



ORSAM WATER BULLETIN

Weekly Bulletin by ORSAM Water Research Programme

Events-News-Politics-Projects-Environment-ClimateChange-Neighbourhoods-Cooperation-Disputes-Scarcity and more



ORSAM WATER BULLETIN

14 July – 20 July 2014

- ❖ Desert' fears for Turkey's water supplies
- ❖ The Future of Euphrates-Tigris Basin and ISIS
- ❖ Iraq extremists must face sanctions – UN
- ❖ Water and its Infrastructure are not Weapons of War, Protect Civilians' Right to Water in Iraq
- ❖ Tehran Water Consumption Rises By 3 Percent Amid Water Shortage Crisis
- ❖ Israeli strikes wreck Gaza water supply
- ❖ Gaza faces imminent water crisis
- ❖ Acute water crisis looms in Gaza
- ❖ ICRC - Non-stop Bombings Destroying Water Infrastructure In Gaza
- ❖ UN aid agencies step up emergency aid to Gaza
- ❖ Acute water crisis looms in Gaza, aid agencies warn
- ❖ Legal opinion: Israel can cut off water, power to Gaza during conflict
- ❖ Health Catastrophe in Gaza after Israel bombs water infrastructure
- ❖ Gaza faces acute water crisis amid air strikes by Israel
- ❖ Gaza: Israel bombs water and sewage systems
- ❖ Israel strikes leave Gaza without water and electricity, official says
- ❖ 'This is Lebanon': why water taps are drying out
- ❖ German bank to loan US\$40 million for water projects in Jordan
- ❖ Water, Jordan
- ❖ “Water Crisis” Lebanon
- ❖ Prince Hassan launches new regional water initiative
- ❖ Ethiopia 'determined to share Nile water'
- ❖ Ethiopia wants Sudan to host 3-way dam talks with Egypt
- ❖ Ethiopia's Nile dam project signals its intention to become an African power
- ❖ Periscope: The Nile Water is the Crises' Sustainable Solution

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- ❖ **Water Wars and Dam construction in the Kabul-Indus basin**
 - ❖ **Reduce water and power tariffs in Delhi, AAP tells Centre**
 - ❖ **Proposals for construction of 15 dams accepted: Govt**
 - ❖ **Fuel and Water: The Coming Crises**
 - ❖ **Conservationists study freshwater ecosystem of Fujairah wadi**
 - ❖ **Suicide By Drought**
 - ❖ **Troubled waters: the Mekong River crisis**
 - ❖ **672 large dams in danger of devastating earthquakes**
 - ❖ **California's big scare over water 'scarcity'**

❖ Desert' fears for Turkey's water supplies

Occupancy rates of Istanbul's dams have dropped to critical levels due to lack of rainfall this year, prompting fears of drought and 'desertification' in Turkey's largest city.

Around 15 million people could be affected after the water level in many Istanbul dams fell to under 20 percent, according to Turkey's State Water Affairs body. Now experts are warning that the country has to conserve and re-use water to prevent problems in agriculture and energy generation.

Ali Uyumaz, a hydroelectric and river improvements expert at Istanbul Technical University, says the Marmara region and Istanbul have a limited number of water basins compared to regions in eastern and southern Turkey.

"The biggest issue is not the occupancy rate but to use water sources wisely" Uyumaz says.

"Turkey needs more water-efficient systems in households and factories. The country should also focus and introduce water-saving measures in each and every home."

At least 1,500 cubic kilometers of waste water are produced globally every year. Waste water can be reused productively for energy and irrigation, but is not generally recovered in Turkey.

Between September 2013 and February 2014, Turkey had low levels of rainfall which significantly harmed both agricultural and energy production.

The current decrease in the level of rainfall and snowfall across the country reduces water levels in hydroelectric power plants and is likely to create a decrease in electricity production in dams, Energy Minister Taner Yildiz said in February.

According to a March report from the Turkish Union of Agricultural Chambers, the production of wheat, which was harvested at record levels in 2013, is expected to fall 14 percent this year due to drought.

Stating that the using modern irrigation techniques is a key way to save water, Uyumaz says agricultural production will face more problems in the future and that there will be more water problems both in urban and arid areas in Turkey, stressing that the country needs better water management.

"If the current improper usage of water continues, this will be the leading cause of drought and desertification both in Istanbul and Turkey. That's why water resources should be managed very carefully.

"We should make smart use of our natural resources; their importance has not been fully understood yet," he adds.

Tugba Evrim Maden, hydropolitics researcher at the Center For Middle Eastern Studies in Ankara, said water has an important role for the generation, extraction and cooling off of every form of energy.

"Likewise, there is need for energy for the generation, transmission and purification of water. The link between water and energy makes the security of both resources highly crucial."

Stating that the world population is about seven billion, Maden said "2.5 billion people are unable to reach electricity, 768 million people lack access to drinking water and 2.8 billion people live in the areas where water scarcity is felt intensively."

Maden claims that Turkey needs to see the creation of an alternative source for cooling in thermal plants, an improvement in technology which saves water and energy, and new legislation.

The researcher also called for an assessment of "non-traditional resources" such as refining seawater and brackish water and enhancing in power plants' productivity.

Though the usage of water for every purpose is possible, the problems about accessing water resources still continue.

According to the UN statistics, around 1.8 billion people had improved sanitation between 1990 and 2010. Today, 2.5 billion people lack of improved sanitation and 2.4 billion people will be still unable to access improved sanitation in 2015, the report says.

A Global Drought Information System report also says in May 2014 that the short-term global drought conditions once again expanded or intensified in many locations, including the western Mediterranean region and central parts of Europe.

“Desert' fears for Turkey's water supplies”, 17/07/2014, online at: <http://www.worldbulletin.net/turkey/140850/turkish-press-review-on-jul-17>

BACK TO TOP

❖ **The Future of Euphrates-Tigris Basin and ISIS**

The Euphrates-Tigris basin is among the most important river basins in the Middle East. The average annual discharge of the Euphrates and Tigris rivers is 84 billion m³, which equals to the average annual flow of the Nile river. The Euphrates-Tigris basin is of great importance in terms of being the source of energy, food and drinking water for Turkey, Syria and Iraq, which are the main riparians to the basin. The riparians have been working on developing the basin waters since the 1950s. The population growth, urbanization, agricultural and industrial activities, as well as periodic dry spells in the basin, put pressure on water resources in terms of both quality and quantity. Being located in a region with rather poor water resources, waters of the basin have been of great priority in political relations between the riparians and have led to cooperation or conflicts among the aforementioned states.

Recently, the climate change has appeared as another factor that affects the hydrology of the basin. It is estimated that climate change will create pressure on the Euphrates-Tigris rivers in the upcoming years. The studies on climate change show that the surface temperature of the Middle East will increase by 2.5 to 5.5 degrees Celsius in years to come, causing a 20-percent-decrease in rainfall in the region.(1) Either individually or in cooperation with riparian countries, countries have been striving to come up with a solution in order to struggle against the climate change and adapt to new climate conditions. The most significant example to this effort is the protocols on water and environment within the Memorandum of Understanding (MoU) Turkey signed with both Syria and Iraq in 2009. The protocols also include observation of water resources, joint projects and protocols envisaging to struggle against the climate change.(2) It is an undeniable fact that hydrological and meteorological changes have an impact on basin waters. However, the biggest obstacle to institutionalization and cooperation aiming to benefit from water resources in the basin is political instabilities and shifting power balances. The protocol signed between Turkey and Syria on the Orontes (Asi) river in 2009 sets a great example to this situation. The Protocol between Turkey and Syria envisages construction of a joint dam entitled 'Friendship Dam' on the Orontes river. The construction of the dam began on February 6, 2011. However, the uprising which broke out in Syria in March 2011 set back the project. Thus, the project being a successful example of cooperation in trans-boundary water basin in the Middle East was unfortunately postponed due to the instability in the Middle East.

The ongoing spread of ISIS across Iraq after Syria in the recent period has caused ISIS to seize control of water resources in both Syria and Iraq. Thus, ISIS will be able to use water structures, which provide the region with water, as a means to prevent especially Baghdad and the Shiite population inhabiting the southern part of country from accessing water. While ISIS seizes control of Al-Raqqa Dam on the Euphrates river within Syrian borders, it also controls the Nuaymiyah Dam on the Euphrates river; Mosul river on the Tigris river and its neighborhood; and the Samarra Dam on western Baghdad within Iraqi borders.(3) The majority of the Euphrates-Tigris river waters, being as important a resource as oil, are seized by ISIS in Syria and Iraq, which gives a strategic advantage to ISIS. On the other hand, it also directly affects the water needs of Syria and southern Iraq. Lack of water will have a negative impact on agricultural production and energy generation in the aforesaid regions. In addition to this, water scarcity might lead to migration from the region, unrest and conflicts. As an alternative solution, Iraq and Syria have recently turned towards unconventional water resources in the event that the inhabitants in the region suffer from water scarcity.(4)

(1) “MIDDLE EAST: Talking about climate change”, 27/12/2012,
<http://www.irinnews.org/report/96905/middle-east-talking-about-climate-change>

(2) “Turkey, Syria, Iraq sign MoU for use of water resource”, 04/09/2009
<http://english.people.com.cn/90001/90777/90854/6748071.html>,
Also; Turkey –Syria Relations
<http://www.mfa.gov.tr/relations-between-turkey%E2%80%93syria.en.mfa>

(3) N. Shamout, “Syria Faces an Imminent Food and Water Crisis”,
<http://www.chathamhouse.org/expert/comment/14959>, 24/06/2014

(4) A. Aso-el, “Irak ve Suriye deniz suyu içecek”,
<http://www.wsj.com.tr/article/SB10001424052702303473204580023111022443630.html>, 11/07/2014

“The Future of Euphrates-Tigris Basin and ISIS”, 15/07/2014, Tuğba Evrim Maden, ORSAM, online at:
<http://www.orsam.org.tr/en/showArticle.aspx?ID=2673>

BACK TO TOP

❖ Iraq extremists must face sanctions – UN

United Nations - UN Secretary-General Ban Ki-moon is urging all countries to enforce sanctions against the Islamic State of Iraq and the Levant (ISIL) extremist group that has captured a vast stretch of territory in Iraq, warning that "terrorism" must not be allowed to steer the country away from its path toward democracy.

In a report to the Security Council obtained on Tuesday by The Associated Press, the UN chief strongly condemned the upsurge of violence at the hands of the militant group and its supporters and called on the 193 UN member states, especially Iraq's neighbours, "to come together and support Iraq in its fight against terrorism".

The extremist group, as an offshoot of al-Qaeda, is subject to an arms embargo and targeted financial sanctions and travel bans.

Ban also urged Iraq's leaders to unite behind a political process acceptable to all parties and form a new government "in the spirit of national unity and inclusiveness".

The report was written before Iraqi lawmakers broke a two-week deadlock on Tuesday and elected a moderate Sunni as speaker of parliament.

It was the first step toward forming a new government that is widely seen as crucial to confronting the militants, but lawmakers now face the most contentious decision: choosing a prime minister.

Water as a weapon

The incumbent, Nouri al-Maliki, who has ruled the country since 2006, is under intense pressure to step aside but is insisting on staying for a third term.

Ban stressed that "the spirit of national unity and reconciliation, non-sectarianism and non-violence

recently expressed by Iraq's political and religious leaders must prevail at this critical time".

Ban said the next steps toward an immediate and long-term solution for Iraq should include a national security plan with explicit guidelines for co-operation between the government and the Kurdistan regional government, an action plan to address the threat posed by all armed groups, speedy formation of a sustainable and inclusive government and "an equitable social policy to address the concerns of all communities".

The UN chief said reports of mass summary executions by the Islamic State group are "extremely disturbing" and the use of water as a weapon is a new and "dangerous trend".

According to his report, militants from the group took control of a dam on the Euphrates River in early April, redirecting the water flow and causing extensive flooding while cutting water supplies to Iraq's central and southern governorates.

The group gained control of a second dam on the river in late April that led to extensive flooding in Baghdad Belt districts including Abu Ghraib, forcing local residents to flee and destroying agricultural land, livestock and irrigation networks, it said.

Ban demanded that the Iraqi government do "everything possible to protect civilians while confronting the terrorist threat".

"Iraq extremists must face sanctions- UN", 16/07/2014, online at: <http://www.news24.com/World/News/Iraq-extremists-must-face-sanctions-UN-20140716>

BACK TO TOP

❖ **Water and its Infrastructure are not Weapons of War, Protect Civilians' Right to Water in Iraq**

The Save the Tigris and Iraqi Marshes Campaign is concerned that parties involved in the current conflict in Iraq and Syria might resort to using water and its infrastructure as a weapon of war. Over the past weeks, several news stories have reported that parties in the conflict, be they related to the government or to insurgents, may be marking the water infrastructure as possible military targets in the struggle to gain control over Iraq's water supply. Insurgents now control some upper parts of the Euphrates and Tigris Rivers in Iraq. Whoever controls the water installations in the north, whether dams, desalination plants, sewage or other aspects of the infrastructure, can control the water supply to Baghdad and the southern parts of the country. Should a decrease – or a cut-off – in water for Southern Iraq occur, there would be huge crises in health and sanitation.

Water from the Euphrates and Tigris rivers is shared by Turkey, Syria and Iraq. Over the past years Turkey has taken control over water flowing into Syria and Iraq through the use of big dams — without any negotiations with the governments of Syria and Iraq. This has resulted in a water shortage, especially for the Iraqi people. The population of all of Iraq, including Kurdistan, is completely dependent upon two dams in northern Iraq. These dams are the two largest contributors to hydro-electric power in Iraq. The area around the Haditha dam (Euphrates) is currently the site of an insurgent offensive, while the Mosul Dam (Tigris), just 45 miles outside of Mosul city, is now on the frontline of the conflict. Both dams could be used to control access to drinking water and water used for farm irrigation. The electricity produced by the dams, upon which the whole country is dependent, is also vulnerable. If dam failure occurs, which is not unthinkable in such a fierce conflict, large areas might be flooded, including parts of Mosul and other cities.

Over the past few months, areas between Baghdad and Fallujah, such as the Abu Ghrib district, suffered from flooding after insurgents took control of Falujha dam, a small dam near Baghdad. This has also created water scarcity in many Iraqi cities south Baghdad. More recently, insurgents cut water provision from Mosul to many towns of the Niniveh plains. Enclaves where minorities live, such as Qaraqosh with its 40.000 inhabitants, have been left without any water source and without electricity to pump it from local wells.

Thus, the Iraqis now live with the compound fear of both a water shortage and of flooding.

This Campaign opposes the deliberate manipulation of water as a means to steer or to gain control over the crises. This kind of action directly violates international humanitarian law. Access to water is a fundamental human right which should not be treated as a weapon. This Campaign also believes that targeting cultural heritage sites on the rivers of Iraq should be avoided at all costs. During the 1980s parts of the Marshes were drained in the Iraq-Iran conflict and the negative impact of this drainage continues to be felt today. We therefore ask all parties involved in the crisis to protect all cultural and environmental heritage sites in Iraq.

The Save the Tigris and Iraqi Marshes Campaign calls upon **all parties involved in the conflict**:

1. to refrain from using water, and water-related infrastructure, as a weapon of war.
2. to guarantee access to safe water to all people of Iraq.

The Save the Tigris and Iraqi Marshes Campaign calls upon **Iraqi (central and Kurdish) and Syrian authorities**:

1. to provide protection for the water infrastructure in their territories by seeking out and cultivating an open dialogue with local communities and local actors in areas of conflict.

2. to respect their obligation to provide basic human rights, including water, to civilians in conflict areas without discrimination.
3. to protect all cultural and environmental heritage sites on Euphrates and Tigris Rivers.

The Save the Tigris and Iraqi Marshes Campaign calls upon the **Security Council and the international community:**

1. to be accountable to their responsibilities as established by the UN Charter to protect international peace by calling for an international forum to discuss threats related to water in Iraq and Syria, involving regional actors and the Turkish government.
2. to hold accountable any party which inflicts damages that contribute to humanitarian crises due to the use of water and its infrastructure as a military instrument.

The Save the Tigris and Iraqi Marshes Campaign also calls upon **local communities, national and international organizations and activists** to monitor the conditions of Iraq's rivers and water infrastructure in order to provide an early warning system should problems arise, and to document any damages or war crimes.

“Water and its Infrastructure are not Weapons of War, Protect Civilians’ Right to Water in Iraq”, 15/07/2014, online at: <http://www.iraqicivilsociety.org/archives/3383>

BACK TO TOP

❖ **Tehran Water Consumption Rises By 3 Percent Amid Water Shortage Crisis**

The water consumption of Iranian capital, Tehran, has increased by 3 percent in the past three months.

Tehran governor, Hossein Hashemi, said on July 16 that if the residents of the province cut their consumption by 20 percent, there would be no water rationing in summer, Iran's Mehr News Agency reported.

"If we pass this summer without any water rationing, we still need to do something fundamental about the water shortage in the country," he added.

Iranian Energy Minister Hamid Chitchian said on July 3 that the country doesn't plan to ration drinking water in summer and any cut in water flow would be related to maintenance, Iran's Mehr News Agency reported.

It is while previous reports suggested that the country's energy ministry has started rationing water.

Arak, Esfahan, Bandar Abbas, Tehran, Shiraz, Qazvin, Qom, Karaj, Kerman, Mash'had, Hamedan, and Yazd are the major cities which are expected to face severe water shortage in summer.

Iran has already started water rationing in Karaj city, Iran's TASNIM News Agency reported on June 25.

Energy ministry officials say that by cutting consumption by 20-30 percent, the country will face no difficulty in distributing enough water across the country.

Iran's rationing water in Karaj comes as the country's President Hasan Rouhani previously ordered the energy ministry to avoid water rationing.

Hamidreza Janbaz, an Advisor to Iranian energy minister, said that currently 517 cities are struggling

with water shortage across the country, Iran's Mehr News Agency reported on June 23.

Janbasz, however, said that the energy ministry will face no difficulty in providing enough water to the country.

On February 19, Donya-ye Eqtesad daily "ed Chitchian as saying that the situation of water resources in Iran has passed beyond the critical condition.

"At present, 96 billion cubic meters of the country's total 120 billion cubic meters of renewable water resources is being consumed annually," he said, adding that if 40-60 percent of renewable water resources is consumed in any country, that country is said to be in a critical condition.

Iran is located in an arid zone and the country has repeatedly faced with drought in the past 40 years.

The drought of 1992-2002 caused a major blow to agriculture. There were "as imposed for fresh water in several cities including Tehran.

Iran's drinking water consumption rate is expected to reach 10 billion cubic meters in the Iranian calendar year of 1420 (to start on March 21, 2041).

Iran will face difficulty in providing the mentioned amount of drinking water, unless it improves its infrastructure. The country's water consumption rate currently stands at 6 billion cubic meters.

"Tehran Water Consumption Rises By 3 Percent Amid Water Shortage Crisis", 16/07/2014, online at: <http://en.haberler.com/tehran-water-consumption-rises-by-3-percent-amid-492105/>

BACK TO TOP

❖ Israeli strikes wreck Gaza water supply

AS THE Israeli ground invasion begins and the number of civilians killed by Israeli air strikes increases, so do the prospects that the Gaza Strip will soon be rendered unlivable.

According to the International Committee of the Red Cross, the World Health Organization and the UN, air attacks on Gaza's water installations and sanitation infrastructure threaten to deprive hundreds of thousands of people of access to water and overwhelm Gaza with untreated sewage.

And so crisis is piled on crisis. In 2012, a UN report had warned that as much as 95 percent of the water in Gaza is not fit for drinking, and that its coastal aquifer will be unusable by 2016. Gazans had to rely on contaminated ground water or expensive water purchased from Israel and received only a fraction of the water that the World Health Organization deemed necessary to sustain life.

Last year, Boston-area residents formed the Boston Alliance for Water Justice to voice concerns about the wisdom of the Patrick administration's partnering with Israel's water industry, given Israel's discriminatory water policies towards Palestinians, which have been widely condemned in the reports of human rights organizations.

Today Massachusetts residents should be aware that we are enmeshed in the humanitarian catastrophe unfolding in Gaza. We must do what we can to avert it.

"Israeli strikes wreck Gaza water supply", 19/07/2014, online at:

<https://www.bostonglobe.com/opinion/letters/2014/07/18/israeli-strikes-wreck-gaza-water-supply/Oh4a8eCx0TpYZ5R0Cq8WNP/story.html>

BACK TO TOP

❖ Gaza faces imminent water crisis

Israel's assault had a devastating impact on Gaza's already fragile water infrastructure.

Gaza City - For seven days now, when Khalil Hassan turns on the tap, he finds no water. He must now go back and forth between his home and an open vegetable stand in Zeitoun district, where he collects water from a truck with a water tank.

"I have 30 people living at home, and not a drop of water for almost a week," Hassan told Al Jazeera.

Sometimes, he transports water in buckets and canisters from a nearby mosque that still has a functioning private well. If the mosque is closed, he has to travel to another neighbourhood in search of water.

The 10-day Israeli assault on Gaza has had a heavy toll on the strip's already fragile water infrastructure, leaving the territory's 1.8 million residents facing an imminent water crisis.

According to International Committee of the Red Cross (ICRC), **hundreds of thousands** of people are now without running water, and within days, the entire Gaza population "will desperately run short of water resources".

"Water and electrical services are also affected as a result of the current hostilities. If they do not stop, the question is not if but when an already beleaguered population will face an acute water crisis," said Jacques de Maio, head of the ICRC delegation in Israel and the occupied territories.

The five-hour UN-supervised truce which began on Thursday morning is not likely to allow time for workers to fix some of the damaged water pipelines.

Nearly 70,000 Palestinians live in al-Shati refugee camp, and 35 percent of the camp population is either under the age of six months or pregnant women, according to Sara Badiei, ICRC's head of engineering in Gaza.

The camp's residents have been cut off from running water for a week, and have been forced to draw water from local wells. Water wells are 25 percent higher in salt concentration than the levels set by the World Health Organization (WHO).

Before the latest Israeli onslaught, households in Gaza received running water for only six to eight hours at a time: 25 percent of households had access on a daily basis, 40 percent every other day, 20 percent once every three days, and the remaining 15 percent only one day out of four.

On the day the water was supposed to be delivered to the camp, al-Shati's pipeline was hit by an Israeli airstrike. It took another three days for the Red Cross to coordinate with the Israeli army to ensure that the army would not strike the municipal workers struggling to fix the pipes.

"We hope that with the presence of ICRC, workers can go to highly sensitive areas to do their work and make sure that the infrastructure will serve the population," Christian Cardon, the head of ICRC's Gaza office, told Al Jazeera.

Two municipal workers were killed on Friday while trying to fix a damaged water infrastructure. A third worker died from wounds sustained two days earlier in an Israeli airstrike. As a result, Gaza's water provider, the Coastal Municipalities Water Utility (CMWU) decided not to send their employees to the field without ICRC accompanying them.

"It's the number one problem that I see - people getting killed while on duty and travelling in clearly labelled cars with municipality logo," said Badiei.

CMWU also stopped all their routine operations, like closing and opening valves. Consequently, some neighbourhoods, like al-Shati camp, which is already receiving water once every four days, will not get it.

Sewage and wastewater treatment systems in Gaza are also deficient. There are five sewage treatment plants in the Gaza Strip, three of which had already been damaged by the bombings. The biggest wastewater treatment plant in Gaza was hit by an Israeli airstrike at 3am on Tuesday. A team of workers went to fix it despite the risks.

"These people put their lives at risk to go and fix the pipelines independently. In my mind they are great heroes, they really made a huge difference," Badiei added.

In Beit Lahiya, in northern Gaza, another sewage treatment plant was damaged in the bombings, both on the inlet and outlet side of the plant, the pipes are leaking raw sewage and partially-treated water into the surrounding area.

"The problem is that in the same vicinity there are regular water pipelines that are also damaged, so as a result there is a giant pool of sewage mixing with regular water and then feeding into regular pipelines that are going into people's homes," explained Badiei.

The water and sewage situation in Gaza was **worsening** even before the Israeli offensive. Destruction of infrastructure in previous Israeli attacks, especially in 2008-2009 Israeli offensive, known as Operation Cast Lead. The Egyptian-Israeli blockade has also caused fuel shortages and restrictions on importing necessary materials to Gaza.

An **estimated 90 percent of water** in Gaza is unfit for drinking or cooking, forcing most people to buy water instead.

Back in Zeitoun district, the Badawi family is one of the few families that stayed behind despite the threat of bombing. The house of 65-year-old Mariam Badawi is now shelter to around 100 people, most of them children and relatives whose houses have been destroyed by the Israeli airstrikes. They, too, have not had running water for a week now when a nearby well was bombed in an airstrike last Wednesday.

"I wanted to pray, and I couldn't even wash my hands. The children don't shower, we don't do laundry. We buy water from private companies, and it is barely enough for cooking," Mariam told Al Jazeera.

The family cannot afford to buy enough water to cover all their needs.

As vegetable stand owners were about to close their shops and return to overcrowded UNRWA schools, Khalil Hassan stood by, hopelessly looking for a source of water. The water truck had already left to deliver water to families living nearby.

"I don't know what to do any more. I can't call a water-tank delivery, because no one wants to drive to Zeitoun."

"Gaza faces imminent water crisis", 17/07/2014, online at: <http://www.aljazeera.com/news/middleeast/2014/07/gaza-faces-imminent-water-crisis-201471755035576420.html>

BACK TO TOP

❖ Acute water crisis looms in Gaza

Geneva: Hundreds of thousands of Gazans are without water after Israeli air strikes that have wrecked the water and sewage system and the whole strip is threatened with a water crisis within days, aid agencies warned on Tuesday.

The eight-day assault has caused massive damage to infrastructure and destroyed at least 560 homes, the U.N. Relief and Works Agency for Palestine refugees (UNRWA) said. “Within days, the entire population of the Strip may be desperately short of water,” Jacques de Maio, head of the International Committee of the Red Cross (ICRC) delegation in Israel and the occupied territories, said in a statement. If hostilities continue, just as temperatures soar in the region, “the question is not if but when an already beleaguered population will face an acute water crisis”, he said. “Water is becoming contaminated and sewage is overflowing, bringing a serious risk of disease,” de Maio added.

Several municipal water engineers have been killed in the conflict and Gaza’s water service provider has suspended all field operations until the safety of its staff can be guaranteed, according to the ICRC, an independent aid agency whose teams have helped with emergency repairs. “Water is a problem and it can quickly turn into a catastrophe,” ICRC spokeswoman Nada Doumani told a news briefing. At least 184 Palestinians, most of them civilians, have been killed in the fighting, the worst flare-up in two years. The stated purpose of Israel’s bombing is quieting cross-border rocket fire from Hamas militants fired into southern Israel.

UNRWA said the destruction compounded the effects of eight years of Israel’s blockade of the enclave. “The water and sewage network is barely functioning, and with the sustained bombardment of the past 8 days, it’s as good as destroyed,” UNRWA spokesman Sami Mshasha told the briefing.

“We’re looking at 90 million litres of untreated sewage that flows into the ocean every day because there is no electricity to treat it. Ninety percent of the drinking water is not fit for human consumption.”

The World Health Organization (WHO), a U.N. agency, warned last week that health services in the occupied Palestinian territory were on the brink of collapse among severe shortages in medicines and fuel for hospital generators. Hamas militants fired volleys of rockets from the Gaza Strip on Tuesday, drawing a threat by Israel to abandon an Egyptian-proposed truce it had unilaterally accepted. “We

are extremely worried as UNRWA that if the ceasefire being negotiated today does not succeed, then the much-talked about ground offensive might unfold and we might see an Israeli military incursion into Gaza,” Mshasha said.

If there is a truce, the ICRC hopes for better access to the increasing numbers of casualties, spokeswoman Doumani said. The ICRC is “documenting violations of international humanitarian law” in the conflict, she said. U.N. human rights Chief Navi Pillay on Friday voiced serious doubts that Israeli’s military operation against Gaza complied with international law banning the targeting of civilians, and called on both sides to respect the rules of war.

“Acute water crisis looms in Gaza”, 17/07/2014, online at:

http://twocircles.net/2014jul17/acute_water_crisis_looms_gaza.html#.U8yv3_1_uFU

BACK TO TOP

❖ ICRC - Non-stop Bombings Destroying Water Infrastructure In Gaza

KUALA LUMPUR, July 17 (Bernama) -- Non-stop bombings in Gaza is destroying its fragile water infrastructure, while the deaths of some municipal water technicians highlight the danger that they faced in carrying out crucial maintenance, the International Committee of the Red Cross (ICRC) said.

According to Jacques de Maio, head of the ICRC delegation in Israel and the occupied territories, currently the people in Gaza are without water and in a matter of days, the entire population will desperately face water shortage.

"Water and electrical services are also affected as a result of the current hostilities and if it continue the people of Gaza will face critical water crisis," he said in a statement.

The ICRC said that the intensified fighting made the matter worse as it prevented technicians from carrying out essential repairs.

The water service provider has also suspended all field operations until the safety of its staff can be guaranteed, the Geneva-based organisation said, adding that all these will result in people not getting any water when they turn on the tap.

Guillaume Pierrehumbert, ICRC water and sanitation expert, said that bolder action was critically required in order to improve water and sanitation system as water was polluted and sewage overflowing, which could cause a serious risk of disease.

The ICRC stressed that under the International Humanitarian Law, the parties to a conflict must differentiate between military objectives and civilians objects and between combatants and civilians.

They must also avoid harming civilians and protect them from the effects of military operation, said the non-governmental organisation that helps people affected by conflicts and armed violence as well as promote the laws to protect war victims.

"ICRC - Non-stop Bombings Destroying Water Infrastructure In Gaza", 17/07/2014, online at:
<http://www.bernama.com.my/bernama/v7/wn/newsworld.php?id=1054152>

BACK TO TOP

❖ UN aid agencies step up emergency aid to Gaza

The United Nations said on Friday it was stepping up emergency aid to Gaza, where Israel's military offensive has made water shortages worse and stoked fears of more sewage contamination and water-borne diseases.

On Tuesday, U.N. aid agencies and the International Committee of the Red Cross warned that after years of Gaza's water system deteriorating, damage from the attacks meant the whole coastal strip was facing a water crisis within days.

"We are still very concerned about the water supply in Gaza, about half of the population are without water supply at this time," U.N. Office for the Coordination of Humanitarian Affairs (OCHA) spokeswoman, Amanda Pitt, told a news briefing in Geneva.

Israel stepped up its ground offensive in the densely populated coastal strip with artillery, tanks and gunboats on Friday and declared it could "significantly widen" an operation Palestinian officials said was killing more and more civilians.

It followed 10 days of barrages against Gaza from air and sea and hundreds of rockets fired by Hamas into Israel.

Some 1,600 homes in Gaza have been destroyed or severely damaged, displacing nearly 10,000 people, Pitt said. More than 22,000 people have sought refuge in 24 facilities of the U.N. Relief and Works Agency for Palestine (UNRWA), she said.

In all, 258 Palestinians, most of them civilians, have been killed since the fighting began on July 8, Gaza officials said.

At least 59 Palestinian children are among the victims, U.N. Children's Fund's (UNICEF) Chris Tidey said. "Child casualties include 43 boys and 16 girls aged between 1 and 17 years," he told Reuters.

There have been two Israeli fatalities.

"Our plan is to distribute food for 85,000 people. We have already distributed emergency food for 20,000 since the conflict erupted, in addition to the 600,000 we regularly assist with food, together with UNRWA," U.N.'s World Food Programme's (WFP) Elisabeth Byrs.

Only 50 percent of sewage pumping and waste-water treatment systems are believed to be operational and 900,000 people lack any water supply, UNICEF's Tidey said.

"We are already scaling up water tankering to communities whose water has been completely cut-off, and provision of bottled water and hygiene materials," he told reporters.

Outbreaks of water-borne diseases are feared in the crowded unhygienic conditions in Gaza's summer heat, agencies said.

"Definitely we are worried about outbreak of disease, especially diarrhoea can occur in this part of the Middle East if there is no access to potable water and the sanitation system is not in order," World Health Organisation (WHO) spokeswoman, Fadela Chaib, said.

"For an infant or young child, diarrhoea can be a fatal disease... A child can die within hours if there is lack of water and re-hydration," she said.

"UN aid agencies step up emergency aid to Gaza", 18/07/2014, online at: <http://www.worldbulletin.net/todays-news/140957/un-aid-agencies-step-up-emergency-aid-to-gaza>

BACK TO TOP

WWW.ORSAM.ORG.TR

❖ **Acute water crisis looms in Gaza, aid agencies warn**

GENEVA (Reuters) - Hundreds of thousands of Gazans are without water after Israeli air strikes that have wrecked the water and sewage system and the whole strip is threatened with a water crisis within days, aid agencies warned on Tuesday.

The eight-day assault has caused massive damage to infrastructure and destroyed at least 560 homes, the U.N. Relief and Works Agency for Palestine refugees (UNRWA) said.

"Within days, the entire population of the Strip may be desperately short of water," Jacques de Maio, head of the International Committee of the Red Cross (ICRC) delegation in Israel and the occupied territories, said in a statement.

If hostilities continue, just as temperatures soar in the region, "the question is not if but when an already beleaguered population will face an acute water crisis", he said.

"Water is becoming contaminated and sewage is overflowing, bringing a serious risk of disease," de Maio added.

Several municipal water engineers have been killed in the conflict and Gaza's water service provider has suspended all field operations until the safety of its staff can be guaranteed, according to the ICRC, an independent aid agency whose teams have helped with emergency repairs.

"Water is a problem and it can quickly turn into a catastrophe," ICRC spokeswoman Nada Doumani told a news briefing.

At least 184 Palestinians, most of them civilians, have been killed in the fighting, the worst flare-up in two years. The stated purpose of Israel's bombing is quieting cross-border rocket fire from Hamas militants fired into southern Israel.

UNTREATED SEWAGE

UNRWA said the destruction compounded the effects of eight years of Israel's blockade of the enclave.

"The water and sewage network is barely functioning, and with the sustained bombardment of the past 8 days, it's as good as destroyed," UNRWA spokesman Sami Mshasha told the briefing.

"We're looking at 90 million litres of untreated sewage that flows into the ocean every day because there is no electricity to treat it. Ninety percent of the drinking water is not fit for human consumption."

The World Health Organization (WHO), a U.N. agency, warned last week that health services in the occupied Palestinian territory were on the brink of collapse among severe shortages in medicines and fuel for hospital generators.

Hamas militants fired volleys of rockets from the Gaza Strip on Tuesday, drawing a threat by Israel to abandon an Egyptian-proposed truce it had unilaterally accepted.

"We are extremely worried as UNRWA that if the ceasefire being negotiated today does not succeed, then the much-talked about ground offensive might unfold and we might see an Israeli military incursion into Gaza," Mshasha said.

If there is a truce, the ICRC hopes for better access to the increasing numbers of casualties, spokeswoman Doumani said.

The ICRC is "documenting violations of international humanitarian law" in the conflict, she said.

U.N. human rights chief Navi Pillay on Friday voiced serious doubts that Israeli's military operation against Gaza complied with international law banning the targeting of civilians, and called on both sides to respect the rules of war.

"Acute water crisis looms in Gaza, aid agencies warn", 15/07/2014, online at: <http://www.chicagotribune.com/news/sns-rt-us-palestinians-israel-aid-20140715.0,3856363.story>

BACK TO TOP

❖ Legal opinion: Israel can cut off water, power to Gaza during conflict

Document states that imposing economic sanctions would be legal, that electricity is not a basic humanitarian need.

Israel is permitted to cut off water, fuel and electricity supplies to the Gaza Strip in response to hostile actions, according to a legal opinion submitted to the Knesset Foreign Affairs and Defense Committee yesterday, in preparation for a committee hearing scheduled for this morning.

The opinion was formulated by Prof. Avi Bell of Bar-Ilan University. This morning's hearing, which is to deal with the influence of the 2005 Gaza disengagement on Israel's deterrence, was scheduled to mark nine years since Israel's withdrawal from the Strip. The hearing was initiated by the heads of the Knesset's Land of Israel caucus – MKs Orit Strock (Habayit Hayehudi) and Yariv Levin (Likud).

The opinion states, "Imposing economic sanctions on the Gaza Strip, such as refraining from the supply of water, fuel and electricity, does not involve military power and is thus a legal measure, despite the collateral effect on the Strip's residents."

According to the document, "In the absence of an agreement denying this right, international law recognizes the right of any state to act this way. Indeed, it is acceptable for states to take even harsher steps, and take nonmilitary retaliatory steps that under other circumstances would be illegal, like voiding aviation agreements.

"Because Israel is not obligated to trade in fuel, electricity or anything else with the Gaza Strip, and is not obligated to preserve a policy of open borders with it, it is permitted to avoid supplying consumer items and to close its borders if it chooses to do so, even if this is imposed as a 'punishment' for terror activity. The only restriction is that Israel is forbidden to interfere in the supply of basic humanitarian needs, like food and medicines, by others."

The document states that electricity is not considered a basic humanitarian need, and therefore Israel can stop supplying electricity. "Moreover, Israel is permitted to attack power stations in Gaza and

thus prevent Gaza from providing its own electricity. Similarly, Israel is permitted to stop supplying water, but it must allow the supply of water by a neutral third party, if such a party seeks to do so.”

“Legal opinion: Israel can cut off water, power to Gaza during conflict”, 14/07/2014, online at: <http://www.haaretz.com/news/diplomacy-defense/.premium-1.605139>

BACK TO TOP

❖ Health Catastrophe in Gaza after Israel bombs water infrastructure

Gaza – Bassem Siam carried two plastic gallons as he left his home in the Sheikh Radwan neighborhood in northern Gaza, ignoring the intense bombardment and the continued Israeli military flights. He went to his neighbors who happen to have a small supply of drinking water to get a sip of water for himself and his family and to help his wife wash the dishes that have accumulated in the kitchen because water has been cut off for two days. The 30-something-year-old man held the two gallons tightly to his chest and returned home quickly as Israeli planes bombed farm land near his home. When he entered the building where he lives, he exhaled deeply, having survived the devastating missile shrapnel.

In addition, three main water lines that feed al-Shujaiya and al-Sabra neighborhoods and provide about 21,000 people with water were also hit.

Thousands of Palestinians in Gaza live under the threat of water scarcity due to the fact that Israeli fighter jets bombed wells that provide water to several residential areas in the Gaza Strip.

Municipalities in charge of these wells believe that the Israeli targeting of wells is motivated by a decision to destroy the infrastructure in Gaza and to undermine the people's ability to remain steadfast.

Israeli planes targeted a well located in al-Nasr neighborhood, west of the city of Gaza, which provides water to about 20,000 people and the Ali well in al-Zaitoun area, south of the city, which provides water to about 7,000 people. In addition, three main water lines that feed al-Shujaiya and al-Sabra neighborhoods and provide about 21,000 people with water were also hit.

This targeting appears to be systematic and its obvious objective is to deprive people of water, the single most important element of daily life, especially during the month of Ramadan.

According to the head of the water facilities at the Gaza municipality, Saad al-Din Atbash, it is very difficult to repair the destroyed wells amidst the ongoing violence. Not to mention that the cost for each well to start working again at the same capacity it was working before is \$120,000. "In addition, the cost of repairing the three water lines that were damaged is about \$6,000 for each line," he added. In light of the ongoing war and siege of Gaza, it is hard for the municipality to repair these wells and water lines, Atbash confirmed. He also noted that the electric cables which operate the well pumps that feed the industrial area to the east of Gaza city (known as Karni) have been burned. These pumps

provide water to about 5,000 people. He confirmed that the crews working in the field have repaired what can be repaired in order to distribute water again, even if on an intermittent basis. He warned, however, that these crews are working in unsafe conditions because the Israeli military targets emergency work crews.

Gazans are starting to complain about the water shortages that last for days at a time, forcing some of them to fill up their home water tanks with desalinated water to use for drinking, cooking, washing and cleaning. The problem, however, is that the distributors of desalinated water were directly targeted more than once during the 2008 Israeli war on Gaza. Not to mention the additional cost of buying desalinated water which doubles people's water bills. In addition, several purification water plants announced their inability to provide services to residents, especially to those living in border areas.

Fadi Omran, one of the desalinated water distributors, tells Al-Akhbar: "We can't risk our lives and go out in the evening. We are trying to work during the day but we don't have enough time to meet the needs of all the people." Omran, who drives a huge truck, explained that the Israelis do not differentiate between civilians and Resistance fighters, "they target any moving object at night." He said that fear for their lives forces them to delay delivering their customers' orders. In addition to the fact that his plant works only when there is electricity.

This targeting appears to be systematic and its obvious objective is to deprive people of water, the single most important element of daily life, especially during the month of Ramadan.

This situation prompted the director of the water department in the Gaza municipality to call on people to ration their water consumption "until the damaged waterpipes and water wells are repaired." He also called on international organizations to intervene in order to prevent Israel from bombing the infrastructure in the Gaza Strip.

On the evening of July 12, Israeli warplanes targeted a vehicle that belongs to the non-governmental Coastal Municipalities Water Utility near its well located to the west of Rafah in southern Gaza. The bombing killed a 42-year-old employee called Ziad al-Shawi, destroyed his car completely and seriously injured two of his colleagues.

Because of this incident, the general director of the utility, Monzer Shiblak, announced the complete suspension of work at the field water utility after the targeting of its staff, "despite the existing coordination with the Israeli side. The suspension will continue until proper field protection is provided for the employees." At the same time, he expressed commitment to see his utility persist in

its vital duties towards the public and in carrying out its water and sanitation services to the best of its ability.

During a press conference, Shiblak called on international humanitarian organizations, especially the International Committee of the Red Cross (ICRC) and the United Nations Office for the Coordination of Humanitarian Affairs (OCHA), to assume their responsibilities and take action to protect the Coastal Municipalities Water Utility and pressure the Israeli side to stop targeting their crews and the municipalities' crews.

According to observers, warnings have been issued regarding the consequences of subjecting Palestinians in Gaza to health and environmental catastrophes as a result of the Israeli bombing of sewage pump no. 1. This pump services the area to the west of the city of Gaza and treats about 15,000 cubic meters of wastewater per day, thus protecting about 200,000 of the city's residents from the potential harm of untreated sewage water.

"Health Catastrophe in Gaza after Israel bombs water infrastructure", 18/07/2014, online at: <http://www.juancole.com/2014/07/crisis-israel-infrastructure.html>

BACK TO TOP

❖ Gaza faces acute water crisis amid air strikes by Israel

The ongoing air strikes by Israeli warplanes for more than a week now have not only claimed more than 150 lives in Gaza Strip but have also created a humanitarian crisis. The International Committee of the Red Cross (ICRC) has warned that as a result of the recent conflict, hundreds of thousands of people in Gaza are without water.

Since July 8, Israeli warplanes have struck more than 1,300 targets across Gaza, which is home to around 1.8 million Palestinians. Some reports also suggest that the Israelis had targeted water wells in different parts of Gaza where 90 per cent of water is now unsafe to drink.

“Water and electrical services are also affected as a result of the current hostilities. If they do not stop, the question is not if but when an already beleaguered population will face an acute water crisis,” said Jacques de Maio, head of the ICRC delegation in Israel.

Gaza’s water system had been deteriorating for years. These strikes at a time when temperatures are on the rise have added to woes of the civilians. Health experts and rescue teams are worried as hospitals, refugee camps, schools, and homes all need water and electricity in order to function. According to ICRC, following the deaths of several municipal water technicians over the past few days, Gaza’s water service provider has suspended all field operations until the safety of its staff can be guaranteed. The non-profit has also urged parties in conflict to avoid harming civilians or civilian objects, and protect them from the effects of military operations. This includes protecting water technicians, water networks and electrical supply systems.

Maude Barlow, an expert with Council of Canadians and Food and Water Watch, has said that more than four decades of Israeli occupation has made it impossible to develop or maintain infrastructure for water in Gaza, causing the contamination of drinking water and many deaths [1]. It is believed that Israel has blockaded Gaza since 2007, denying the Palestinian people there basic rights.

Water as a weapon of war

If the situation continues for long, it would not be wrong to say that water is being used as a weapon of war in the conflict between Gaza and Israel. The tactic is already being used in ongoing conflicts

in parts of Africa and West Asia. When water supplies in the besieged Syrian city of Aleppo were recently deliberately cut off by armed groups for eight days, at least 2.5 million people were deprived of access to safe water for drinking and sanitation. Before this, in 2000, the Syrian regime deregulated land use and gave vast quantities of land and water to its wealthy allies, severely diminishing the water table and driving nearly one million small farmers and herders off the land. This year in April, days before elections in the country, Iraq's waters were seen becoming a weapon of war.

A US report, released in 2012, had said that beyond 2022, says the use of water as a weapon of war or a tool of terrorism will become more likely, particularly in South Asia, West Asia and North Africa.

“Gaza faces acute water crisis amid air strikes by Israel”, 18/07/2014, online at: <http://www.kractivist.org/water-is-being-used-as-a-war-of-weapon-in-countries-like-syria-and-iraq-gazaunderattack/>

BACK TO TOP

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❖ Gaza: Israel bombs water and sewage systems

Israel's armed forces have destroyed vital water and sewage infrastructure in their bombing campaign of the besieged territory, writes Mohammed Omer. This constitutes a severe breach of the 1977 Protocol to the 1949 Geneva Conventions on the part of Israel and all those conceiving, planning, ordering and perpetrating the attacks

Israel's Gaza offensive, which by the ninth day has claimed at least 208 lives, including 40 children, and injured over 1,530 people, threatens to bring an even deeper humanitarian disaster to the area, with vital water and sewerage systems being destroyed by Israeli air strikes.

Palestinian officials on Saturday claimed that the Israelis had targeted water wells in different parts of Gaza City, leaving thousands of families without access to clean drinking water.

Saed al-Din Atbash, head of water facilities at Gaza Municipality, told reporters in Gaza City that Israel is deliberately targeting the wells:

"Warplanes have targeted two wells directly, one near to al-Maqwsi area 9a densely populated area with residential tower blocks) and another in al-Zaytoun, both used by 7,000 inhabitants."

Pipeline attacks may leave 100,000's with no water

Israeli warplanes have also targeted five water pipelines that supply large numbers of Gazans. With each line providing water to 20,000 inhabitants, as many as 100,000 people could be affected by the attacks.

Gaza Municipality estimates the damage to each of the water wells at \$150,000. The cost to the civilian population could well be higher, forcing families to try and stockpile on expensive and scarce drinking water.

"Services are now struggling to cope and the insecurity is making it difficult to deliver aid", Oxfam country director Nishant Pandey said last week.

Oxfam's partners have had to suspend efforts to chlorinate water supplies in Gaza because of the ongoing violence, although 90% of water in Gaza already considered unsafe to drink.

Shati refugee camp, in northern Gaza, is among the worst affected areas. Home to Ismail Haniyeh, who until last month exercised prime ministerial authority in Gaza, the camp is seen as a valuable target and has been hit at least once by Israeli F16s, local eyewitnesses said.

Atbash said repairs to the water line will require a period of calm and until then about 70,000 residents will be deprived of water in the refugee camp.

And even under normal circumstances, Palestinians are systematically denied adequate access to water. (See '[Water apartheid in Palestine - a crime against humanity?](#)'))

A sewage quagmire

The sewage system is also a target, with Israeli warplanes targeting sewage treatment stations in West Gaza City early on Saturday. The areas most affected are Shati refugee camp, Tal al-Hawa, Sheikh Ejleen and most Western districts, according to Atbash.

Oxfam reports that following the damage to sewage plants, 25,000 cubic meters of raw sewage are spilling into the sea daily - increasing the likelihood of disease caused by poor sanitation. The damage is expected to take months to fully repair.

The organisation also fears that severe shortages of fuel - a problem at the best of times - will cause sewage pumps, sewage treatment plants and water pumps to be switched off within days.

The latest attacks are exacerbating an already critical sewerage situation. (See '[Gaza: sewage as a weapon of war](#)').) The *New York Times* reported last year that 13 sewerage stations in Gaza Strip were either overflowing or were close to overflowing.

Our legal right to water!

Gaza Municipality sees the Israeli attacks on the water and sewerage systems as "*collective punishment*" of the Palestinian people.

"Under international law, the targeting of civilian water supplies is classified as a war crime", Atbash said. "The Israeli occupation's fighter-jets targeted a sewage-station holding 25,000 cubic meters of untreated sewage, pumped in from four areas daily."

Atbash appealed to the international community to urge Israel to stop targeting water and sewerage facilities, saying that all occupied civilians have a legal and human right to clean water, sanitation and hygiene:

"We are constantly working to improve municipality water facilities to citizens in Gaza. The Israeli occupation is deliberately destroying the water wells in order to increase the human suffering during the hot summer season."

Article 54 of the 1977 Protocol to the 1949 Geneva Conventions, which prohibits the "*starvation of civilians as a method of warfare*", states:

"It is prohibited to attack, destroy, remove or render useless objects indispensable to the survival of the civilian population, such as foodstuffs, agricultural areas for the production of foodstuffs, crops, livestock, drinking water installations and supplies and irrigation works, for the specific purpose of denying them for their sustenance value to the civilian population or to the adverse Party, whatever the motive, whether in order to starve out civilians, to cause them to move away, or for any other motive."

As such, the main defence of Israel and those responsible for ordering and perpetrating the attacks on Gaza's water and sewage infrastructure would be that the damage was accidental. However, given the widespread and apparently systematic nature of the attacks, such a claim may not be sustainable.

Even without the bombing, less than half of Gaza's water needs are satisfied

As anywhere else, consumption of water in Gaza increases in summer, but power-cuts due to Israel's destruction of electrical systems have forced water-pumps used by families to be shut down.

"We often don't have access to both water and electricity in the same hour", said Umm Ramzy, a mother of seven children, who daily has to confront the fact that occasional drips from the water tap will not take care of family needs or domestic chores.

Gaza Strip needs on average 180 million cubic meters of water annually, while the capacity of the coastal aquifer (after Israel has depleted in from deep boreholes near its border with Gaza) is no more than 80 million cubic meters per year.

To handle the shortage, the municipal water supply is cut at certain times and distributed to different areas according to the population density.

The aquifer is also suffering from salt water contamination and the infiltration of untreated sewage. A recent UN report has predicted that the Gaza aquifer may be "*unusable*" by 2016. (see 'Water in Gaza - total collapse draws ever nearer').)

Umm Ramzy is among those who find the situation difficult to live with: *"When I wash I need water, when I cook I need water, when we are thirsty we need water, when my children use the toilet they need water."*

One of her children announces there is no water to flush the toilet for the second day. In some areas, a few trucks are distributing limited water to families, but for drinking only, not for anything else, said residents of Shati refugee camp.

"We never think of taking a shower", Umm Ramzy told the *Middle East Eye*. "That's a luxury right now." Gaza's summer can be unbearably hot anyway, where families find it difficult to cope with daily life. With war, it certainly makes it worse than before.

Emergency World Bank plans unfunded, on hold

The World Bank has plans to improve the situation through the proposed \$43m North Gaza Emergency Sewage Treatment Project, which according to the World Bank aims to:

- mitigate the immediate and impending health, environmental and safety threats to the communities surrounding the poorly treated and rapidly growing sewage lake in the Beit Lahia area of northern Gaza; and to
- contribute to the provision of a satisfactory long-term solution for the treatment of wastewater in the Northern Gaza Governorate.

However, no funding has yet been committed to the project - and with everything in Gaza on hold while the Israeli military operation continues, no improvements are in sight.

The latest damage to vital infrastructure is further straining the Palestinian health system, already having to treat many hundreds of people seriously injured by the bombing. Hospitals in Gaza have also been targeted in Israeli attacks.

The World Health Organization has appealed for \$60m to help prevent the total collapse of the Gaza health system.

If this situation continues, Gaza residents are at risk of suffering a humanitarian crisis even worse than the immediate one of trying to survive under Israel's air-strikes.

"Gaza: Israel bombs water and sewage systems", 16/07/2014, online at:

http://www.theecologist.org/News/news_analysis/2480165/gaza_israel_bombs_water_and_sewage_systems.html

BACK TO TOP

❖ Israel strikes leave Gaza without water and electricity, official says

JERUSALEM (CNS) — The head of Caritas in Jerusalem said he would launch an international appeal to help with the Gaza Strip and would not wait until the end of Israeli-Hamas hostilities, as he had done in the past.

Father Raed Abusahlia, general director of Caritas Jerusalem, said July 18 that more than 80,000 Palestinians had been displaced and 1,250 homes have been completely demolished in Israeli airstrikes and the invasion of Gaza in July. He said 80 percent of the Gaza Strip was without electricity and 90 percent of people did not have drinkable water.

“Families are leaving everything behind and they don’t know what they will be coming back to,” he told Catholic News Service. “It is very difficult. There will be a lot of work to do afterward.”

Israeli launched a ground offensive in Gaza July 17, and in an email to Father Abusahlia that night, Amin Sabbagh, Gaza Caritas staff coordinator, wrote: “We are facing heavy attack from the sea, from the air and from land. There are lots of explosions everywhere, and people are afraid. Children are scared and women are crying. The situation is impossible. We pray that the Lord brings his peace upon us.”

“This needs to stop on both sides,” Father Abusahlia said. “We would have liked Hamas to have accepted the (Israeli-proposed) cease-fire,” but Hamas, which controls the Gaza Strip, also wants “the lifting of the blockade and an opening of the crossings from both Israel and Egypt.”

“They don’t want just a cease-fire,” the priest said. Referring to the seven-year Israeli-imposed blockade of the Gaza Strip, he added, “1.7 million people in Gaza should not remain in the biggest prison.”

The priest said Gazans need hospital supplies. He said Caritas medical staff had been volunteering at local hospitals as well as helping where they could from their homes with the use of first aid kits distributed by Caritas after the fighting in 2012.

Despite calls by Hamas not to leave their homes, thousands of people in 14 targeted quarters heeded Israeli warnings and evacuated and were being sheltered in U.N. school buildings. Some Palestinians remained in their homes, fearing theft in tough economic times.

Auxiliary Bishop William Shomali of Jerusalem said the school at Holy Family Parish in Gaza had been opened to those fleeing their homes.

Bishop Shomali urged Palestinian and Israeli political leaders to accept Pope Francis' call for an immediate cease-fire.

“Many innocent people have been killed. The human pride is terrible, and the result is the loss of innocent people,” Bishop Shomali said. “We need an immediate cease-fire both on southern Israel and in Gaza. People are afraid, tired, they don't sleep.”

In Jerusalem, Matthew McGarry, country representative for Catholic Relief Services, told CNS he was in regular contact with staff in Gaza. He said they told him that although militants had been launching missiles in Israel from civilian areas, many people have also been killed by Israeli airstrikes in areas where there are no launch sites.

A young CRS intern and her family were killed while sitting in their house, he said.

“She was just a young woman trying to improve her situation,” he said. “As with everything, it is not one way or the other. Certainly there are launch sites in civilian areas, but innocent civilians are being killed in their homes.”

He said CRS was working to procure nonfood items for Gazan residents for a time when staffers could distribute them.

“It has been terrible. People are fasting for the month of Ramadan, they are not eating or drinking during the day and they have only a few hours of sleep with the airstrikes and the drones flying overhead,” said McGarry. “It is very frightening, frustrating and disappointing. Clearly this latest round of hostilities is more intense. The indiscriminate targeting of civilians is unacceptable, whoever is doing it.”

Dr. Issa Tarazi, executive director of Near East Council of Churches Department of Services to Palestinian Refugees in Gaza, told Catholic News Service July 18: “There is shooting everywhere, bomb strikes and airstrikes. There are explosions all around. Nobody can move.

“Gaza is so crowded; everywhere you shoot, there are people. We have experience with this, and we don’t want it to be repeated,” he said.

In a post on the Spanish website of the Institute of the Incarnate Word, Father Jorge Hernandez, parish priest in Gaza, said he had shared the translated message of support from Pope Francis with this parish and other Christians.

“Dear brother, I am with you and the sisters and the entire Catholic community. I accompany you with my prayers and closeness. May Jesus bless you and the Virgin Mary protect you,” Pope Francis wrote in Spanish to his fellow Argentine priest.

Father Hernandez, who asked for prayers, spoke of visiting his parishioners, where he saw “terrible moments of fear, confusion, stress, crying, but always, always, always at the end of their stories is the profound confidence in ... praising God.”

“Israel strikes leave Gaza without water and electricity, official says”, 18/07/2014, online at:
<http://catholicphilly.com/2014/07/news/world-news/israel-strikes-leave-gaza-without-water-and-electricity-official-says/>

BACK TO TOP

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❖ 'This is Lebanon': why water taps are drying out

Lebanon is moving forward with a plan to import water from Turkey, having failed to impose any restrictions on water usage in response to one of the worst water shortages in recent memory.

“It is unbelievable that they think now of importing and they have done nothing to stop waste,” said Nadim Farajalla, an environmental hydrologist from the American University of Beirut. “If we need to import, that’s the last thing we do.”

Environment Minister Mohammad Machnouk expressed a similar sentiment in a statement released Wednesday in which he said that conserving Lebanon’s existing resources should be prioritized over importing water.

Even the architect of the plan, MP Mohammad Qabbani, admitted his frustration that the rest of a proposal put forward by his parliamentary committee to address the crisis was being ignored.

“Today I drove through Solidere [Downtown Beirut], and they were hosing down the sidewalks,” he said, shaking his head.

Despite his reservations, Machnouk has submitted an official request to the Turkish government to import 100,000 cubic liters of water a day for a period of four months, starting in September, Qabbani told The Daily Star Wednesday. While the government has yet to receive a reply, Qabbani said Ankara responded positively “in principle” when the Turkish ambassador conveyed an earlier, oral request.

The lawmaker emphasized that Lebanon was negotiating “state to state” and not with any private companies. The Turkish Embassy declined to comment.

Qabbani said that, if an agreement is struck, the imported water would be pumped into the Dbayyeh water treatment plant and, if possible, the one in Dayshounieh, for distribution to the Beirut area.

A water expert who has worked closely with the Water and Energy Ministry said neither location currently has the infrastructure to receive water from a large tanker

“It’s doable, but it will need some time for to put the infrastructure in place,” he said.

“I’m not sure if it can be done in the remaining two months of summer,” he continued, adding that the Dayshounieh plant would require an additional 5 kilometers of piping.

Importing water is one of several proposals put forward by Qabbani to manage the crisis following an unusually dry winter. He admitted that the drought was compounded by years of “mismanagement” of Lebanon’s water resources.

He added, however, that some of the other recommendations put forward by the committee, including bans on using hoses, washing cars or sidewalks and watering lawns, as well as a moratorium on certain types of irrigation, could be enacted by a decree from the Energy and Water Ministry, and did not need Cabinet approval.

When asked why none of the recommendations for conserving water had yet been adopted, he said: “This is Lebanon.”

The Daily Star was unable to contact Water and Energy Minister Arthur Nazarian, and has received no ministerial response to a request filed last week seeking permission to speak to the head of the Water Authority for Beirut and Mount Lebanon.

Qabbani said other proposals, such as the temporary expropriation of private wells by the government, had come up against political opposition.

“What I’m really afraid of is that there is going to be fighting over water,” especially if the price of water skyrockets, he said.

Apart from the logistical consideration, importing water from Turkey would likely prove expensive as well.

“It is neither possible, nor suitable to do it,” said Elie Zakhour, head of the head of the International Chamber of Navigation of Beirut, which represents shipping companies.

While he declined to speculate about the approximate cost, he insisted: “It would cost too much.”

Zakhour dismissed the plan, saying, “It will never happen.”

Israel seemingly cooled to a similar plan for economic reasons.

In 2002, Tel Aviv signed an agreement with Ankara to import some 1.75 billion cubic feet of water a year. The plan stalled when the Israelis balked at the cost of transport, and was later scrapped by Turkey in retaliation for the killing of nine activists aboard a Gaza-bound Turkish vessel in 2010.

Farajalla called for increased government transparency, demanding to know the names of the experts behind the plan to import water and how it would be implemented.

“There is a general waste of money and lack of awareness in the government,” he said. “I have no trust in them, no faith in them. What they are doing is not right.”

The Ministerial Committee dedicated to the water crisis is scheduled to meet Thursday.

“This is Lebanon': why water taps are drying out”, 17/07/2014, online at: <http://www.albawaba.com/business/lebanon-water--590900>

BACK TO TOP

❖ German bank to loan US\$40 million for water projects in Jordan

German Development Bank (KfW) has signed a US\$40mn loan agreement with Jordan's Ministry of Water and Irrigation to finance water projects in the Middle Eastern country

The finances would be directed to the third phase of the Water Resources Management Programme, which aims to improve water supply and sanitation across Jordan and support the national water transport system.

The programme also includes the expansion of the Al Karak purification station to 5,500mcm, rehabilitation of farmers in the northern Jordan Valley and establishment of agricultural societies for irrigation purposes.

KfW authorities stated that the programme, once completed, would help 4.1mn Jordanians.

After signing the deal with KfW's deputy director Sawsan Aruri, minister of water and irrigation Hazem Nasser said the water sector management was seeking international aid and grants to implement new water and sanitation projects in the north of Jordan.

Nasser stated that the ministry would build new networks to provide water for agriculture in the northern Jordan Valley region and minimise loss of water. The new projects, under a medium-term plan, involve the construction of a line from Zaatari, part of the Disi water conveyance project, to carry 10mcm of water to northern governorates.

KfW has also agreed to provide another US\$40mn by September 2014 to overcome water deficits resulting from the exodus of Syrian refugees into Jordan, added the minister.

“German bank to loan US\$40 million for water projects in Jordan”, 15/07/2014, online at:

http://www.technicalreviewmiddleeast.com/index.php?option=com_content&view=article&id=11793:german-bank-loans-us-40-million-for-water-projects-in-jordan&catid=1091&Itemid=194

BACK TO TOP

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❖ Water, Jordan

‘Ministry revamping, drilling wells in south to meet rising water demand’
Farmers should seal illegal agricultural wells by year end — Water Ministry
‘Projected pipeline to convey water from King Abdullah Canal to Irbid’

‘Ministry revamping, drilling wells in south to meet rising water demand’
by Hana Namrouqa | Jul 12, 2014

AMMAN — The Ministry of Water and Irrigation is rehabilitating and drilling new wells in the south to meet an increasing demand for water during summer, a government official said Saturday.

The Water Authority of Jordan (WAJ) has started rehabilitating Al Qatraneh wells to raise their capacity, an official at the Water Ministry said.

Al Qatraneh wells have long been one of the sources supplying the capital with part of its water needs, but following the inauguration of the Disi Water Conveyance Project last year, the ministry diverted Al Qatraneh wells’ water to Karak Governorate, 140km south of Amman, to improve its water supply.

Al Qatraneh wells pump 12,000 cubic metres of water per day to Karak, according to figures from the ministry, which indicated that water supply from the wells will increase once the rehabilitation project is completed.

In addition, WAJ started drilling a new well in Hassa in Tafileh Governorate, 180km south of the capital, to raise water amounts in the south, the official said on condition of anonymity.

The projects are part of the second phase of the ministry’s water emergency plan, which was announced last week to deal with the increasing demand for water with the onset of summer and the fasting month of Ramadan, as well as the influx of tourists, expatriates and Syrian refugees, he added.

Under the emergency plan, the ministry will also establish a water reservoir in Eimeh village in Tafileh to store 1,000 cubic metres of water to supply the village’s residents with extra water, in

addition to plans to establish during another reservoir in Hassa this year at a cost of JD100,000 to increase water supply in the southern governorate.

In addition, the ministry last week started pumping water from Lajjoun wells to address water shortage in Karak, the official said, noting that rehabilitation work is under way on Karak's two main pumping stations, which are expected to begin operating in October this year.

<http://jordantimes.com/ministry-revamping-drilling-wells-in-south-to-meet-rising-water-demand>

Farmers should seal illegal agricultural wells by year end — Water Ministry

by Hana Namrouqa | Jul 09, 2014

AMMAN — Owners of illegal agricultural wells are required to start procedures for sealing their wells by the end of this year, a government official said on Wednesday.

The Water Authority of Jordan (WAJ) will start sealing all illegal agricultural wells across the Kingdom by the end of this year, when a grace period given to farmers by the Cabinet in November 2013 ends, Water Ministry Spokesperson Omar Salameh said.

“The Cabinet endorsed a decision last year allowing farmers using water to irrigate their crops from illegal wells to continue cultivation until the end of 2014,” Salameh added.

“Now that the grace period is about to end, we remind farmers using illegal agricultural wells to prepare for sealing them by the end of this year,” he told The Jordan Times.

The ministry instructed farmers who dug illegal wells to irrigate their crops to coordinate with WAJ for the procedures to seal the wells, Salameh said.

“Owners of illegal agricultural wells are mainly requested not to prepare their lands for Orweh Tashrineyeh cultivations, because the wells will be sealed at the end of this year, thus they will incur losses if they don't abide by the instructions and the Cabinet decision.”

Orweh tishrineyeh is a local agricultural term that refers to winter crops planted at the end of each year, when farmers grow vegetables in the Jordan Valley. Different kinds of vegetables are cultivated during this period, including cucumber, tomato, aubergines and zucchini.

“The Cabinet decision seeks to end all violations on water resources and protect underground water from further depletion and rising salinity levels,” Salameh noted.

There are over 1,500 illegal agricultural wells across Jordan, the majority of which are found in the Jordan Valley, according to official figures.

The Cabinet decision, which allowed owners of illegal agricultural wells to continue pumping water for irrigation, stipulated that they pay for it and stop cultivating crops that depend on the illegal wells by the end of this year.

In March, WAJ started issuing notifications to owners of illegal agricultural wells, demanding that they pay their fines, which exceed JD24 million.

The notifications detail the name of the debtor and the required cost, which is either estimated according to the terrain of the agricultural unit, the type of crops, the energy consumed, satellite images, or according to the readings of the water gauges, according to the Water Ministry.

If owners of the illegal agricultural wells fail to pay their dues by August 15, authorities will seize their movable and immovable assets and take other legal measures, which also include a travel ban.

The ministry said that owners of illegal wells pay 150 fils per cubic metre for the first 10,000 cubic metres pumped, while the price rises to 250 fils for 10,000-30,000 cubic metres and 500 fils for over 30,000 cubic metres.

<http://jordantimes.com/farmers-should-seal-illegal-agricultural-wells-by-year-end---water-ministry>

‘Projected pipeline to convey water from King Abdullah Canal to Irbid’ – Jordan Times

by Hana Namrouqa | Jul 06, 2014

AMMAN — A pipeline will be established to convey water from King Abdullah Canal to Irbid Governorate to address the surging demand for water due to the ongoing Syrian refugee influx in the northern region, government officials said Sunday.

The project's studies are in the final phases and its blueprint is almost ready, Water Ministry Spokesperson Omar Salameh said.

“The carrier is one of the main strategic water projects the ministry will implement in the northern region,” Salameh told The Jordan Times.

“As the water sector in the north is witnessing massive pressure due to rising temperatures, the arrival of expatriates and the ongoing influx of Syrian refugees, the resources are generating less water,” he added, noting that “tough water conditions in the north necessitate the implementation of the carrier.”

In a statement released Sunday, Water Minister Hazem Nasser said the carrier will convey 30 million cubic metres of water annually from the King Abdullah Canal to the Wadi Al Arab Pumping Station before it eventually reaches Irbid's Zabada water reservoir, which is currently under rehabilitation to store 100,000 cubic metres per day.

The project will cost \$85 million and international agencies agreed to finance it, according to Salameh.

“Construction on the carrier will commence next year and it will take 16 months to be completed,” he underscored.

The 110-kilometre King Abdullah Canal is supplied by the Yarmouk River. It irrigates 40 per cent of the crops in the Jordan Valley and supplies some 40 per cent of the capital's water after being treated at the Zai Water Treatment Plant.

Salameh said the project is part of the water emergency plan's second phase, which Nasser announced on Sunday during a meeting with heads of water directorates across the country and water companies.

Nasser said the second phase seeks to deal with the increasing demand for water with the onset of summer and the holy month of Ramadan, as well as the influx of tourists, expatriates and Syrian refugees.

“The second phase of the Water Authority of Jordan’s emergency plan consists of operating new water resources and redistributing water to districts with shortages.”

<http://jordantimes.com/projected-pipeline-to-convey-water-from-king-abdullah-canal-to-irbid>

“Water, Jordan “, Jordan Times, 13/07/2014, online at: <http://mideastenvironment.apps01.yorku.ca/2014/07/water-jordan-jordan-times/>

BACK TO TOP

❖ “Water Crisis” Lebanon

U.S. signs water MOU as Moqbel warns of crisis

BEIRUT: The United States Embassy signed a Memorandum of Understanding with four regional water establishments Friday, as the ministerial committee following up on the looming water crisis announced plans to draft an action plan to tackle shortages.

Access to water was singled out as a top priority for Americans and Lebanese by U.S. Ambassador to Lebanon David Hale, during the signing ceremony held at embassy headquarters in Awkar. The MOU will formalize U.S. cooperation with water establishments in the Bekaa Valley, north and south Lebanon, Beirut and Mount Lebanon.

“With the dry winter we had in Lebanon this year, we’ve seen shortages, authorities have asked us to conserve, and there are fears the taps could dry out,” Hale said.

The MOU, signed by the United States Agency for International Development, defines a framework for cooperation between the USAID-funded Water Infrastructure Support and Enhancement program – a \$26.2 million grant provided by USAID to enhance Lebanon’s water resource management – and each of the water establishments to improve overall financial and managerial performance.

The ministerial committee tasked with following up on Lebanon’s looming water crisis will draft an action plan within a week that will include short- and long-term solutions to address shortages, Defense Minister Samir Moqbel said Friday.

“The ministers agreed to ... propose it to the committee and then to Cabinet so that the government can make appropriate decisions,” Moqbel told reporters after the end of the committee meeting he chaired.

Moqbel said the country was in need of technical solutions to face the crisis.

“Water shortage is now an inevitable crisis that requires fast and technical solutions to prevent the dangerous repercussions on citizens,” the defense minister said.

Chaired by MP Mohammad Qabbani, several parliamentary committees met earlier this week to discuss the water crisis and announced proposals to address the issue.

The proposals call for restrictions on water use – including a moratorium on irrigation for seasonal crops, in exchange for compensation to farmers – and a ban on washing cars and sidewalks and watering lawns, under threat of fine.

They also called for patching up existing infrastructure in order to prevent leaks and lifting VAT on the importation of water. They called for exploring the possibility of importing water from Turkey by sea using huge fabric balloons called Spragg Bags.

During the ministerial committee meeting that was attended by the environment, public works and industry ministers, Qabbani gave a detailed presentation about the committee's recommendations.

Moqbel said the ministers also agreed that future solutions should focus on constructing dams and lakes as well as organizing awareness campaigns to limit water consumption.

Meanwhile, Environment Minister Mohammad Machnouk spelled out the severity of the shortfall.

“The shortage ... is around 400 million cubic meters,” he told a local magazine. “We are only able to adopt water rationing policies for domestic and industry use.”

Read more: <http://www.dailystar.com.lb/News/Lebanon-News/2014/Jul-12/263606-us-signs-water-mou-as-moqbel-warns-of-crisis.ashx#ixzz37MN1p8Lt>

(The Daily Star :: Lebanon News :: <http://www.dailystar.com.lb>)

Germany funds water treatment for Jeita Spring

BEIRUT: The German-Lebanese project for the protection of Jeita Spring announced Friday that the

establishment of a wastewater collection and treatment system in the Jeita groundwater catchment could now be implemented as a result of German funding for the project.

According to a statement released by the German Embassy in Beirut, the Jeita Spring suffers from a 100-year-old leaking system that collects water from one of the largest springs in Lebanon and distributes it to Greater Beirut.

A German-funded renovation project, the KfW JSPP project, aims to revive the spring with a wastewater collection and treatment system that would minimize the risks to drinking water. The new treatment system is ready for implementation, the statement said.

Germany previously funded the German-Lebanese Technical Cooperation Project – Protection of Jeita Spring – which aimed to enhance water capture and storage in the groundwater catchment of the Jeita Spring.

The enhanced water capture operation was launched four years ago by the GLTC and benefited from funding by the German Federal Ministry for Economic Cooperation and Development, which provided 1.7 million euros for the project.

During a workshop at the Monroe Hotel, the GLTC project revealed the results of its hydro-geological investigations to an audience of water sector professionals in Lebanon, alongside Environment Minister Mohammad Machnouk and German Ambassador to Lebanon Christian Clages.

Read more: <http://www.dailystar.com.lb/News/Lebanon-News/2014/Jul-11/263535-germany-funds-water-treatment-for-jeita-spring.ashx#ixzz37MNBnQdW>

(The Daily Star :: Lebanon News :: <http://www.dailystar.com.lb>)

Ministers to draft action plan for water crisis

BEIRUT: The ministerial committee tasked with following up on Lebanon's looming water crisis will draft an action within a week that will include short- and long-term solutions to address the shortage, Defense Minister Samir Moqbel said Friday.

"After discussing the recommendations and solutions, the ministers agreed to put in place a detailed action plan within a week and propose it the committee and then to Cabinet so that the government can make the appropriate decisions," Moqbel told reporters after the end of the committee meeting that he chaired.

Moqbel said the country was in need of technical solutions to face the water crisis.

Chaired by MP Mohammad Qabbani, several concerned parliamentary committees met earlier this week to discuss the water crisis and announced a series of proposals to address the issue.

The parliamentary plan calls for restrictions on water use, including a moratorium on irrigation for seasonal crops, in exchange for compensation to farmers, and a ban on washing cars and sidewalks and watering lawns, under threat of fine.

The plan also called for patching up existing infrastructure in order to prevent leaks and lifting the VAT on the importation of water. The proposal called for exploring the possibility of importing water from Turkey by sea using huge fabric balloons called Spragg Bags.

During the ministerial committee meeting that was attended by the environment, public works and industry ministers, Qabbani gave a detailed presentation about the committee's recommendations

Moqbel said the ministers also agreed that future solutions should focus on building dams and constructing lakes as well as organizing awareness campaigns to limit consumption.

"Water shortage is now an inevitable crisis that requires fast and technical solutions to prevent the dangerous repercussions on citizens," the defense minister said.

Meanwhile, Environment Minister Mohammad Machnouk sounded the alarm over Lebanon's water shortages.

“The shortage of water is around 400 million cubic meters,” he told a local magazine.

“In the summer season, we are only able to adopt water rationing policies for the domestic and industry use.”

“We will release a study explaining the environmental effect of the water shortage.”

Read more: <http://www.dailystar.com.lb/News/Lebanon-News/2014/Jul-11/263530-ministers-to-draft-action-plan-for-water-crisis.ashx#ixzz37MNIv4an>

(The Daily Star :: Lebanon News :: <http://www.dailystar.com.lb>)

Water crisis plan deemed unrealistic

Meris Lutz| The Daily Star

BEIRUT: Experts dismissed an ambitious parliamentary proposal put forward Wednesday to address Lebanon’s water crisis as impractical and unrealistic, saying the infrastructure, enforcement mechanisms and legal grounds for many parts of the plan were missing.

Beirut MP Mohammad Qabbani called on the government to declare a “state of water emergency” following a meeting of several concerned parliamentary committees that was also attended by the ministers of environment, agriculture, energy and tourism, as well as the head of the Higher Relief Committee, Maj. General Mohammad Khair.

Qabbani then announced a series of proposals as part of a comprehensive plan to address the crisis, which has resulted in water shortages throughout the country.

The plan calls for restrictions on water use, including a moratorium on irrigation for seasonal crops, in exchange for compensation to farmers, and a ban on washing cars and sidewalks and watering lawns, under threat of fine.

The government would effectively seize control of private wells while compensating their owners. Some of these wells would be integrated into the existing networks through an undetermined monitoring system.

The plan also called for patching up existing infrastructure in order to prevent leaks and lifting T.V.A. taxes on the importation of water. The proposal called for exploring the possibility of importing water from Turkey by sea using huge fabric balloons called Spragg Bags.

The restrictions would be enforced by the Interior Ministry in coordination with local government, municipalities, and the state water authority, Qabbani said.

But a water expert who has worked closely with the government on public water projects called the plan “impractical to say the least.”

“We can’t even get the Interior Ministry to stop illegal wells being dug, which is much easier than forcing people to conserve water,” said the expert, who asked to remain anonymous.

Moreover, the expert said it would take at least a year to put the enforcement mechanisms in place, and negotiating compensation with farmers and well owners would likely be a complicated process.

“Who decides how much and which farmers, and if you’ve decided not to produce seasonal crops, is there a plan to import these? How do you meet the demand of the local market?” the expert asked. “And as for taking over private wells, I don’t think we have the legal capacity.”

The expert also pointed out the technical challenge of hooking private wells up to the government network.

“There’s infrastructure that goes into it, and they have to control the quality of the water,” he said. “It’s been a dry year. Taking over wells is not the solution if they are all tapping into the same source.”

“Realistically, in the short term, given how poorly prepared we are, conservation is the only thing that can do,” he continued. “Raising awareness to conserve water and trying to aggressively fix any leaks in the networks, this is what we can do in a short period.”

Many of the expert's concerns were echoed by Nadim Farajalla, an environmental hydrologist at the American University of Beirut.

"I would start with restrictions and really applying those, and then when push comes to shove, we would start looking at purchasing," Farjalla said, adding that importing water from Turkey would likely be "cumbersome and very expensive."

He also criticized the proposal for calling for more wells, saying the government should invest instead in water treatment and reuse.

Farajalla explained that while this year's drought was severe, it still fell within what is considered the normal climate cycle for Lebanon.

"If it persists, becomes more frequent, then you can tie it to climate change," he said of Lebanon's dry spell. "What we're seeing now is what we will be facing a decade or two into the future."

Farajalla also pointed out the irony of the government's recent decision to eradicate the hashish crops in the northern Bekaa Valley.

"Hashish grows well without water; that's actually one of the few crops that economically makes sense right now," he said sardonically.

"Our concern should be not only this year, but next year," he concluded. "What is the plan to collect and store water and to prevent people from uncontrolled pumping?"

When reached for comment, Qabbani defended the plan but declined to speculate about the timeline for implementation or the estimated cost.

"We hope that at least we can do something before the peak" of the drought in August, he said, adding, "We have been making noise about this since March and nobody did anything because nobody cares."

Regarding enforcement, Qabbani reiterated his proposal that the security forces in coordination with municipalities ensure compliance with the plan, which has yet to be adopted by Parliament.

“Our priority is not to close down wells; our priority is to get water, whether the wells are legal or not,” he said. “If we are serious, we can do serious work.”

Read more: <http://www.dailystar.com.lb/News/Lebanon-News/2014/Jul-10/263349-water-crisis-plan-deemed-unrealistic.ashx#ixzz37MNU5CE>

(The Daily Star :: Lebanon News :: <http://www.dailystar.com.lb>)

““Water Crisis” Lebanon”, Daily Star, 13/07/2014, online at: <http://mideastenvironment.apps01.yorku.ca/2014/07/water-crisis-lebanon-daily-star/>

BACK TO TOP

❖ **Prince Hassan launches new regional water initiative**

AMMAN — HRH Prince Hassan has announced a new initiative to help build peace and security in the Arab world through regional cooperation on water conservation and management.

The prince will assume the chairmanship of the High Level Forum for the Blue Peace Middle East plan, according to a statement released by his office on Tuesday.

The forum is a direct result of collaboration with the Strategic Foresight Group, an international think tank headquartered in Mumbai.

As part of his new role, Prince Hassan will provide strategic guidance and input to the work of the forum in identifying vulnerable segments of society in West Asian countries that are deprived of water due to violence, migration, climate change and other factors.

Earlier this year, the prince stepped down from the chairmanship of the United Nations Secretary General’s Advisory Board to be better able to focus on promoting equitable and durable solutions to water and sanitation across the region.

“The present conflict in Syria, that was in part caused by prolonged drought, presents a bellwether of future societal breakdown across the entire region, which must urgently be averted,” the statement quoted Prince Hassan as saying.

“We need to stop focusing exclusively on militarily security and develop long-term solutions that further human security for the people in the region,” he added.

The new initiative “will first map precise localities and communities in Iraq, Jordan, Lebanon, Syria and Turkey that are facing water shortage”, before moving on to propose water inclusion policies for the countries in the region, the statement said.

The forum will build on the earlier work carried out by Prince Hassan and the Strategic Foresight Group in the area of water conservation and management.

Most recently, a high-level group working with organisations such as the Swedish International Development Cooperation Agency and the Swiss Agency for Development and Cooperation produced a strategic roadmap for water cooperation titled: “Water Cooperation for a Secure World”.

The report “pioneered the revolutionary ‘Circles of Cooperation’ approach”, which calls for countries to develop deep, policy-level cooperation on an inter-regional level.

“Out of the 148 countries that share trans-boundary resources in the world, no two countries engaged in active water cooperation go to war for any reason. Conversely, countries that have avoided water cooperation, such as those in the Middle East are at active risk of war,” the statement said.

Due to overuse, the aquifer on the Gaza-Israel border that supplies water for over 1.6 million people is expected to be unusable after 2020. Over the last 50 years, the flow of the Jordan River has more than halved.

River flows in Turkey, Syria and Iraq have depleted by 50 per cent to 90 per cent. Furthermore, 45 million people are at risk in Egypt within the next two decades with the rise in water levels of the Mediterranean.

On Tuesday, Prince Hassan delivered the keynote address at the Enhancing Security Through Water Diplomacy OSCE Security Days conference in Vienna.

“An absence of water is the biggest and most effective weapon of mass destruction,” he said, according to the statement.

“Only a few years ago, Jordan was the fourth poorest water country in the world. Now, struggling to cope with the influx of anywhere between two hundred to four hundred Syrian refugees a day, Jordan is today the third poorest nation in terms of water resources,” the prince noted.

“We have to move away from solutions that treat people as objects. Instead we need to focus on solutions that empower people and make them part of the solution. Let’s collaborate on water. It will be the first of many steps that will move my region, and regions across the world, from conflict to collaboration.”

<http://jordantimes.com/prince-hassan-launches-new-regional-water-initiative>

“Prince Hassan launches new regional water initiative”, Jordan Times, 08/07/2014, online at:

<http://mideastenvironment.apps01.yorku.ca/2014/07/prince-hassan-launches-new-regional-water-initiative-jordan-times/>

BACK TO TOP

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❖ Ethiopia 'determined to share Nile water'

Ethiopian Prime Minister Hailemariam Desalegn said on Friday that his country was determined to share Nile River water with all riparian states.

"Ethiopia's stand with regard to Nile water is clear," Desalegn told a press conference for foreign correspondents at his office in Addis Ababa.

"Although Ethiopia is the source of 86 percent of Nile water, it believes that the Nile is a common resource," he said.

In recent years, tension has marred relations between Ethiopia and Egypt over the former's construction of a major dam project on the upper reaches of the Nile River, which represents Egypt's primary water source.

Ethiopia says the dam is necessary for its national development plans and insists the project won't impact Egypt's traditional share of Nile water, which has long been governed by a colonial-era water-sharing treaty that Addis Ababa has never acknowledged.

Desalegn said that Ethiopia, Egypt and Sudan should join forces to utilize the Nile's potential through understanding and dialogue.

"Ethiopia has no intention to harm any riparian country; the Grand Ethiopian Renaissance Dam will never hurt Egypt or Sudan," he asserted.

Last month, Egypt and Ethiopia agreed – on the sidelines of last month's African summit in Equatorial Guinea – to resume tripartite talks with Sudan on the Ethiopian mega-dam.

"We appreciate the new spirit of Egyptian President Abdel-Fattah al-Sisi and we assure that this spirit will further be strengthened," Desalegn said.

He said the tripartite dialogue would look into the issue of the hydrology simulation model, which has been recommended by an international panel of experts.

-South Sudan-

Turning to South Sudan, Desalegn said that the warring parties of that country were already committed to continuing talks aimed at ending the crisis.

"There is no need of a new strategy for South Sudan because the case is not complicated. The discussion will continue in the near future," he said.

The premier voiced hope that the next round of talks would lead to the ultimate resolution of the crises. However, he said, the people of South Sudan would not be endlessly killed by the warring parties.

"If the killing continues, all should take note that the East African countries will not stand idle," he said.

"The international community is ready to impose sanctions based on the recommendation of the Inter-Governmental Authority on Development (IGAD)'s decision," he added.

South Sudan has been shaken by violence since last December, when Kiir accused his sacked vice-president, Riek Machar, of trying to overthrow his regime.

Hundreds of thousands of South Sudanese have since been displaced in subsequent fighting, while large swathes of the population continue to face a serious humanitarian crisis as a result of the violence.

In May, the country's warring rivals signed a peace deal brokered by IGAD, a Djibouti-based East African trade bloc. The move followed an earlier cessation-of-hostilities agreement inked in January.

Neither deal, however, has succeeded in curtailing hostilities, while IGAD-mediated peace talks appear to have ground to a halt.

"Ethiopia 'determined to share Nile water'", 19/07/2014, online at: <http://www.worldbulletin.net/news/140966/ethiopia-determined-to-share-nile-water>

BACK TO TOP

❖ Ethiopia wants Sudan to host 3-way dam talks with Egypt

The Ethiopian government said Tuesday that it had proposed the third week of August for holding tripartite talks with Sudan and Egypt to discuss Ethiopia's multibillion-dollar hydroelectric Nile dam project, suggesting that the meeting be held in Sudan.

"Sudan is a suitable venue for the resumption of tripartite talks because it has hosted previous meetings successfully and has good experience," Fekahmed Negash, director-general of boundary and trans-boundary rivers at Ethiopia's Water Ministry, told Anadolu Agency.

Earlier this month, Cairo said it had offered to host tripartite talks in mid-July.

The invitation came after Egypt and Ethiopia agreed – on the sidelines of last month's African summit in Equatorial Guinea – to resume talks on the Ethiopian mega-dam, which Cairo fears will reduce its traditional share of river water.

Ethiopia, however, rebuffed the invitation.

"Ethiopia cannot agree to Cairo's proposal because the issue needs preparation," Negash said. "We sent our proposal to Egypt and Sudan yesterday; we expect a positive response from both."

Set up in 2011, a tripartite technical committee was tasked with studying the impact of the Grand Ethiopian Renaissance Dam on the two downstream states.

The committee's activities, however, were suspended in January amid mounting tension between Cairo and Addis Ababa.

According to Negash, the committee will "pick up where it left off at the time of its disruption, which is the formation of a committee for conducting two proposed studies."

The two proposed studies, he said, involved a hydrology simulation model and a trans-boundary social, economic and environmental impact assessment.

"The committee will comprise members drawn from all the three countries... who will select contractors to conduct the two studies," he explained.

In recent years, tension has marred relations between Ethiopia and Egypt over the former's construction of a major dam project on the upper reaches of the Nile River, which represents Egypt's primary water source.

Ethiopia says the dam is necessary for its national development plans. It insists the project won't impact Egypt's traditional share of Nile water, which has long been determined by a colonial-era water-sharing treaty that Addis Ababa has never acknowledged.

"Ethiopia wants Sudan to host 3-way dam talks with Egypt", 15/07/2014, online at:

<https://www.middleeastmonitor.com/news/africa/12811-ethiopia-wants-sudan-to-host-3-way-dam-talks-with-egypt>

BACK TO TOP

❖ Ethiopia's Nile dam project signals its intention to become an African power

The 4x4 roars off, kicking up a cloud of dust. With one hand on the wheel, the other stifling a yawn, Semegnew Bekele could do this trip with his eyes shut. A construction engineer, he has driven down this track at every hour of the day or night over the past three years. "Ordinary people are building an extraordinary project," he says. He is referring to the [Grand Ethiopian Renaissance dam](#) (Gerd), in the north-west corner of the country close to the border with Sudan. Four hours away from the town of Assosa more than 8,500 workers and engineers are labouring on a massive project to harness the waters of the Blue Nile.

The site is closely guarded. Only officially authorised vehicles are allowed through the three checkpoints. As the kilometres flicker by, the din of the diggers becomes more audible. Then the gigantic site itself appears, with thousands of tonnes of aggregate piled up and smooth expanses of concrete lining the bottom of the Guba valley, ringed by arid hills. The hundreds of families belonging to the Gumuz indigenous people, who lived off fishing, have been moved to a location several tens of kilometres away, making room for a hydroelectric power station that will be the largest in [Africa](#) when it comes online in 2017. At present only a third of it has been built.

Bekele, who works for the [Ethiopian Electric Power corporation](#), has already worked on two dam construction jobs, both on the river Omo in the south-west. He answers our questions with a flood of figures: the dam will be 1,780 metres long and 145 high, with a reservoir covering 1,874 sq km expected to contain 70bn cubic metres of [water](#). Output from the 16 turbines will total 6,000MW. It will be sufficient to meet growing demand in [Ethiopia](#), now Africa's second most populous country, where gross domestic product is estimated to have grown by 10.5% annually over the past five years. The countdown has already started for Bekele: he has three years left to complete this concrete colossus. "I don't feel like a special person," he says, "just an engineer leading the project." True enough, the driving force behind the dam is [former prime minister Meles Zenawi](#), who ran the country for more than two decades. He was obsessed with the country's rebirth. The structure will be built, whatever the cost, he asserted, upon laying the first stone in April 2011. He died the following year.

International bodies such as [Amnesty International](#) and Human Rights Watch were extremely critical of his record on human rights, but he knew how to rouse national fervour and mobilise the country for the five-year growth and transformation plan launched in 2010, which included Gerd.

The scheme is expected to cost \$4.1bn. As the country has not received any international funding, the government has appealed to the population to buy treasury bonds. For civil servants it is mandatory. Companies have urged their personnel to give up a month's wages to support Gerd. In a country where information is under strict control, it is hard to say whether they have much choice. "We agreed, we want to contribute to development," bank clerk Birhanu Libsework, 25, tells us in a cafe in Addis Ababa. "We're prepared to make sacrifices for better living standards and more energy," says Genet Getachew, an Amharic teacher. A single mother, she helps her daughter with her homework by candle light during the frequent outages in the capital. "The government mustn't try to do a thousand things at once, but this one is necessary," says Yeshe Negash (name changed at her request), a sociology graduate.

The government has already raised more than \$350m, a third of which has been contributed by Ethiopians abroad.

Ethiopia hopes to become an [African lion](#). "We have finished with the syndrome of dependence," says Zadiq Abraha, deputy-head of Gerd coordination. "We want to recover our past glory," he adds. Some neighbouring countries are less upbeat about the project. Citing two treaties, dating from 1929 and 1959, Egypt claims a historic right over the Nile. It [fears that the dam will restrict the flow of water](#). The treaties, signed with the UK and Sudan, allocate two-thirds of the Nile's water resources to Egypt, with the right to veto any project affecting the world's longest river.

"These treaties are now obsolete. We are entitled to build the dam," says Alemayehu Tegenu, Ethiopia's minister of water, energy and irrigation. "For a long time we derived no benefit from our river."

Mohamed Ghoneim, the Egyptian representative to the African Union, disagrees. "It's impossible to undertake a project on this scale without environmental impact studies to assess the consequences for downstream countries," he counters, speculating on a range of potential disasters: salt may accumulate in the soil; land downstream could turn to desert or the flow be interrupted; the dam might even break. "The Nile is a vital resource for 80 million Egyptians," he adds.

In 2012, a year after work started, Addis Ababa tasked an international panel of experts (from Ethiopia, Egypt and Sudan among others) with a study of the project's human and economic impact. In May 2013 they reported that further studies were needed. The Ethiopians have refused, saying

enough time has already been wasted. Egypt is demanding a second international panel. Negotiations between Ethiopia and Egypt are deadlocked.

Night falls on the site. In the temporary lodgings, several thousand workers are falling asleep, while the next shift are playing football, soon to resume work. In a few years the Guba valley will be flooded. "The whole area will become a tourist attraction," Bekele suggests hopefully. But what will happen to the Gumuz community, we inquire. The engineer tells us to turn off the recorder. "We're all making sacrifices for our country," he says. "It seems only natural."

"Ethiopia's Nile dam project signals its intention to become an African power",14/07/2014, online at:
<http://www.theguardian.com/global-development/2014/jul/14/ethiopia-grand-rennaissance-dam-egypt>

BACK TO TOP

❖ **Periscope: The Nile Water is the Crises' Sustainable Solution**

It is very strange that in a country like Sudan which cannot utilize more than 6 billion cubic meter of its yearly share of the Nile water there is a crisis in drinking in the capital Khartoum in which the two Niles, the White and Blue join in their journey to the north, Egypt. It is the highest degree of the lack of competence and a long term vision.

In this context the worst project that the Khartoum State have designed and implemented in the last two or three decades was digging wells to supply the state population with drinking water.

If the huge funds that have been spent in upgrading the existing Nile purification water and the connections to households in addition to the reaction of new stations at strategic points taking into consideration that the River Nile almost surround the whole of Khartoum and its suburbs, there would not have been the present crises of shortage of water in almost every part of the state.

The latest statements of the state officials that the crises is over and that water is available is not quite correct because there is only a meager improvement that is water is supplied for some hours and households have to store the quantity they can until the next day and this is not a solution. The solution is that water is available 24 hours a day to be used according to need and not stored like gold.

But there is a light at last it seems because few days ago the State water administration have announced that will stop digging any more wells and focus on Nile water purification plants but here there is a need for more transparency on how this projects will implemented and where. In addition it is high time that this is done in a very transparent participatory approach which include the stakeholders that is the society at large. Such a step will be an incentive for the society not only to invest in the erection of such plants but what is more important is the long term maintained of them. There have been very successful similar projects in many communities in the states that lack drinking water in Kordofan and Darfur and many other states and most of them have been erected by international and national NGOs in cooperation with the local communities.

We hope that the declared intention on Nile water purification will materialize as soon as possible in the above mentioned lines and we will keep focusing on this issue because the provision of healthy

good quality water is an essential human right which the government as a whole is obliged by the national constitution and international conventions to guarantee for every citizen.

“Periscope:The Nile Water is the Crises' Sustainable Solution”,16/07/2014, online at:
<http://news.sudanvisiondaily.com/article.html?rsnpaid=1767>

BACK TO TOP

❖ **Water Wars and Dam construction in the Kabul-Indus basin**

Since 2003, the Afghanistan government plans to build 12 projects. These dams will serve mainly as a source of hydropower, with a total potential of 1,890 megawatts. A mere 16,400 hectares of land will be irrigated, while water storage capacity will increase from 3 to 24% of the annual surface water availability.

The hydropower projects will help reduce the gap between the 670 megawatts of electricity produced in Afghanistan and the 3,571 megawatts required by its fast growing population. It would also help allocating water to the mining industry (that is key to the country's economic development) and improve domestic water supply for Kabul city which is already over-exploiting its groundwater resources.

The prospect of dam construction in Afghanistan has long been a source of concern for Pakistani officials. In 2003, the chairman of Pakistan's Indus River System Authority, Nasr Rajput, claimed, "We will have no water to build new dams if big dams are constructed by Afghanistan on the Kabul River." Officials pushed to contain the perceived threat by calling for a treaty with Afghanistan "to protect Pakistan's water rights" and avoid future conflicts.

International organisations such as the World Bank and USAID have also supported the idea of a water-sharing agreement between Afghanistan and Pakistan. In 2006, the World Bank offered to mediate a consultation process between the two countries, but Afghan officials refused, arguing they lacked data and capacity.

After a 2011 US Congress report warned that water scarcity could fuel dangerous tensions, the World Bank and USAID strengthened their efforts to encourage cross-border dialogue on water. The World Bank also facilitated informal dialogues on water issues in the Indus Basin, for example through the Abu Dhabi Dialogues.

Senior Afghan officials from the Ministry of Energy and Water and the Ministry of Foreign Affairs have refused to discuss water rights. They have also never requested transboundary impact studies. At the same time, they have repeatedly requested funding for large dams from the international community, particularly the World Bank. The World Bank has always conditioned its support on the

necessary (but not sufficient) step of ‘prior notification’ and agreement with neighbours, which the Afghanistan government has refused.

Hydropolitics

While Pakistani officials, USAID and the World Bank have tried to bring a reluctant Afghanistan to the negotiation table, no studies have been carried out to evaluate the possible impact of Afghan projects on downstream Pakistan. In other words, opposition to the Afghan projects took shape without a clear understanding of the water stakes.

In January 2013, an internal World Bank funded study found that the six main projects planned in the Kabul basin would only reduce water flow into Pakistan by 3%. The other six projects would have virtually no impact and are not even considered as transboundary. Furthermore, dams in Afghanistan could provide power desperately needed in Pakistan. But this study did not change the attitudes of Afghan officials towards dialogue and cooperation.

This raises questions about the political motivations behind the nature of interactions over the past decade.

A forthcoming publication by the Kabul-based research organization, Afghanistan Research and Evaluation Unit (AREU), sheds some light on how water issues are perceived within Afghanistan. Based on interviews with leading Afghan policymakers, members of parliament, academics and key informants, the study shows most senior Afghan decision makers consider transboundary water resources development as a “zero-sum game”, and as a way to upset existing power asymmetries unfavourable to Afghanistan. This position is further motivated by feelings of “mistrust” and “acrimony” that already shape – to a large extent – relations with Pakistan.

Many people within Afghanistan believe that as the country emerged from three decades of war, neighbours owe it “a grace period to develop” during which, the government should not be expected to justify or negotiate its projects, including within the framework of international norms governing shared water. For a long time president Hamid Karzai has been hesitant to start a dialogue on water sharing for fear he would be portrayed by Afghans as “a water seller.”

Pakistan and India compete for influence in Afghanistan

On the Pakistani side, it is important to remember that a decade ago fears about the “12 Afghan dams” were linked to concerns India was allegedly cooperating with the Afghan government to implement those plans. The Pakistani government-funded Islamabad Institute of Policy Studies claimed that India’s offer of assistance aimed to increase India’s influence over Afghanistan while at the same time decrease Pakistan’s water supply.

Pakistan’s claims that Afghan projects were a threat and involving the US and the World Bank could well be more about ensuring the country would not be side-lined in a possible attempt by India to strengthen its ties with Afghanistan.

From 1999 to 2010, Pakistan has been in open disagreement with India over the Baglihar Dam located on the Chenab in Jammu and Kashmir. One international advisor suggested that Pakistan could not show signs of leniency with Afghanistan considering its disagreements over Indian projects.

In August 2013, two months after Nawaz Sharif took power in Pakistan, the ministers of finance from Afghanistan and Pakistan signed an agreement to build a 1,200 megawatt hydropower project on the Kunar River at a cost of US\$2.7 billion. Although no details were discussed – how the hydropower would be shared, how operations would be managed and how funding would be provided – this agreement came as a surprise not only to the international advisers in Kabul but also to the World Bank, USAID and senior officials in the Ministry of Energy and Water and the Ministry of Foreign Affairs who were not involved in its preparation. For a number of international observers, this agreement appeared as a positive first step.

Meanwhile, Pakistan secured funding from the World Bank for the Dasu hydropower project, after sending prior notification to the Afghan government in February 2014. The 4,320 megawatt project is located on the Indus river and therefore will not affect water flow in Afghanistan.

In March, the National Security Council of Afghanistan raised an objection to the project, arguing that Pakistan had not informed them about the project, while the ministry of finance urged international institutions not to finance and implement the project without the written consent of the Afghan government. The Afghan government seemed however divided, as the ministry of finance – that had already crafted the Kunar agreement with Pakistan – expressed that it had no concerns a-priori with Dasu. Opposition to Dasu was reiterated on April 15 this year by the ministry of foreign

affairs, as its spokesman officially stressed that Afghanistan was still studying the potential impacts of the project. However, on June 10, the World Bank approved US\$588.4 million funding for the Dasu dam.

As the building of the Dasu and Diamer-Bhasha dam (also on the Indus) ease the pressure on Pakistan power crisis, the Kunar dam may drop in Pakistan's priority list. And since the World Bank and the Pakistan government are funding these projects, the likelihood they will finance the Kunar project is more uncertain than ever. Similarly, USAID has lost interest in supporting such a project.

Recent developments are likely to further alienate an already large proportion of Afghan decision-makers who look at Pakistan with distrust, and who strongly believe that "[Afghanistan's] neighbours have better relations with the major donors — such as the World Bank." The idea of a double standard has already flourished among academics and political analysts who recently claimed at a seminar in Kabul: "the World Bank had turned down Afghanistan's repeated pleas for funds to construct hydropower dams, albeit it instantly approved Pakistan's request for loan."

But at the same time, those who blame the World Bank and the Government of Pakistan for the lack of progress in hydropower development in Afghanistan may also need to consider what they could have done differently.

It appears to have been a deliberate choice of the Afghan government (except perhaps the ministry of finance more recently) to stall fact finding studies, information exchange and dialogue. Even when it was clear that their projects did not cause any significant harm to Pakistan, they kept refusing to follow the World Bank policy of prior notification and defend their case. The government of Afghanistan decided to follow the same resource capture strategy that allowed it to build the Salma and Kamal Khan dams in river basins shared with Iran. But Afghanistan has only succeeded in building two minor projects on the Kabul River (Shah-wa-Aros and Machalghoo) funded by the government and with no transboundary repercussions.

A significant portion of MPs are now questioning this strategy, AREU's study has shown. As one MP stated, "You can see the result of this strategy [i.e. unilateral resource capture without any dialogue], which is the absence of completion of any single dam since Karzai is in power."

Overall, the past decade may well have been a wasted opportunity for Afghanistan’s transboundary water resources development in the Kabul-Indus basin. But it may not be too late to engage in meaningful and constructive dialogue to make projects such as Kunar move forward, particularly considering the potential for benefit sharing, including flood control, sediment control and hydropower.

“Water Wars and Dam construction in the Kabul-Indus basin”, 14/07/2014, online at: <http://water.tallyfox.com/mosaic/text/water-wars-and-dam-construction-kabul-indus-basin>

BACK TO TOP

❖ **Reduce water and power tariffs in Delhi, AAP tells Centre**

New Delhi: The Aam Aadmi Party (AAP) today demanded that the central government should reduce the electricity and water tariffs in the interim budget of the National Capital Territory (NCT).

"The AAP appeals to the central government to honour the sentiments of the overwhelming majority in the Delhi assembly while presenting the state's budget in Parliament, and it should reduce the electricity tariffs by 50 per cent and provide 700 litres of water free for every household.

"Since the BJP's central government has continued with the previous Congress-led UPA government's decision of keeping the state assembly in suspended animation, and this situation has been continuing for five months now, therefore the view of nearly 90 percent of the MLAs cannot be ignored," the party said in a statement.

It added that in the assembly elections held in December, 60 of the 70 MLAs (32 BJP and 28 AAP) were elected on the promise of reducing the electricity tariffs in the city.

Slamming the UPA government for withdrawing subsidies given by AAP government while it was in power, the party said that the BJP too allowed the budget to be passed.

"The UPA government withdrew the subsidy on electricity and water that was provided by the AAP government, and even the BJP quietly allowed the interim budget to be passed without raising the demand for the restoration of the relief that was given to the people.

"The Congress, which systematically allowed the private power distribution companies (discoms) to raise the electricity tariffs in Delhi during the Sheila Dikshit regime, was not expected to lower these tariffs nor did it make this promise to the people," the party said.

Since Delhi is under Centre's rule, budget of the National Capital is expected to be presented in the on-going Parliament session.

Meanwhile, the AAP has slammed Israel for its "unprovoked" attacks on Gaza and demanded that India should support the cause of independent Palestine.

"We call upon the government of India to support the call for an independent Palestine. These demands, specially for an independent Palestine are hugely important and both the Government and civil society must rise to support the Palestinian people and their struggle for justice, peace and independence," the party said.

"Reduce water and power tariffs in Delhi, AAP tells Centre", 14/07/2014, online at:
<http://www.firstpost.com/politics/reduce-water-power-tariffs-delhi-aap-tells-centre-1618631.html>

BACK TO TOP

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❖ **Proposals for construction of 15 dams accepted: Govt**

New Delhi: The Advisory Committee of the Ministry of Water Resources has accepted proposals for construction of 15 dams, the Lok Sabha was informed today.

Replying to a question, Minister of State for Water Resources Santosh Kumar Gangwar said, 60 major, medium and multipurpose proposals, including spillover, involving construction of dams have been received from state governments during the XII Five Year Plan.

Out of which, 15 proposals for dams have been accepted by the Advisory Committee of the Ministry of Water Resources, Gangwar said.

To another question on the Polavaram Multipurpose Project, he said, the Detailed Project Report of Polavaram project with an estimated cost of Rs 10,151.04 crore at 2005-06 price level was accorded investment clearance by the Planning Commission on 25.02.2009.

"The Revised Cost Estimate of the project for Rs 16,010.45 crore at 2010-11 price level was accepted by the Advisory Committee of Ministry of Water Resources in its 108th meeting held on 04.01.2011. But investment clearance has not been accorded," he added.

Per the Ministry of Environment and Forest, he said, a total of 1,93,357 persons are likely to be affected by the Polavaram Project.

"In pursuance of the Andhra Pradesh Reorganisation Act, 2014, the Central government has constituted the Polavaram Project Authority (PPA) and its governing body for execution of the project and obtaining all requisite clearances including environmental, forests and rehabilitation and resettlement norms," Gangwar said.

"Proposals for construction of 15 dams accepted: Govt", 17/07/2014, online at: <http://www.samachar.com/Proposals-for-construction-of-15-dams-accepted-Govt-ohrtLdbjdci.html>

BACK TO TOP

❖ Fuel and Water: The Coming Crises

Demand for fuel and water in the Middle East is rapidly increasing. Populations are growing, as are expectations of middle-class levels of consumption. Supplies of fuel and water are finite, however, and renewable water reserves are dwindling fast. The summer issue of *Middle East Report* warns of the resource crises to come in the era of climate change. In the main, these are crises of inequality, not scarcity.

The Middle East is usually characterized as oil-rich and water-poor. In her incisive primer, **Jeannie Sowers** shows that this canard erases huge variations between and within the countries of the region. More to the point, the glib generalization obscures the political, social and environmental factors that determine who gets access to adequate fuel and water and who does not.

Fossil fuels, of course, are the region's energy source of choice and the main reason for its geopolitical importance. *Middle East Report* interviews **Toby Jones** about "energy security," a term spreading like an oil spot into everyday parlance that masks so many motives of profit and power. **Dina Zayed** and **Jeannie Sowers** tell the more encouraging tale of Egyptians' campaign against polluting coal-fired cement plants.

Middle Eastern states are beginning to make the investments in solar or wind power that seem sensible for a sun-baked region with vast open spaces. In the meantime, many states are seeking the quicker fix of nuclear power plants. **Nicholas Seeley** reports on Jordan's move in the nuclear direction. **Bassel Burgan**, a prominent Jordanian activist, tells *Middle East Report* why he is against nuclear power in his country.

Francesca de Chatel and **Mohammad Raba'a** relate the history of manufactured drought in Wadi Barada, the river valley whose waters once earned Damascus the title "paradise of the Orient." The Syrian regime drilled boreholes around the Barada's springs to fill swimming pools and garden hoses in suburbs built for the army and intelligence service officer corps. Water bubbles under the surface of the political violence in this part of Syria.

Also featured: **Katherine Hennessey** attends the raucous, rough-and-tumble Yemeni theater; **Narges Bajoghli** parses new Iranian depictions of the Iran-Iraq war on film; **David H. Price** reviews Hugh Wilford's *America's Great Game*; and more.

Subscribe to *Middle East Report* or order individual copies here.

Middle East Report is published by the Middle East Research and Information Project (MERIP), a progressive, independent organization based in Washington, DC. Since 1971 MERIP has provided critical analysis of the Middle East, focusing on political economy, popular struggles, and the implications of US and international policy for the region.

“Fuel and Water: The Coming Crises”, 18/07/2014, online at: <http://www.merip.org/mer-271-fuel-water-coming-crises>

BACK TO TOP

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❖ Conservationists study freshwater ecosystem of Fujairah wadi

FUJAIRAH // With the help of volunteers, conservationists are studying the fresh water ecosystem of Fujairah's Wadi Wurayah.

Teams have carried out more than 275 freshwater tests and explored 30 different areas with water in the mountain wadi.

The effort is part of the Water Research and Learning Programme carried out in the Wadi Wurayah National Park.

The programme is a collaboration between the Emirates Wildlife Society-World Wide Fund for Nature (EWS-WWF), the international environmental charity Earthwatch, HSBC Bank Middle East and Fujairah government.

As part of efforts to study the water ecosystem, more than 400 dragonflies were tagged and about 300 toads measured, as their abundance and health gave important information about the overall health of the ecosystem.

“Freshwater is a scarce yet important commodity, especially in the Middle East. It is important to better understand freshwater ecosystems, such as those inside Wadi Wurayah National Park, through gathering important data that will help us in proposing robust conservation measures,” said Ida Tillisch, director general of the EWS-WWF.

“Thanks to continued research efforts in the wadi, we now know that by reducing the pressure on the wadi through measures such as preventing access to its pools, the quality of the water resources have increased as levels of E.coli and other coliform bacteria have dropped significantly.”

The ongoing programme, which was launched in September last year, is the first effort of its kind in the Middle East, focusing on the biodiversity of freshwater areas and spreading awareness about the environmental issues facing them.

Wadi Wurayah has been off-bounds for members of the public since December last year, when the Crown Prince of Fujairah, Sheikh Mohammed bin Hamad bin Mohammed Al Sharqi, officially closed the gates of the wadi to let the popular area recover from years of human intervention.

The park is set to reopen after the development of appropriate infrastructure that would accommodate visitors while also preventing disturbance to rare animals and plants.

“Conservationists study freshwater ecosystem of Fujairah wadi”,16/04/2014, online at:
<http://www.thenational.ae/uae/environment/conservationists-study-freshwater-ecosystem-of-fujairah-wadi>

BACK TO TOP

❖ Suicide By Drought

On the grasslands of the Tibetan plateau, one sometimes hears a strange chattering -- an excited buzz that seems to emanate from the earth itself. Anyone who stops to look for the source will quickly realize that the ground is marked by a series of holes, from which small, shy creatures are likely to be watching.

The labyrinthine burrows made by these mammals, called pikas, provide them security. But they provide China and much of Asia security as well. By digging holes in the ground, pikas allow rainwater to percolate into the earth and replenish the water table. Without the humble pika, the water simply runs along the surface, triggering floods and soil erosion. So it is no coincidence that, when the pikas became the target of a state-led poisoning campaign beginning in the mid-twentieth century, waters began, slowly, to dry up across the country. The pika was accused of being a pest that destroyed grasslands. Scientists have pointed out that the pika prefers long grass and that its visibility is a symptom, not a cause, of grassland degradation. But policy is slow to catch up with science; pika killings continue today.

The pikas' plight illustrates China's difficulties in confronting its water crisis. The economic development on which Beijing depends to keep the population in check poses a dire threat to the fragile ecosystems that the country and the continent depend on for water. It might thus seem politically impossible for China to enact any of the far-reaching environmental reforms that it needs. In the long term, though, absent any policy changes, China is likely on the path to serious civil strife, and perhaps even civil war.

THE WILD WEST

Most of China's most important rivers originate in the plateaus of Tibet and the surrounding mountain ranges, an area known by scholars as the Third Pole because of its plentiful ice. The rivers flowing from the Third Pole -- among them, the Mekong, the Yangtze, and the Yellow River -- traditionally satisfied the majority of China's water needs. But those waters, along with China's other supplies, have been steadily disappearing. Since the 1950s, 27,000 rivers have vanished from China. China has only seven percent of the world's freshwater to meet the needs of about one-fifth of the

world's population. Of that water, only 23 percent is located in northern China, which, as home to most of the country's major industries, uses much more water than China's south. Meanwhile, much of the country's available water supply has been rendered unusable by pollution.

The rapid economic development of western China in the last decade and a half has put even more pressure on China's water supply. Beijing has supported this economic development in spite of its pernicious ecological consequences, though, because it believes that economic growth is the key to calming the restive minorities in the west. (If Kazakhs, Tibetans, and Uighurs have plenty of employment opportunities, the theory holds, they will be less likely to rebel against Communist Party rule.) But Beijing's control over what goes on in western China is limited. Grand engineering projects designed in Beijing and implemented in distant provinces do exist: think of the railway to Tibet or the Three Gorges Dam. But lately, the process of development in western China has mostly been ground-up -- cities have mushroomed out of nowhere, almost entirely unnoticed by the central government.

These cities are a byproduct of increasing unemployment in the country's east, sharpened in the aftermath of the global financial crisis that began in 2008. Out of work even in the larger cities such as Beijing, Shanghai, and Guangzhou, many young Chinese moved to existing cities in western China, such as Lanzhou, Xining, and Urumqi. When those cities grew too crowded, they ventured into what had once been virtually untouched land. Some of them went in search of caterpillar fungus, which serves as an aphrodisiac in Chinese medicine; those who were adept at finding the fungus in the wilds of western China could afford to live in small towns by working only a few weeks a year. Others believed that they would be part of a new tourism industry; wealthy tour groups from eastern China pay considerable money to see the snowy peaks of Tibet, even if the tourism infrastructure that has been built to accommodate them considerably diminishes their beauty.

With these new residents has come haphazard new infrastructure. In Qinghai province, the government is building a barrage of new roadways from the capital of Xining to the southern city of Yushu. In the Tibet Autonomous Region, Beijing is planning to build additional railways linking Lhasa and Shigatse, and extending to the border of Nepal.

The problem is that this development is taking place in ecosystems that hold the headwaters for China's water supply. And the pressures that urbanization puts on the headwaters -- through overuse, grassland degradation, pollution, and threats to species that have a role to play in maintaining the health of the river ecosystem -- is already having consequences downstream. On the Tibetan plateau, streambeds are dry and glaciers have melted into dead rock.

Similar threats confront China's other water sources. The Pearl River in Southern China is drying. In China's northeast, burgeoning construction projects are swallowing the wetlands that replenish the region's groundwater. As a result, water shortages have plagued the country in recent years, and experts predict that water demand will exceed supply by 2030. Given the unreliability of Chinese statistics and how swiftly ecosystems can shift course, that crunch could arrive even sooner than anticipated.

THE CHAIRMAN'S DELUSIONS

Rather than trying to conserve water, the Chinese government has endorsed a massive project inspired by China's first communist leader, Mao Zedong. The south had plentiful water, Mao reasoned in 1952, whereas the north did not; therefore, water should be diverted from the south to the north. In 2002, the Communist Party initiated a massive engineering project in order to realize this vision: a series of canals that will draw approximately 45 billion cubic meters of water from the south to the north. The first canal has already opened in eastern China. Two more -- including a western route that will cut across the Himalayas -- are underway.

It is true that water resources are distributed unevenly, with the south home to 77 percent of the country's total water resources. Of the total water resources available in northern China, about 45 percent get used; the south needs to use only about 20 percent of its water resources. It is also true that as the north continues to grow, so will its demand for water. But there are several problems with Beijing's water diversion policy. First, the ecological risks are immense. It is quite possible that the project will disrupt the river systems and exacerbate water shortages, rather than solve them, by triggering soil erosion and eliminating species responsible for maintaining a healthy river. The Three Gorges Dam provides a cautionary tale about tampering with natural forces: research [shows](#) that the

dam caused an increase in seismic activity and landslides. Downstream of the infamous project, water shortages disrupted irrigation.

Second -- and more important -- the project solves nothing in the long term. If northern China's inefficient water use continues unchecked, the 45 billion cubic meters piped in from the south will eventually be too little -- especially with the rivers' sources drying out. As Beijing diverts more and more water to the north, it will expose a long-standing political rift. In its long history, China has often split along north-south lines. Already, in southern places like Chongqing and Yunnan, one hears a growing complaint: Why should we southerners go thirsty so that the northerners can grow rich? As southern crops fail and people there feel the burden of water shortages, such complaints will only increase.

More generally, Beijing has yet to confront the many historical examples that suggest that water shortages can be a grave threat to national security. Persistent drought led to the collapse of Mayan civilization between 760 and 930 AD. In China, the Ming dynasty collapsed in the seventeenth century largely due to years of successive droughts. More recently, in the Middle East and South Asia, water shortages have led to political unrest. The recent swell of environmental protests in China indicates that it will not be immune to the trend.

A historian looking back in 2040 might well tell a story in which Beijing, unable to curb the state's relentless water use, condemned it to growing water shortages. As the south grew parched, political grievances flared into violent opposition, which became increasingly difficult to put down as angered military commanders joined in and residents of the desiccated third pole -- Tibetans, Uighurs, Kazakhs -- went into revolt. Like the Ming dynasty before it, the historian would conclude, China had collapsed because thirst spawns violence.

WAR ON DROUGHT

To avoid serious ecological and political calamity, China's central government will have to curtail its economic goals. Fortunately, Beijing's recent climate change policies suggest that it may be prepared to make such a compromise. Ahead of the United Nations climate change talks to be held in Paris in

2015, the Chinese government has talked of initiating a “war on pollution” and reducing its carbon emissions. There are plenty of signs, from the investment in renewable energy to discussing emissions with the US in the Strategic Economic Dialogue, that at least some in the Chinese government are serious.

But cutting carbon emissions without a plan to address water issues -- and other problems like soil contaminated with toxins -- is futile. Beijing needs to develop a plan that addresses the entirety of its environmental woes. For one, it has to mandate sustainable development, which will require strengthening the central government against the local governments. Cities can no longer be allowed to spring up in western China without Beijing’s knowledge -- the effects on water supply are simply too great. The government will also have to bring locally administered industries, which emit more pollutants and use more water than they report, under control. To aid these efforts, the Chinese government should also try to rally popular support around sustainable development. The Chinese public is tired of the water shortages, unsafe drinking water, and soil contamination caused by haphazard urban development. Xi Jinping could present environmental reform as the next chapter of China’s glorious history and as part of the new model of great power relations that he has touted.

Once it has popular support in place, China could make other major changes. First, it would be worth putting a halt to the south-to-north water diversion project -- perhaps even going so far as to undo the existing canal in eastern China -- and insisting on water and energy efficiency in the north instead. As experts have pointed out, simple measures like water recycling and water price increases could help immensely. This would likely lead to vociferous complaints from provincial officials and industrial barons, but that should be preferable to steadily alienating the southern swath of the country and allowing the root causes of the problem to persist.

Second -- and this too would lead to some political backlash -- Beijing should move to curb, and perhaps even stop, development in the country's most ecologically sensitive areas. The Chinese government needs to treat the protection of the Tibetan plateau as a key to national security, not an impediment to economic growth, even if that means finding other ways of easing social tensions in western China. One possibility would be to stanch the flow of Han migrants, which feeds the resentment that ethnic minorities often feel.

Beijing should also consult the platoon of conservation biologists, both Chinese and foreign, who have long been warning of looming ecological catastrophe. China's water security depends on a complex and subtle balance -- the forests that enrich the watersheds, the alpine grasslands that limit soil erosion, the relationships between myriad organisms which maintain healthy waterways -- that is extremely difficult to understand. The Chinese state may need to swallow its pride in reaching out to foreign experts, but that shouldn't be an impediment. China desperately needs to comprehend its environment in all its intricacy, and the country's officials should be open to reaching out to anyone who might be able to help. Even the diminutive pika, after all, has a critical role to play.

"Suicide By Drought", 18/07/2014, online at: <http://www.foreignaffairs.com/articles/141643/sulmaan-khan/suicide-by-drought>

BACK TO TOP

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❖ Troubled waters: the Mekong River crisis

Den Kroolong got the jolting news in a 6am phone call at his home in northern Thailand one day in December last year. His boat had disappeared. Being an experienced fisherman, he had left it tied up securely on the banks of the Mekong River, a few minutes' drive away.

But now a friend was calling to say something extraordinary had happened overnight to the river, which separates this part of Thailand from neighbouring Laos. It had suddenly become engorged by muddy, debris-filled flood waters and had risen by several metres. This was peculiar because December is in the region's dry season, when the Mekong is normally so placid and low that people grow vegetables along its banks for cash and paddle off the sandy beaches that emerge on its shores.

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“Troubled waters: the Mekong River crisis”, 18/07/2014, online at: <http://www.ft.com/intl/cms/s/2/1add7210-0d3d-11e4-bcb2-00144feabdc0.html#slide0>

BACK TO TOP

❖ 672 large dams in danger of devastating earthquakes

New Delhi: As many as 672 dams are located in India's most seismically active areas that are prone to the most devastating earthquakes, Jitendra Singh, minister for science and technology and earth sciences said on Wednesday. The dams are located in either seismic zone IV or V, he said in response to a question in Parliament. The seismic zoning map of India, prepared by the Bureau of Indian Standards, divides the country into four seismic zones from Zone II to the most vulnerable Zone V. India is home to more than 4,800 completed large dams, while 347 large dams are under construction, according to the National Register of Large Dams. The Central Water Commission is required to assess the potential vulnerability of a dam to seismic events and make recommendations for additional seismic investigation. "Considering the global advancements in geo-technical engineering and developments in design, research and construction of dams, nuclear power plants and hydro power projects would withstand seismic jolts through adequate safety measures," the minister said. In a country with more than 5,100 large dams (including those under construction) and 1,040 active faults covering 57% of land mass, there is always a possibility that a severe earthquake in highly seismic zones might affect the performance of a dam, said K. Jagan Mohan, an assistant professor at the Hyderabad-based Mahatma Gandhi Institute of Technology in a research paper titled Earthquakes and Dams in India: A Perspective. "In this regard, a discrete element modelling has to be carried out where the behaviour of structure can be observed from crack initiation to complete collapse of structure." "It is important that the government takes up studies regarding vulnerability of structures, to see aspects like capacity of reservoirs and the extent of damage that can be caused using the calculations from newly available models," Mohan added. Activists say that adequate safety measures should be taken. "Safety measures exist for dams, but not for the environment and people around. They have a disaster management plan for dams but they exist only on paper. Emergency plans include sending emails to the next station and blowing the siren to warn people," said Vimal, convenor, Matu Jan Sangathan. "But these are never followed," he added. The minister told the Lok Sabha that following the Fukushima incident, when a tsunami hit the Japanese nuclear plant in 2011, causing a meltdown, the government had directed safety reviews of all Indian nuclear power plants in operation and under construction. Safety review of Indian nuclear power plants carried out by task forces of Nuclear Power Corp. of India Ltd and Atomic Energy Regulatory Board found that Indian reactors were safe and had sufficient margins and features in their design to withstand extreme

natural events such as earthquakes and tsunamis. A set of guidelines for inspection of dams following earthquakes have also been outlined in safety and maintenance of the existing dams or reservoirs. The highest number of dams in high-intensity seismic zones were in Gujarat with 444 large dams, followed by Maharashtra with 170 large dams.

“672 large dams in danger of devastating earthquakes”, 17/07/2014, online at:

<http://www.livemint.com/Politics/L6b0BVncjWNnQKm7kILQMI/672-large-dams-in-danger-of-devastating-earthquakes.html>

BACK TO TOP

❖ California's big scare over water 'scarcity'

California plans to impose \$500 fines – daily – for anyone violating water bans, such as overwatering lawns. Such threats run against new thinking about water as abundantly renewable.

[California](#), the source of nearly half of US-grown fruits, nuts, and vegetables, has joined many other drought-hit areas with its first water-emergency measure. On Tuesday, state regulators approved daily fines of as much as \$500 for anyone who violates local bans on such activities as washing cars and watering lawns.

This new enforced ethic of conservation may serve a temporary goal of avoiding water “blackouts” in many cities. But it sends a message that water is a scarce resource – when it isn’t.

Like many places, California has not done enough with the water it already has. More of its used water – “gray water” – must be recycled. Storm runoff is not well collected for nondrinking uses. More underground storage is needed to reduce evaporation. Aquifers can be replenished. Water prices must rise to encourage efficient uses and provide investments in new sources.

Even the condensate of air conditioners can be reused.

Such steps would be made easier if communities saw water as abundantly reusable rather than in limited supply. This requires an attitude shift, not alarmist rhetoric or punitive fines. Yes, new ways of dealing with water may be politically difficult or expensive. But the same amount of water exists on the planet today as billions of years ago. And humans have a long history of adjusting their uses to the available water, from the Roman aqueducts to the vast canals of [Angkor Wat](#).

The idea of water as renewable rather than scarce was made clear in one of the many recent books about water, “The Big Thirst: The Secret Life and Turbulent Future of Water,” by journalist [Charles Fishman](#), who traveled the world to master this topic.

He writes:

“It’s easy to be optimistic about water because almost all water problems are solvable. When you meet the people, town by town and country by country, who are tackling water problems, you cannot help but be impressed by their energy, their creativity, their curiosity, their determination. The water

community has a real sense that water has been overlooked for so long that just grabbing hold of the problems in an honest way, and explaining them to the public, is a big start on solving them.”

Many places are far ahead in reimagining their uses and sources of water. [Las Vegas](#), one of [America](#)’s driest cities, has dropped its water usage by about a third and recycles much of its water. [Australia](#) has dealt with severe drought through widespread conservation measures.

But not enough is being done in places where water is “scarce.” A 2012 report by the [Natural Resources Defense Council](#) found only six of 36 states facing water supply challenges have comprehensive plans to adapt.

Being water conscious first entails seeing water as resilient, a resource to be borrowed, returned, and borrowed again. “If we’re going to be ready for a new era of water, we need to reclaim water from our superficial sense of it,” Fishman states.

He points out that there has not been a war fought over water for centuries. Humans have learned to work out their differences over water by better management and creative solutions.

“California's big scare over water 'scarcity'”, 17/07/2014, online at: <http://news.yahoo.com/californias-big-scare-over-water-scarcity-210704952--politics.html>