law in times of armed conflict" into the ministerial declaration, a non-binding consensual statement, which will be announced at the end of the 5th World Water Forum on Sunday. Yonca Poyraz Dogan Istanbul

## Turkey hopes to use water to build peace, minister Erođlu says

Veysel Erođlu, the minister of environment and forestry, has said Turkey wants to use water to build peace rather than allowing it to become a source of tension as dwindling water supplies begin to turn this natural resource into an increasingly precious commodity.



"We have been increasing cooperation with our neighbors, including Syria and Iraq. We want to use water to build peace," he said in reference to the Euphrates-Tigris basin, which is shared by Turkey, Syria and Iraq.

### **There was another much-talked-about project for making use of the water from the Manavgat River. What's happened to that?**

The preparations for the Manavgat project were completed in early 2000. As the director of the DSI in 2003, I wrote to the officials of the relevant countries, from Libya to Jordan, and to Palestinians and Israelis, that we had water available to be filled into tankers and ready to go. The conclusion regarding this was that the cost of transporting the water would be too high. We gave the water and the management of the project's operations to the Antalya Metropolitan Municipality. If anybody wants this water, they still can buy it.

### **The head of the Palestinian waterworks authority told Today's Zaman last week that they want to import water from Turkey. Have you had talks with Palestinian officials about this? What can Turkey do in this regard?**

We will have a meeting and see what we can do. We are aware of their increasing water need. It may be possible to transport water to the Palestinian territories by tanker.

### **Has Israel demanded any of the Manavgat water from Turkey?**

They haven't. If they want to buy it, we are ready to sell.

## **Minister of Environment and Forestry Veysel Erođlu: an academic in bureaucracy**

Holding a doctorate in civil engineering from İstanbul Technical University's department of environmental engineering, Erođlu served as a professor at the university until 1994, when he became the general director of the İstanbul Waterworks Authority (İSKİ). From 2003 to 2007, he was the general director of the State Waterworks Authority (DSİ). After he was elected to Parliament in 2007 as a deputy for the ruling Justice and Development Party (AK Party), he became the minister of environment and forestry.