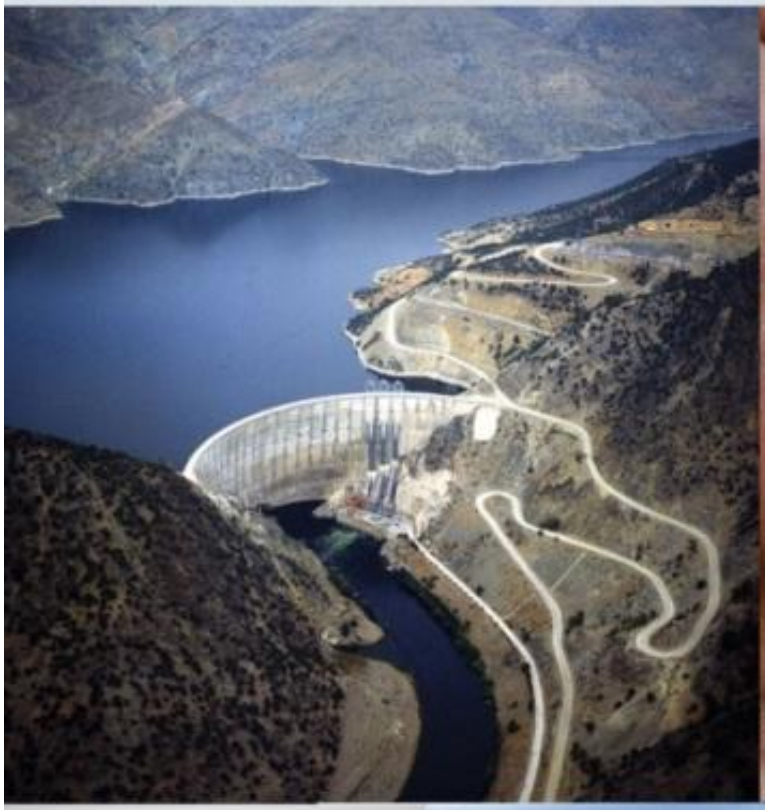


ORSAM WATER BULLETIN

Weekly Bulletin by ORSAM Water Research Programme

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





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22 October – 28 October 2012

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❖ British firms are invited to share in KRG boom

British companies are being invited to see the potential of investing in the Kurdistan region of Iraq at a special two-day conference in London.

On 14-15 November at the BIS Conference Centre, they will see how the Kurdistan Regional Government plans to improve its agriculture and water sector using over a quarter of a billion US dollars worth of private investment.

The conference, supported by UK Trade & Investment, will enable some of Kurdistan's largest companies, chambers of commerce, trade associations and senior government officials to meet and potentially partner with British producers of goods and services and expertise and consulting.

The Kurdish companies come from the agriculture and water resources sector (including livestock, poultry, vineyards, fruit farming), along with firms involved in the construction of dams, greenhouses, engineering, contracting, marketing and packaging.

Since the fall of Saddam Hussein in 2003, the KRG has pushed forward to create a stable and growing economy. The KRG is reviving its agriculture sector, allocating 50% of the region's land, and developing its water resources to become the breadbasket of Iraq again.

The region is rich in natural resources with five main rivers, 59.8% of the water flow staying in Kurdistan and 40.2% flowing into Turkey and Syria. Kurdistan has three large dams with the capacity of 10.5bn cubic metres and three smaller dams with the capacity of 6m cubic metres. Currently there are 14 dams under construction with 38 being considered.

Growth over this year is expected to be at an approximately 8%, with the UK boasting the fourth largest contingent of foreign companies registered in the region.

Speakers include the KRG Minister for Agriculture and Water Resources, the head of the Department of Foreign Relations, officials from the Kurdistan Investment Board, private sector representatives operating in the region, and the British government.

Alongside the conference, there will be the opportunity for one-to-one meetings with the government and with leading Kurdish company representatives, who are visiting the UK to meet British firms.

There will also be networking opportunities over lunch and coffee breaks. This event is free of charge and is funded by the Kurdistan Regional Government.

"British firms are invited to share in Kurdistan boom", 27/10/2012, online at:
http://www.gtglobaltrader.com/news/british-firms-are-invited-share-kurdistan-boom

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❖ Construction of Meghri HPP to begin in the next 10-15 days

In the near future in Meghri the construction of a new hydroelectric power station will begin near the Aras river, close to the border with Iran. This was reported by the Armenian head of the Armenian-Iranian intergovernmental commission, the Minister for Energy and Natural Resources of Armenia, Armen Movsisyan, who added that construction of the dam will begin in the next10-15 days.

"As the Iranian side proposed, in the next 10-15 days we will organize the ceremony of starting the construction of the Meghri HPP," Movsisyan said after the signing of the Memorandum of Understanding on the results of the 11th session of the intergovernmental commission.

The Iranian side expressed its willingness to increase funding for the project in order to address the rest of the issues for the early start of construction. "There is already a decision made by the Iranian government about raising the threshold for funding, and only small, private issues remain. We hope that in the near future we will see the start of construction," Iranian Energy Minister Majid Namdzhu said at the session of the commission.

The agreement on the construction of a hydro-electric power plant on the Aras river was signed between Armenia and Iran in 2007. It is assumed that two powerful hydro-electric power plants in the South Caucasus would be built in Meghri (Armenia) and in Karachilare (Iran).

Each of the two plants will produce 793 million kW/h per year. Preliminary construction costs will amount to about $323 million; an Iranian investment company will provide the funding for this.

"Construction of Meghri HPP to begin in the next 10-15 days", 25/10/2012, online at: http://vestnikkavkaza.net/news/economy/32987.html

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❖ Climate Change and Mideast Insecurity: The Hidden Connection

The remarkable silence of this year's presidential candidates on the issue of global warming was all the more notable during Monday's debate on foreign policy. For all the talk of violent threats to American security in Syria and North Africa, neither candidate connected them to a powerful contributing cause: climate change.

The National Oceanic and Atmospheric Administration concluded in 2011 that "human-caused climate change [is now] a major factor in more frequent Mediterranean droughts." That helps explain why Syria for the past five years has experienced what one expert called "the worst long-term drought and most severe set of crop failures since agricultural civilizations began in the Fertile Crescent many millennia ago."

An important article published by the Center for Climate and Security this year notes the drought -- which was compounded by government mismanagement of water resources -- plunged more than a million Syrians into extreme poverty and hunger. The famine prompted hundreds of thousands of people to flee their villages for the cities, at a time when the country's social infrastructure was already burdened by the strain of housing hundreds of thousands of Iraqi refugees.

The Assad regime's inept response to this social crisis helped fuel political protests that led to the country's civil war when the government rebuffed them with force. "Indeed," the authors note, "the rural farming town of Dara'a was the focal point for protests in the early stages of the opposition movement last year -- a place that was especially hard hit by five years of drought and water scarcity, with little assistance from the al-Assad regime."

Similar factors contributed to the earlier eruption of social protests across North Africa that produced the "Arab Spring," according to a study by researchers at the New England Complex Systems Institute (NECSI). They found a powerful correlation between high food prices and mass riots. As they pointed out, "widespread unrest does not arise from long-standing political failings of the system, but rather from its sudden perceived failure to provide essential security to the population." Sure enough, the protests that swept the Arab world began as the Food and Agriculture Organization's world Food Price Index peaked at nearly 240 in the winter of 2010-11, up from about 150 in 2009 and the low 100s earlier in the decade.

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More trouble may be brewing in coming months if this explanation is correct. The historic U.S. drought this summer, combined with droughts in Russia and neighboring food exporters, have spurred soaring food prices. The FAO's index hit 216 in September.

Any index reading over 210 represents a dangerously high level, according to the NECSI study. "Such a threat to security should be a key concern to policymakers worldwide," it warned. "While some variation in the form of unrest may occur due to local differences in government, desperate populations are likely to resort to violence even in democratic regimes."

"Climate Change and Mideast Insecurity: The Hidden Connection", 26/10/2012, online at:
http://www.huffingtonpost.com/jonathan-marshall/climate-change-food-prices_b_2007614.html

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❖ Security lens for climate change brings risks – academics

BRIGHTON, England (AlertNet) — Intellectual discourse over global climate change has veered from helpful to 'apocalyptic" – a change that may draw attention to the issue but also handicap efforts to take effective action on it, academics said at a University of Sussex climate security conference.

"In their battle to get climate change taken seriously, some well-known scientists replace cautious uncertainty, the hallmark of good climate science, with prophecies about the certainty of catastrophe," said Betsy Hartmann, a novelist and professor at Hampshire College with an interest in climate security issues.

The problem, experts said, is that environmental and climate issues, more often than not, will not get listened to by political leaders unless there is an imminent security threat.

"The glum reality is that governments tend to take security threats more seriously than any other kind," Hartmann said.

Emphasizing an apocalyptic viewpoint on climate change leads to a misinformed public that either fears doomsday or feels apathetic in the face of an insurmountable challenge, the experts said. The problem is that view can sway public opinion and lead to unsound policy, experts said.

Mike Hulme, a professor of climate change at the University of East Anglia, said the shift toward viewing climate change largely as a security threat also fits with deep-seated fears about the impacts of runaway climate change.

"With climate destabilized and with our vulnerability exposed," said Hulme, "all of our deep cultural and psychological fears are escaping, creating, out of this new necessity, the discourse of security."

This shift in focus has led to more apocalyptic images of climate change both in the media and academia. Hulme highlighted a Greenpeace report which likened climate change to a nuclear bomb and Hartmann pointed to the popularity of "apocalypse" themes in recent popular culture.

APOCALYPSE SELLS

"Dystopia sells, and kids are brought up on *The Hunger Games*," Hartmann noted.

Drawing links between climate change and conflict, however, should be undertaken with caution, as the evidence is not at all clear, experts said.

Hartmann in particular faulted academics who attribute the violence in Darfur to climate change. One problem with such attribution is that it allows Sudan's government to absolve itself from blame from its own role in the conflict.

"The fact that political violence in Darfur was cast in this way is nothing short of scandalous," Hartmann said. "For one, it plays right into the hands of the Sudanese regime."

Mark Zeitoun, an expert on water governance issues at the University of East Anglia, said the Israeli water crisis has been similarly reframed.

Water studies performed by the Israel Water Authority in 2008 primarily attributed the water crisis to climate change. Two different Knesset investigations in 2002 and 2010, however, de-emphasized climate change and claimed the crisis was political and manmade in nature.

Solely blaming climate change for the water crisis removes politics from the equation and absolves the government from blame, Zeitoun said.

"Water scarcity is constructed by the government officials and, in at least in one case, replicated by academics," said Zeitoun. "That scarcity message and narrative feeds the water security discourse very neatly, doesn't it?"

Similarly, current climate change outlooks also may be painting inaccurate images of the vulnerability – or resilience - of farmers, pastoralists, and the poor to climate change threats.

"We are being told to train our eyes on how climate change is likely to set poor people fighting against each other for diminishing resources," said Hartmann, "and when those resources run out, they'll be sent storming towards our borders as climate refugees."

In fact, climate pressures and resource scarcity can, in some cases, lead to improved cooperation over limited resources. And new research on climate-related migration suggests it may more closely resemble traditional migration patterns – usually taking place locally or regionally and often involving one family member who sends remittances home – than waves of international migration.

In a world where climate change is viewed largely as a security threat, "scarcity renders (affected people) either into victims or villains incapable of innovation or livelihood diversity and who are naturally prone to violence," Hartmann said. She pointed out that, in many cases, pastoralists engage in less conflict during environmental stress.

Hulme warned that people should not fall victim to believing that someone's behavior or character will be largely determined by climate pressures.

ALARMISM A GOOD THING?

However, Richard Falk, a retired research professor from the University of California, Santa Barbara, opted at the conference "to cautiously and ambivalently say a good word for alarmism."

Alarmism, Falk said, is born out of the global system's inability to deal with global problems like climate change. Most government systems are organized around state security, not individual human security. Raising alarm bells by linking climate change to security, he said, is one of the few ways to communicate global problems to state governments.

Alarmism has "been quite effective" in raising awareness of problems, but has ultimately been "very ineffective" in driving behavior changes to address it.

Speakers at the conference recommended keeping an eye on inaccurate rhetoric around climate security threats and challenging it.

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"If we want to build a different future, a democratic future, where justice, equality, and peace are the center of responses of climate change," said Hartmann, "we need to challenge the tall tales, identify whose interests they serve, and chart a practical way forward."

"Security lens for climate change brings risks – academics", 25/10/2012, online at: http://www.trust.org/alertnet/news/security-lens-for-climate-change-brings-risks-academics

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❖ This Week in History: Swamps, birds, water wars

In November 1958, JNF completed a seven-year project, draining the vast Hula lake and swamps, marking a huge engineering feat; but disastrous ecological repercussions soon became apparent

On November 1, 1958, the Jewish National Fund completed a large-scale drainage project in the Hula Valley, marking a huge engineering achievement for the nation. It soon became clear, however, that the drainage had severe unintended ecological repercussions.

Until the 1950s, the Hula Lake and its adjacent swamps covered up to 60 square kilometers of the Hula Valley. The lake was 5.3 kilometers long and 4.4 kilometers wide, extending over 12-14 square kilometers. Tens of thousands of birds inhabited the area, along with many species or rare fish and plants, making for a unique composition of flora and fauna.

Several reasons have been given for the state's decision to give the green light to drain more than 65 square kilometers of the natural wetland area. The two most widely-cited objectives at the time were to increase the amount of arable land and to eradicate malaria. Another benefit the government hoped to gain was the peat that lay at the bottom of the marshland, which it hoped to use as a fertilizer and for the chemical industry. Additionally, it hoped to maximize on the water, which was evaporating from the huge areas of marshland and would otherwise flow straight to the Jordan River and Lake Kinneret. Lastly, the state hoped to build a major road through the large area, which was inaccessible to traffic at the time.

The project began in 1951, and due to a general lack of environmental awareness both in Israel and abroad at the time, there was little resistance. Indeed, the Israeli government brought to fruition an idea that had been mulled by several former rulers of the land under the Ottoman Empire and the British Mandate. Projects to regulate the valley even stretch back to the Roman and Byzantine periods.

A few scientists and nature lovers, however waged a determined battle against the plans, and thus the Society for the Protection of Nature in Israel was born (SPNI) in 1953 under the leadership of Azariah Alon and Amotz Zahavi. Though the organization failed to halt the draining of the valley, it played an important role in the aftermath of the project.

Syria also opposed Israel's activities in the Hula Valley at the time, because the land stretched east to the Israel-Syria border, to an area considered disputed territory between the two sides. The project would strengthen Israeli control over the region, and according to Michael Brecher and Jonathan Wilkenfeld's book, A Study of Crisis. Syria contended that Israeli activities violated the 1949 Armistice Agreement which stated the Demilitarized Zone was a no-man's land. Israel meanwhile, maintained that the land fell under its jurisdiction according to the British Mandate maps. The dispute escalated as Israeli workers came under fire, for which Israel blamed Syria. Israel suspended work for a week while the matter was considered by the UN Mixed Armistice Commission (MAC). Violence increased as Syrians killed seven Israeli policemen and Israel retaliated with an airstrike. Both sides appealed to the UNSC, blaming the other for breaching the Armistice Agreement. Forty Israelis were killed in the conflict and some 100 were injured, many from heavy Syrian shelling of the area. According to *A Study of Crisis*, Syria also suffered heavy casualties. On May 8, 1951, the UNSC called for a ceasefire and the withdrawal of military troops from the area. The MAC mediated an agreement, and Israel resumed the project.

The JNF completed its seven-year project in November 1958, but in the coming years, it became apparent the consequences were environmentally disastrous. Though water levels increased by an estimated 28 million cubic meters per year, its quality was reduced by large amounts of nitrates and sulfates released by decomposing peat, which during the rainy season were washed into the Kinneret. Before the drainage project, the swamps had acted like filters, purifying the water. Moreover, the peat itself, once exposed, turned into highly flammable, infertile black dust. Strong winds sweeping the valley produced dust storms that in turn damaged agricultural crops and an entire area sunk some three meters. Over 100 animal species disappeared, numerous freshwater plant species became extinct, and many flocks of migratory birds found alternative areas to stop on their route between Africa and Europe.

Additionally, the eradication of malaria as one of the project's key objectives was later discredited, as it transpired that the disease was overcome by other factors, chiefly by the work of Israeli scientist Gideon Mer. Indeed, Dr. Chaim Sheba, Director-General of the Ministry of Health sent a letter to the Prime Minister's Office in November 1951, warning that the drainage operation may even increase the number of new infections and urging Prime Minister David Ben-Gurion to reconsider the matter. The government, however, did not heed the warning and went ahead with the project.

By the 1980s, it was apparent that the drainage had not produced the desired results and ideas of re-flooding part of the area emerged in a bid to rehabilitate the land. After years of SPNI campaigning,

the Hula Restoration Project came to life. In the early 1990s some 10 percent of the Hula wetlands were re-flooded, and a new and much smaller lake, Agmon, was created.

By 1964, the Hula Reserve was established, becoming Israel's first declared nature reserve. While the many species that were lost cannot be returned to life, the valley once again teems with birds stopping by on their journeys between Africa, Europe and Asia, with an estimated 500 million birds from over 400 species passing through the reserve each year.

"This Week in History: Swamps, birds, water wars", 28/10/2012, online at: http://www.jpost.com/Features/InThespotlight/Article.aspx?id=289552

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❖ Is the Dead Sea dying? Water loss continues at record rate

The Dead Sea is shrinking at a record rate, prompting calls for Israel and Jordan to stop fertilizer makers from siphoning so much of the water whose restorative powers have attracted visitors since biblical times.

The salty inland lake bordering the nations dropped a record 1.5 meters (4.9 feet) over the last 12 months because of industry use and evaporation, the Hydrological Service of Israel said. That's the steepest Dead Sea decline since data-keeping started in the 1950s. Half the drop was caused by Israel Chemicals Ltd. and Jordan's Arab Potash Co., said Gidon Bromberg, Israeli director of the Friends of Earth Middle East.

"This is unacceptable and speaks to the urgency of the need to force industry to change their extraction process," Bromberg said in an interview from Tel Aviv.

The makers of potash, a raw material for fertilizer, are competing for water with a centuries-old tourism industry on the Dead Sea, Israel's most crowded leisure destination last year with 857,000 visitors. That's more packed than Tel Aviv and Eilat's beach resorts, the Tourism Ministry said.

It isn't only pumping causing the degradation of the Dead Sea, a biblical refuge for King David. Agriculture diverts water for crops from the Jordan River that feeds into the Dead Sea, adding to a decline that's created potentially life-threatening sinkholes by the shore.

On the north shore of the Dead Sea, 75 kilometers (47 miles) long 50 years ago and 55 kilometers now according to the environmental group, spas offer the medicinal benefits of mud baths and mineral springs. Those wanting to bob in waters about 10 times as salty as the ocean must either ride in a cart for several minutes or take a hike that's a little longer.

Dead Sea Works, owned by Israel Chemicals, denied any increased pumping, saying it has used 150 million to 170 million cubic meters a year from the sea for two decades.

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"The main reason for the declining sea level is the increased usage of the water that used to flow to the Dead Sea in the past, especially from the Jordan River, by all countries in the region," the company said in an emailed statement.

It's already paying to use Dead Sea water through royalties that it said have doubled since the beginning of the year, Dead Sea Works said. Israel Chemicals agreed in December that royalty payments on potash production above certain levels would double to 10 percent.

"Charging the Dead Sea Works per water usage by cubic meter will not affect the pumping volume since the amount of pumping is a function of the evaporation ponds' surface area and changing climate conditions alone," it said.

"We're keen on doing all possible to preserve the Dead Sea, which is shrinking annually," Issa Shboul, spokesperson of Jordan's Ministry of Environment, said by phone.

"We regularly request the potash companies and other companies that benefit from the Dead Sea water for their business to adopt the latest technological advances to reduce the negative impact on the Dead Sea level," Shboul said.

Jordan and Israel should reinvigorate a joint committee that hasn't met for more than a decade to work on developing extraction techniques that use less water, Bromberg said.

Israel's Environment Ministry said it's working on a proposal with the government that examines the use of all resources, including phosphates and mineral water.

Israel allocated 850 million shekels ($223 million) this year to rehabilitate and develop the Dead Sea's tourism potential. Spencer Tunick's group photo in 2011 of naked people at a beach raised awareness of sinkholes and shrinking shores of the lowest place on Earth at 414 meters below sea level.

About one-third of the Dead Sea's surface area has disappeared and sinkholes are increasingly common as the waters shrink amid drought, agricultural diversion, largely from the Jordan River, and pumping to extract minerals for fertilizers.

Jordanian, Palestinian and Israeli policymakers, under the auspices of the World Bank, have been examining various plans to halt the Dead Sea's decline. These include two tunnels and a pipeline that may cost as much as $10 billion. These would transfer water about 110 miles from the Red Sea and brine from desalination plants to keep Dead Sea levels stable.

Preliminary reports from the Red Sea-Dead Sea Water Conveyance Study Program have shown that mixing sea water, desalination brine or both with Dead Sea water entails risks, especially when amounts exceed 300 million cubic meters a year.

The Dead Sea has a current annual deficit of 700 million cubic meters, Bromberg said. The risks include gypsum and other microorganism growth caused by mixing different types of water.

Major parts of the study are expected to be completed and posted online by the end of the month, according to an official with knowledge of the report. These include drafts of final reports on alternatives, feasibility and environmental assessments.

More can be done to stop the deterioration to an area home to rare wildlife including leopards, ibex and the griffon vulture, Bromberg said.

"We are calling on Jordan and Israel to introduce legislation that would require Dead Sea waters to have a price, with pumping rates and licensed, monitored meters," he said. "All other sources of water are extracted under license."

The beach photographed by Tunick meanwhile has changed beyond recognition in a year with salt-encrusted rocks more common now as Dead Sea waters recede, environmentalists say.

— with assistance from Randall Hackley in London and Mohammad Tayseer in Amman, Jordan.

"Is the Dead Sea dying? Water loss continues at record rate", 28/10/2012, online at: http://www.independent.co.uk/news/world/middle-east/is-the-dead-sea-dying-water-loss-continues-at-record-rate-8229546.html

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About one-third of the Dead Sea's natural surface area has disappeared and sinkholes are increasingly common as the restorative waters shrink amid drought, diversion of water for agriculture, largely from the Jordan River, and industry pumping. Photographer: Menahem Kahana/AFP/Getty Images

Sinkholes mark the dried-out center section of the Dead Sea as a canal moves water from the northern to the southern sections. Photographer: David Silverman/Getty Images

Dead Sea Works denied it has increased pumping. It said in an e-mailed statement that it has used 150 to 170 million cubic meters a year from the sea for the past two decades. Photographer: David Silverman/Getty Images

"This is unacceptable and speaks to the urgency of the need to force industry to change their extraction process," Bromberg said in an interview from Tel Aviv.

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Medicinal Benefits

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'Negative Impact'
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Sinkholes Common
About one-third of the Dead Sea's surface area has disappeared and sinkholes are increasingly common as the waters shrink amid drought, agricultural diversion, largely from the Jordan River, and pumping to extract minerals for fertilizers.
The initiation of charges for pumping may affect Arab Potash, which has outperformed the Amman SE General Index this year, rising 8 percent compared with a 4.6 percent drop of the measure. Net income has advanced for three years to $423 million in 2011. The Jordanian company had no comment to the environmental group proposals after being called several times.
Israel Chemicals has advanced 16 percent this year compared with a 10 percent gain by the TA-25 index as corn prices climbed in the U.S. drought. The shares fell 2.1 percent today to almost a six-week low. Farmers apply potash to help strengthen roots and make crops more drought-resistant. The company had net income of $1.5 billion last year.

Mixing Waters
Jordanian, Palestinian and Israeli policymakers, under the auspices of the World Bank, have been examining various plans to halt the Dead Sea's decline. These include two tunnels and a pipeline that may cost as much as $10 billion. These would transfer water about 110 miles from the Red Sea and brine from desalination plants to keep Dead Sea levels stable.

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More can be done to stop the deterioration to an area home to rare wildlife including leopards, ibex and the griffon vulture, Bromberg said.

"We are calling on Jordan and Israel to introduce legislation that would require Dead Sea waters to have a price, with pumping rates and licensed, monitored meters," he said. "All other sources of water are extracted under license."

The beach photographed by Tunick meanwhile has changed beyond recognition in a year with salt-encrusted rocks more common now as Dead Sea waters recede, environmentalists say.

"Dead Sea's Record Loss Grows With Potash Makers Demand", 23/10/2012, online at: http://www.bloomberg.com/news/2012-10-22/dead-sea-s-record-loss-grows-with-potash-makers-demand.html?utm_source=Circle+of+Blue+WaterNews+%26+Alerts&utm_campaign=a20e1cad1b-RSS_EMAIL_CAMPAIGN&utm_medium=email

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❖ Once Pristine, Now Polluted, There's Hope Yet for Jordan River

It has been more than 60 years since Israeli eyes witnessed this engineering marvel. The massive metal block makes any man standing next to it seem small. The instrument is so large that one must stand next to it to appreciate how wild and rich with water the Jordan and Yarmuch rivers must have been, in order to surround and create electricity in the power station build by the "Old Man from Naharayim" [as Pinhas Rutenberg, who built the power station, was nicknamed]. And how small and pathetic those rivers are today.

A massive river is required to set in motion an electric power station to make it create electricity. The Jordan River was once that massive. Each year, 1.3 billion cubes of water flowed through it — a quantity almost identical to all of the drinking water Israel uses for household, agricultural, and industrial purposes, together. But it hasn't been that way for almost 60 years. Israel, Jordan and Syria built dams at the outlet of the Sea of Galilee, and dams were erected at the Yarmuch and the Jordan, stopping water from the streams that once flowed into the river from the mountains from the east. Almost all of the water that once flowed from the lower part of the Jordan to the Dead Sea has disappeared.

As if that weren't enough, instead of freshwater, Israel poured into the Jordan huge amounts of raw sewage and partially treated sewage, along with saline wastewater from fish farms. From the villages along the river on the Jordanian side, along with the Palestinian villages on the Israeli side, wastewater is also poured into what is left of the river. The results can be seen along the way, and of course in the Dead Sea, where the shortage of water, along with industrial activity of the Dead Sea factories in both Israel and Jordan, result in an ongoing decrease in its water level.

Gidon Bromberg, Israeli director of Friends of the Earth, an environmental organization operating in Israel, Jordan, and the Palestinian Authority, along with his Jordanian counterpart Munqeth Mehyar, believe that the Jordan can be rehabilitated. They believe it is possible to bring together the governments of Israel and Jordan to cooperate, transfer large amounts of water into the river, and turn it, with the help of residents, into a tourist marvel that will bring economic growth.

Five years ago, photographer Amit Shabi and I set off on a long journey along the banks of the Jordan on the Israeli side and the dying Dead Sea shores. It was a sad journey, the conclusions of which were depressing. Five years later, we wanted to see how it looks from the other side — how

Jordan treats this river, across which only two paces through shallow water suffice to reach the neighboring country. Along with Bromberg, Meyhar, and the contacts they and organization representatives established, we managed to secure permits to reach the areas to which the Jordanian Army, like its counterpart on the Israeli side, generally forbids access, at the river itself.

Anyone passing by Degania Dam, on the road between Tsemach and Tiberias [in the northern district of Israel], will see the Jordan flowing from the lake southward. Not many people know that the pure and clean water continues to flow just a few more kilometers. After the baptism site that attracts hundreds of thousands of pilgrims per year, and the popular canoe site where that clean water can be enjoyed, an earth dam and pumps are set up to transfer water to the kibbutzim of the Jordan Valley. Beyond the dam — called the Alumot Dam — a different type of flow begins. Millions of cubes of raw sewage are transferred from there southward, joined by the contents of a pipe carrying water from different saltwater springs, whose flow into the Sea of Galilee is prevented.

A string of dams

Not far from there, barely 7.5 million kilometers, below the road that leads from Tsemach to al-Hama, is a closed Jordanian site under military guard. There, the Yarmuch waters reach a massive dam, and are diverted to a canal that goes into a mountain shaft. This dam, Adassiya Dam, is the last in a string of dams that were set up by the Syrians and the Jordanians on the Yarmuch. Almost all of the water that reaches it is diverted to the Abdullah Canal, the Jordanians' national water carrier. As we stand there, under the watch of a Jordanian officer, and see the Yarmuch waters from the northeast flowing into the mountain shaft, and the wide and dry channel of the Yarmuch where 450 million cubes of water once flowed southward each year, Bromberg says glumly to his colleague: "That's your Alumot Dam, Munqeth."

Five years ago, we spoke with Amizur Boldo from the Jordan Valley, who was considered for years a mythical Nature and Parks Authority inspector. He and Abu Riad from the village of Karmiyeh in Jordan have never met. They don't even know of one another. But they tell the same story.

"Until before they closed the water, the river was big and strong," Abu Riad recalls. "It was wide and deep. It had clean water and we could drink. We would swim in the river, fish. Boy do I miss the taste of those fish. It was a place where couples in love would come and sit. We did everything in the river. But now the river is very sad. We once couldn't cross it because of the strong current; the river was some 50 meters wide. And today? It's barely five. Small children sometimes accidentally cross it

over to the Israeli side. Sometimes my children say, 'Are you sure there was once water in the river?'"

Boldo is almost 70 years old, and only recently retired from the Authority. Abu Riad has land on the banks of the river. He is 71, has been a farmer for 55 years , and mostly he cannot understand why he can't use water from the river to irrigate his fields, like before. "We could once use the water for irrigation, we would take out the water and transfer it to the fields. There were orchards here. We would grow oranges and lemons along the river. Bananas. Today there isn't enough water for these kinds of crops, and we grow other things. We can't use the river's water; it's too salty and polluted," he says. When the Jordan was a healthy river, many types of plants were grown along its banks on both sides. Researchers like Lunz Weig, who were on research delegations that took challenging rafting trips down the Jordan River at the end of the 19th and beginning of the 20th centuries saw — just like in the song "Elad Yarad El Hayarden" [Elad Went Down to the Jordan] — steppes, poplar trees and tamarisk trees that provided shade along the banks. Reeds, papyrus, and cane adorned the river, along with nerium oleander and other types of plants. The Jordan was a source of life. Many fish swamp along it, as did water snakes, turtles and frogs. Most of the species living in the river didn't survive the pollution and water shortage. Along the river, on both sides, many animals that once thrived are endangered. There were even once tigers and cheetahs here. Throughout the years, people spotted wolves, coyotes, hyenas, swamp cats, wild boars, lutras, rabbits, hedgehogs and porcupines. As the years when on, their numbers dwindled, and some of them are no longer found near the river.

After Naharayim, access to the river on both sides is limited for military reasons, and only farmers and special permit holders are allowed access. This is also one of the reasons the neglect didn't seem to bother anyone for years. That's how it goes when you can't see and you can't smell [what is taking place]. Most of the plants that grew along the Jordan also disappeared, except for the cane, which manages to thrive even in polluted waters, and the tamarisk, which can live in saltwater and take over everything. Other water ferns and species also disappeared. The convenient access we had to the banks has been replaced by thicket that is practically impassable, and when we try to go down from the fields to the river, whose swishing we can hear in the distance, we have to forcefully clear the route. In the thicket, we can see actual "stairs" in the earth. Each step signifies the former width of the river. When we finally succeed in traversing many meters of jungle, we can't help but be disappointed: "Gentlemen, this is the great Jordan," Bromberg says sadly as we stand before a

pathetic stream, two or three meters wide. When Munqeth dips a stick into it, we discover that its depth doesn't exceed more than half a meter. That's what's left.

Laundry in the national water carrier

Juma'a, 41, stands in his field on the bank of the river. He watches, smiling, our attempt to clear a path through the thicket. He gave up long ago. He inherited the land from his father, but today there are no more orchards here. He grows peppers, potatoes, zucchini, tomatoes, and okra. In areas further north, just across from the Jordan Valley in Israel, there is more rain, and there are still orchards and plots that require more water.

The river's water is beyond the thicket but doesn't touch it. "We don't touch [the water] because it will ruin the crops. If only we could take water. It's closer and doesn't cost money," he says. His generation wasn't exposed to the wide river, and because of the paltry rainfall in the last few years, even flash floods are no longer. And yet, there are people on both sides who steal even the polluted and saline water water from the Jordan. You can see pumps lowered into the river on both sides, drawing water from it. "Maybe there are those who are trying to mix the water with clean water, but that's not good water," says one of them.

Under these circumstances, it turns out that the price of land next to the river is also a lot lower. More expensive land can be found near the Abdallah Canal. The canal is one of three central water sources for Jordanians. The transfer the water they took from the Yarmuch from north to south, and under the supervision of the Jordan Valley Authority (JVA), they are allotted water. The water flows once a week. On other days people must rely for their fields and homes on water tanks, or on agricultural catchment. In the absence of a river to be accessed and enjoyed, the canal isn't just an elixir of life, but also a "hangout" spot. At the end of the day, after the intense heat that encompasses the valley on both sides of the border, the village youth swim in it. On the breached fence, laundry hangs.

The farmers say that today, a lot less water flows through the canal than in the past. They blame Israel and Syria. "Since the peace agreement, the Syrians are punishing us. They took our water," one of them says. Government representatives in Jordan also say that this is the situation. "The Syrians aren't meeting the agreements [they made] with us, and their dams stop most of the water," says one of them. Despite the fact that the farmers blame Israel, in accordance with the peace agreement, Israel transfers to Jordan between 30 and 50 million cubes of water annually. Last week, it was possible to see large amounts of water flowing from the pipe that goes from the Sea of Galilee straight to the Abdullah Canal.

In Israel, change is already coming

Following long years of struggle and pressure from environmental groups, including Friends of the Earth, Israel is expected to finally stop directly polluting the Jordan. In another half a year or so, a large purification facility is supposed to launch operations, which will stop the transfer of wastewater at the Alumot Dam. The wastewater that comes from the Beit She'an area is being treated, and they hope also to treat the runoff from the fish farms. At present, plans are in preparation to rehabilitate the banks of the river, and pave paths for bicycles and hikers, along with lookout and resting spots, and routes that will enable access to the stream. In the absence of one government authority, like the one established for the Kishon and the Yarkon rivers, two rehabilitation plans are being prepared — one for up until Naharayim, and the second south of Naharayim, up until Nahal Bezek south of Beit She'an. The two are not necessarily in full cooperation.

The main problem is that even if there are plans for environmental and landscape rehabilitation, that won't ensure there will be water in the Jordan. Israel's Water Authority is prepared to pour into the Jordan only 30 million cubes of water. Half of that will be water that will be transferred for the first time in 60 years from the Sea of Galilee on a regular basis, and half will come from the salty carrier that will continue to flow. In practice, the amount won't exceed the amount of water that flows today. Pollution will lessen but the salinity is likely to increase.

Bromberg says that in order to rehabilitate the Jordan and begin to address the problem of the dying Dead Sea, 250 million cubes of water need to be transferred, and with the extent of planned desalination, it's possible. "Even what is happening today wouldn't have happened without organizations like us. We put a lot of pressure, also internationally, for them to acknowledge the need to deal with the Jordan and what the shortage of water is doing to the Dead Sea. It's a good start, but there's a long way to go," he says. Recently, they succeeded in securing the establishment of a forum of parliamentarians from Israel, Jordan, and the Palestinian Authority, who will attempt together to push the governments to rehabilitate the river.

In Israel there are fears, which at present appear to be justified, that if they transfer more clean water, it will just be pumped out along the way. The minister in charge of the JVA, Sa'ad Abu Hammour, whose agreement to meet with journalists from Israel was unusual, says, "On our side, we presently have no master plans for the river, but we don't need a plan. Our vision is for more water to pour into the river." He expects Israel to transfer the water, and has a hard time promising that agricultural water won't be pumped out. But he expresses optimism: "We have a law in Jordan and no one is

allowed to pump without a permit. That is a law that can be enforced." His statements suggest that the Jordanians may not be there yet, but they are also starting to make progress.

Next week, Abu Hammour will, for the first time, sit with representatives from the Israeli Water Authority to discuss water in the southern Jordan, through the joint committee that deals with the water issue as a result of the peace agreement. According to Bromberg, "From our perspective, it is practically a revolution. For years, we knocked on doors in Jordan, Israel, and the [Palestinian] Authority. We were told we were dreaming. In the past, they didn't even agree to sit and talk about the water issue. Ultimately, it is money that will talk. This river has huge tourism potential and it's good for everyone. It will take more time, but we are starting to yield fruits."

Today, the only site that attracts tourists on the Jordanian site is the baptism site for Christians at Qasr al-Yahud. This site was established facing the Israeli site, where tradition has it that Jesus was baptized in the river. The polluted water that flows there was one of the sources of pressure that Bromberg and his partners used to bring about the rehabilitation of the Jordan. Now they are trying to prove to the Jordanians, with the help of the eco-park they established, that it is possible to rehabilitate natural territory, which would mean economic advantages for the population. "The farmers are the poorest people here, and as long as the situation on the ground remains [as it is], that will [continue to] be the case. The rehabilitation of the river and development of tourism will create an alternative."

Signs of optimism

Since we wrote the article five years ago, the Dead Sea water level went down by another seven meters or so, and the water retreated by another ten meters from the shoreline. Just this year, it dropped by a meter and a half — the largest drop ever. The shortage in water influences the river and the sea, the latter having once been fed regularly by the former. In the absence of agreements on expanding the amount of water to be transferred into the Jordan, it's hard to be optimistic. In these five years, only between 50 and 100 million cubes reached the Dead Sea, as opposed to 6.5 billion cubes that would flow into it a few decades ago. And still, it's possible to detect signs of optimism. The water that will flow through the Jordan is expected to be far less polluted, and maybe, as Bromberg believes, that is the first significant step that will eventually enable the future transfer of more substantial amounts of water.

The park that will lead the way: How tourism will rehabilitate the Jordan

Whoever looks hard from Beit She'an eastward can see on the other side of the border, just a few minutes' drive away, the eco-park that Friends of the Earth has established. The first field school [in Israeli terms], if you will, in Jordan. After extensive convincing, the Jordanian government agreed to give them 100 dunam of uncultivated land. "We decided to test a pilot that would show how the rehabilitation of land can contribute to the population," says Bomberg.

The territory was fenced, developed, and trees were planted. "In a botanical survey that we did, we discovered that there are 150 types of flowers and plants, some of which haven't been seen in the area in areas. We recognized dozens of types of birds and mammals," says Abdel Sultan, a member of the organization who is responsible for the area.

The Jordanians saw that it was good and agreed to give the organization another 2,600 dunam, and the park, which also has huts and campgrounds, attracts thousands of visitors every weekend.

The territory is on the ravine of the Ziglab stream, where some 50 years ago, the first Jordanian dam was established, preventing water from flowing from the mountains into the Jordan River. There are now ten more in Jordan, and the organization believes that this rehabilitation could serve as an example in the future.

The grandiose tourism plan that they are presently drafting entails rehabilitating the power station site in Naharayim, which was destroyed in 1948, when its operation came to a halt. The territory is part of the Peace Island, which was established as part of the peace deal, to which both Israelis and Jordanians are supposed to enjoy total access without passport requirements. Today, Israelis can only reach the dams, and nobody goes to the power station, except the Jordanian Army, with permits. The plan is to establish a large bird watching park on the site, where the lake that fed the power station stood, which will attract tourists to accommodation sites that will be established there. Such a regional project could attract, they believe, many donations and investors, and speed up moves critical to the rehabilitation of the river.

"Once Pristine, Now Polluted, There's Hope Yet for Jordan River", 22/10/2012, online at: http://www.al-monitor.com/pulse/culture/2012/10/saving-the-jordan.html

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❖ Irrigation Pioneer Wins World Food Prize

A researcher who helped make crops grow in dry land areas received the World Food Prize last week. Daniel Hillel was recognized for his work in developing what is called "micro-irrigation" or "drip irrigation." It has made farming possible in places where there is little rainfall or water.

Daniel Hillel's farm near his home in Israel shows his ideas at work.

"Each tree row is fed by these plastic tubes that drip water at the base of the tree."

Watering plants drop by drop has changed agriculture by reducing the amount of water needed to grow crops.

Jan Hopmans is a hydrologist at the University of California at Davis. He studies water-related issues in society. He says farmers now depend on drip irrigation in many areas, including vineyards in Spain, onion fields in Africa, and even farms in the United States.

"We in California grow about fifty percent of the fruits and vegetables of the continental United States. And the reason that is possible is because of, indeed, these drip and micro-irrigation techniques."

The World Food Prize Foundation says Daniel Hillel was born in California at the beginning of the Great Depression. After his father died, his mother moved the family to Palestine, where her parents lived. The area eventually became part of the state of Israel.

Daniel Hillel got his start in dryland farming as a settler in Israel's Negev Desert in the nineteen fifties.

"The issue was efficient use of water. Because land is available. It's extensive. Water is limited."

Desert farmers were not able to push water through irrigation canals to their crops, the way farmers have since ancient times. So Mr. Hillel and others gave plants just what they needed, just where they needed it.

"The idea was to apply the water little by little, the way you spoon-feed a baby."

The method worked so well that soon Mr. Hillel was traveling the world, showing others how to do it.

Experts say drip irrigation is an idea whose importance is growing, as climate change and rising population stretch water supplies in many parts of the world.

"This is where water use, water availability, water-use efficiency and climate change and crop

production all converge. And this has been really the essence of my career."

"Irrigation Pioneer Wins World Food Prize", 26/10/2012, online at:
http://learningenglish.voanews.com/content/irrigation-world-food-prize/1531373.html

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❖ The Dead Sea Is Disappearing

Scientists and bureaucrats alike are very concerned about the Dead Sea, that super salty, religiously famous lake that lies on the border of Israel and Jordan. It's shrinking at an alarming rate and nobody knows what to do. The body of water that served as a refuge for King David in Biblical times has dropped a record 4.9 feet in the last year, and the disappearing water is showing no signs of slowing down. As a point of comparison, the world's oceans that are rising at record rates have only gone up 4 to 8 inches in the past *century*. If we don't do something soon, there's a distinct chance that the Dead Sea as we know it could just disappear.

The reasons for the sinking sea are pretty straightforward. Experts say that half the drop has been caused by industry, specifically Israel Chemicals Ltd and Jordan's Arab Potash Co. The Dead Sea's waters contain ten times more salt than the oceans, a fact that makes its waters perfect for manufacturing potash, a basic ingredient in fertilizer. As the chemical companies pump out the salty, profitable water for potash, the local agricultural industry diverts water from the Jordan River that feeds the Dead Sea to their fields of crops.

Agriculture and industry are important, but aside from the religious implications, the disappearance of the Dead Sea is causing some really serious geological problems. As the Dead Sea has lost over one third of its surface area, sinkholes have become increasingly common in the region. And it's not a cheap problem to fix. One to reverse the negative flow by using two tunnels and a pipeline to keep the sea full would cost $10 billion. It's not so simple as pumping a bunch of sea water or even fresh water. Since the Dead Sea's composition is so unique, any change in salinization would deeply affect the local ecosystems.

This puts the locals in a real pickle. On one hand, the Dead Sea's waters is helping to keep their people fed, and the sea itself provides a much needed flow of cash from tourism. On the other hands, they're on track to destroy the very commodity that's helped the region to thrive. To be really cynical about the whole thing, though, the Dead Sea's not going to disappear tomorrow. Might as well wait around for science to invent a solution. Like we're doing with the world's global warming problem. That's going real well.

"The Dead Sea Is Disappearing", 23/10/2012, online at: http://www.theatlanticwire.com/global/2012/10/dead-sea-disappearing/58279/

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❖ Zarqa health inspectors close 12 water desalination plants

ZARQA — The Zarqa Health Department on Wednesday closed down 12 water desalination plants in the governorate, 22km east of Amman, for health violations and referred the owners to court.

Turki Kharabsheh, head of the department, said inspectors collected water samples from the plants for testing at the Ministry of Health labs, where it was discovered that they were polluted and did not meet health requirements

"Zarqa health inspectors close 12 water desalination plants",Jordan Times, 25/10/2012, online at: http://mideastenvironment.apps01.yorku.ca/?p=6147

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❖ Impact of climate change on water resources in focus at Amman workshop [EU info centre]

A three-day regional training to develop the capacity of national and local water practitioners from the southern Mediterranean to undertake immediate precautionary measures towards the adaptation of the water sector to potential negative impacts of climate change, was recently conducted by the EU-funded project 'Sustainable Water Integrated Management – Support Mechanism (SWIM-SM)' in Amman, Jordan in collaboration with the 'Horizon 2020 Capacity Building –Mediterranean Environment Programme (H2020 CB/MEP)'.

A SWIM press release said the training, which took place from 3 to 5 October 2012, aimed to meet the following aims:

· Raise the awareness of participants on the potential impacts of climate changes on water resources in the region, its socio-economic and environmental consequences,

· Increase their understanding on the degree of vulnerability particularly to increasing drought and flood events,

· Make the case for adopting the no-regret actions approach as the appropriate and immediate means for the water sector to adapt to climate change,

· Introduce appropriate approaches for planning, strategizing and developing no-regret actions measures, plans and policies, with a special focus on drought and flood management,

· Review capacity, political commitments and measures needed for the creation of an enabling environment for the implementation of no-regret actions including institutional, legislative and financial needs,

· Identify and discuss appropriate approach and practices for mainstreaming no-regret actions into IWRM policy frameworks,

· Identify the optimal communication and public participation strategies to enhance the role of communities in designing and implementing no-regret water management measures.

Sustainable Water Integrated Management (SWIM) is a Regional Technical Assistance Programme launched by the European Commission, with a total budget of approximately €22 million, to contribute to the extensive dissemination and effective implementation of sustainable water management policies and practices in the Southern Mediterranean Region. The Programme carries forward the results achieved by two earlier EC regional programmes, SMAP (I, II and III) and MEDA Water. SWIM consists of two major Components, which are inter-related and complement each other: a Support Mechanism funded with a budget of €6.7 million and Demonstration Projects funded with a budget of €15 million.

"Impact of climate change on water resources in focus at Amman workshop [EU info centre]", 23/10/2012, online at: http://mideastenvironment.apps01.yorku.ca/?p=6140

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❖ Local official: Israel destroys 5 water wells in Jenin

ENIN (Ma'an) -- Israeli forces destroyed five water wells in a Jenin village on Wednesday, claiming the structures were unlicensed, a local official said.

Muhammad Fahmi Maree, head of a local agricultural association, told Ma'an that an Israeli bulldozer, accompanied by military vehicles, destroyed the wells in Kafr Dan village.

Israeli authorities did not give the villagers any prior notification about the demolition, Maree said, adding that Israeli forces also destroyed a water pump.

Jenin governor, Talal Dweikat, told a Ma'an reporter that by destroying water wells Israeli authorities are targeting the Palestinian economy.

He called on human rights groups to help end Israeli aggression against Palestinian farmers.

"Local official: Israel destroys 5 water wells in Jenin", 24/10/2012, online at:
http://www.maannews.net/eng/ViewDetails.aspx?ID=531724

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❖ The Red Sea-Dead Sea Canal Project

A study by the World Bank on the impact of a projected canal linking the Red Sea with the Dead Sea in Jordan may put an end to the future of one of the most controversial regional development projects in Jordan and with the neighbouring countries sharing the coasts of this historic sea, as stated by Jordanian specialists.

Environmental Researcher-activist Pater Wordum has argued that "We are all waiting for the World Bank final study on this project, and after that we can examine proposals of implementation. " He is also hopeful that the Bank would publish this study in a month's time and would post it on its website because it is of interest to everyone.

The regional canal project that links Jordan with Palestine and Israel has evoked divergent political and environmental viewpoints in support and in rejection of the project ever since its presentation in the 2002 e Johannesburg summit. This was because it is viewed as one strategic solution to the acute water scarcity in Jordan and also a solution to the several environmental hazards faced by the Dead Sea, in particular and the region, in general.

While it is opposed by some politicians because it would lead to normalizing relations with Israel, others support the project because it provides one of the few solutions to water problem in this Arab country. Environmentalists opine that it would affect the coral reefs of the Red Sea and would aggravate pollution of the environment by the pipes which will convey the water.

Wordum agrees that the project involves environmental hazards, including among other things, the mixture of the waters of the two seas which are of different salinity and composition combinations. "We don't know how this problem could be tackled," he said. "We have no other option than desalination of the sea water for addressing our water drinking shortage in Jordan," said Saad Abu Hamour, the Secretary-General of the Jordan Valley Authority. "Potable water is a priority in Jordan and we are trying to secure it by linking the two seas," he said, adding that the project's environmental effects, such as the water mixture, can be overcome with engineering methods in a way that the nature of the waters would not be affected and would not pose a health hazard to the consumers.

The project, which will be implemented in three phases, is estimated to cost about 10 billion US dollars. Hamour says Jordan alone cannot provide this fund and the international community must stretch a hand for carrying out this project because it concerns the entire international community as it involves religious and creed dimensions that touch of the feelings of millions of people on Earth. Jordan is one of the world's four poorest countries with regard to water as it produces around 880 billion cubic meters distributed over drinking household consumption and other economic activities and agriculture which alone consumes 58% of total water in Jordan and largely depends on ground water.

The Secretary-General of the Ministry of Water, Basim Talfah says the water sector in Jordan requires investments of 1.5 billion US dollars to cover the deficit in this vitally important sector alone.

"The Red Sea-Dead Sea Canal Project", 22/10/2012, online at:
http://news.sudanvisiondaily.com/details.html?rsnpid=215389

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❖ UFZ Is Breaking New Grounds In Water Management

Project Implementation Office established at the Jordanian Ministry of Water and Irrigation

Amman/ Leipzig. Following an initiative proposed by Jordan's Ministry of Water and Irrigation, the Helmholtz Centre for Environmental Research (UFZ) and the Jordanian Ministry of Water and Irrigation are currently developing an extensive programme designed to improve water management in Jordan. The proposed decentralisation of sanitation and reuse of water is designed to significantly alleviate the issues of water scarcity and groundwater protection that Jordan faces recently. During this process it is important to sustainably align fundamental social conditions as well as political and administrative standards with wastewater treatment technology requirements. During her visit to Jordan on 21st October, Annette Schavan, Federal Minister of Education and Research, has together with Jordan's Minister of Water and Irrigation, officially inaugurated the Implementation Office that has been established for this purpose at the Jordanian Ministry of Water and Irrigation.

With funding from the German Ministry of Education and Research (BMBF) under the "Integrated Water Resource Management" sponsorship programme (02WM1212), the UFZ and the Jordanian Ministry of Water and Irrigation (MWI) have set up a Project Office at the MWI designed to co-ordinate the development of an implementation strategy on decentralised wastewater treatment scenarios in rural and peri-urban areas over the next three years. Many of Jordan's households are not connected to mains sewerage systems, and the indirect disposal of untreated wastewater through cesspools poses considerable risks to the country's scarce groundwater resources. This could be avoided by reclaiming and reusing wastewater locally, thus significantly contributing to an improved water balance in one of the most arid countries in the world. Jordan proposes a share of recycled water of up to 15% of the overall water quantity available, to be used primarily for agricultural purposes.

This joint Jordanian-German initiative aims to integrate the relevant institutions and technologies into the current political strategy of Jordan while also giving consideration to the socio-economic environment, and to study the conditions required for successful implementation. In the process, new markets will be opened up, not least in other countries where water is scarce since the procedures and methods developed will be transferable so that other regions may apply them efficiently as well.

MWI and UFZ pursue their goal by using the so-called participatory approach, which is new in many ways: They are building a visible bridge between research, development, water resource policy and implementation. A National Implementation Committee (NICE) is to develop the implementation strategy, where the interests of all major stakeholders of Jordan will be represented. Established experts from the GWP Regional Sections and corresponding networks will be involved to help create the fundamental conditions required for decentralised wastewater treatment systems. Special workshops and consultations (capacity development) are currently being conceived in line with requirements. It must be emphasised that rather than serving as a substitute for centralised disposal plants, decentralised wastewater structures should be put into place where they can achieve greater economies as opposed to centralised solutions. The most suitable locations will be identified by way of a GIS based analysis developed at the UFZ and designed to evaluate and visualise economic, ecological, demographic and physical factors for decision-making. This will allow for earmarking such locations that pose a particularly high risk to groundwater resources.

The NICE project evolved as a result of the groundwork undertaken in the lower Jordan River watershed by the IWRM project, SMART (Sustainable Management of Available Water Resources with Innovative Technologies), which is also sponsored by the BMBF. Research institutions, regulatory authorities, universities and water utilities from Germany, Jordan, Israel and Palestine are all involved in the project consortium. A particular highlight in Jordan is the Research, Demonstration and Training Facility in Fuheis (near Amman) where decentralised wastewater treatment technologies and options for agricultural reuse have been tested locally during normal operation since 2010. The SMART project includes the seven pilot plants for decentralised wastewater treatment and reuse that are currently under construction in rural and peri-urban areas in Jordan.

The project implemented jointly by MWI, BMBF and UFZ is a major step forward, combining environmental research and technology transfer with the core elements of international co-operation. It adds a whole new facet to application-oriented research the UFZ is committed to.

About Helmholtz Centre for Environmental Research (UFZ)

At the Helmholtz Centre for Environmental Research (UFZ) scientists are researching the causes and

consequences of far-reaching changes to the environment. They are concerned with water resources, biological diversity, the consequences of CLİMATE CHANGE and adaptability, environmental and biotechnologies, bioenergy, the behaviour of chemicals in the environment, their effect on health, modelling and social science issues. Their guiding theme: Our research contributes to the sustainable use of natural resources and helps to secure this basis for life over the long term under the effects of global change. The UFZ employs 1,000 people in Leipzig, Halle and Magdeburg. It is financed by the federal government and the federal states of Saxony and Saxony-Anhalt. For more information, visit http://www.ufz.de/.

The Helmholtz Association contributes towards solving major and pressing social, scientific and economic issues with scientific excellence in six research areas: Energy, Earth and Environment, Health, Key Technologies, Structure of Matter, Aeronautics, Aerospace and Transport. The Helmholtz Association is Germany's largest scientific organisation with over 33,000 employees in 18 research centres and an annual budget of approximately 3.4 billion euros. For more information, visit http://www.helmholtz.de.

SOURCE: Helmholtz Association of German Research Centres

"UFZ Is Breaking New Grounds In Water Management", 22/10/2012, online at:
http://www.wateronline.com/doc.mvc/ufz-is-breaking-new-grounds-in-water-management-0001

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❖ Gross violations: Israel's water theft

Making sure that Palestinians do not have enough to quench their thirst, is just another ploy to force them out of their homeland

According to many international organisations, water is being used by Israel as a war weapon, threatening the life of the Palestinian people. Since the creation of the Zionist entity in Palestine, Israel has been working relentlessly on annexing Palestinian land and water sources lying beneath. Such a strategic design was confirmed in a document prepared, in 1941, by David Ben-Gurion (Israel's first prime minister). In this document (which was released by the British Public Record Office) Ben-Gurion stated: "We have to remember that for the Jewish state's ability to survive, it must have within its borders, the waters of [rivers] Jordan and Litani."

To make things worse, Israel's erection of the racist/apartheid Wall in the occupied Palestinian territories, as from 2002, further added to the adversities of Palestinians. Under the pretext of security, the Wall has actually enabled Israel to seize 37 Palestinian water wells, reach major aquifers in the West Bank and make 30 other wells very hard to reach and use by Palestinians. In this respect, a Palestinian research project confirmed that "the geographical line of the Wall exactly coincides 100 per cent with the line of the aquifers in the occupied West Bank". A recent BirZeit University symposium also concluded that "the Wall will be extending 670km to surround the cities and villages of the West Bank, thus eventually annexing 40 per cent of the total land of the West Bank. The design of the Wall was made with the intention of imposing direct and full control over the water resources of the West Bank". This may well explain why Israel has always insisted on postponing the issue of water resources to the final stage of negotiations with the Palestinians, while continuing its expansion of colonies as well as keeping control of Palestinian water resources. Israel has been deliberately planting its colonies in the Palestinian occupied territories above the Palestinian aquifers to deny them whatever little water is left. As for the Palestinian water that could not be stolen, the Israeli colonies undertook the task of polluting it with their industrial waste. Besides, the Israeli occupation is preventing the Palestinians from building and developing an efficient sewage system to protect their resources of drinking water in the occupied territories. This strategy is obviously part of a determined attempt to increase the agonies of Palestinians so that they find themselves forced to leave.

In 2011, the Census Bureau in Ramallah (Palestine) issued a report pertaining to Jewish colonies and water resources in the Palestinian land, which stated that "in spite of the rarity of water in comparison with human growth and expansion, the water crisis has taken an extreme and dangerous path after 1967. Water crisis has affected many Arab countries, especially after Israel gained control over water resources of the rivers – Jordan, Hasbani, Banias and Mount Hermon — in addition to all the Palestinian aquifers. This made 81 per cent of all Palestinian water resources under the full Israeli control over the period 1967-2011, which left the Palestinians with only 850 cubic metres of water per year to use". This situation has even deteriorated further because solving the water crisis has become impossible due to the continuous, aggressive Israeli measures of stealing Palestinian water. Dr Shaddad Al Oteily, Chief of Water Resources in the Palestinian National Authority (PNA), recently stated that "International studies, along with Israeli official studies, show clearly that every Israeli colonist in the occupied Palestinian territories consumes water 70 times more than the Palestinian individual". His remarks were confirmed by the Israeli human rights group B'tselem and an unprecedented French parliament report authored by socialist MP Jean Glavani — once a minister of agriculture — accusing Israel of implementing "apartheid" policies in its allocation of water resources in the West Bank. Al Oteily also revealed that "water available to the Palestinians in the West Bank amounts to 105 million cubic metres from springs and aquifers, which is much less than what was available in 1995 according to the Oslo Agreement, which designated 118 million cubic metres to them. According to international standards, the Palestinians should have 400 million cubic metres. Yet, they are getting only 25 per cent of their need, which is being augmented with 56 million cubic metres that the PNA buys from Israel, four million cubic metres of which are being allocated for Gaza". Furthermore, according to a UN report, "there are currently 56 springs in the West Bank near Israeli colonies, 30 of them were annexed by the Israelis who are denying the Palestinians access to them, while the rest of the 26 springs are under strict Israeli supervision as a prelude to annexation". The international report conceded that "the Palestinians were terrorised by acts of violence meant to prevent them from reaching the annexed springs which are being used as tourist attraction areas to support the infrastructure of the Israeli colonies, while decreasing the Palestinian presence in the areas". The report concluded that "the annexation of the springs and the aquifers of the Palestinians is only a part of the colonial Israeli expansion in the West Bank".

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Under such conditions, it might be right to presume that the failure of Palestinians to control their water resources — among several other resources — makes the establishment of an independent Palestinian state almost impossible. The ultimate intent of the Israeli occupation is to make the lives of Palestinians unbearable. The lack of water to quench their thirst, as such, is meant to force them out of their homeland, in order to fulfil the Israeli project aiming to evict Palestinians from their historic land, in the context of the so-called Judaisation of Palestine.

"Gross violations: Israel's water theft", 27/10/2012, online at: http://gulfnews.com/opinions/columnists/gross-violations-israel-s-water-theft-1.1094245

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❖ Food Prize winner brings water conservation message to Lincoln

World Food Prize winner Daniel Hillel has spent much of his life in the Middle East, one of the most water-poor regions in the world.

He arrived Thursday in one of the most heavily irrigated states in the United States.

Don't look for his message to change. He will tell a Lincoln audience Friday about the need to conserve the world's shrinking water supply more stringently and about the need to prepare for the weather extremes that go with climate change and global warming.

"In studying water relationships under dry-land conditions," Hillel said, citing his working background in Israel, "I became very sensitive to this issue of water efficiency."

The 82-year-old pioneer in micro-irrigation of crops in arid regions collected the World Food Prize and the $250,000 award that goes with it last week in Des Moines.

His noon lecture at the Embassy Suites in downtown Lincoln is co-sponsored by the University of Nebraska's Water for Food Institute, its Institute of Agriculture and Natural Resources and the Malaika Foundation.

Roberto Lenton, founding director of the university's new institutional focus on water for food, will be among those welcoming Hillel to Lincoln.

Lenton called Hillel a worthy choice based on his contributions to world food needs.

"We ourselves here are delighted that someone who has worked all his life on how to manage water for food production has been given the World Food Prize," Lenton said.

In an interview Thursday, Hillel traced his roots from his birth in Los Angeles at the start of the Great Depression to his father's death a year later and to his family's move to what would become the state of Israel in 1948.

At 9, he was sent to live on a kibbutz and developed an appreciation for agriculture.

After returning to the United States for high school and his undergraduate and master's degrees, he went back to Israel in 1951 for a job mapping soil resources for the government.

Subsequent years of managing scarce water resources on the Negev Desert, which makes up more than half of Israel, taught him the virtues of doling out water one drop at a time -- "like you were spoon-feeding a baby."

In Nebraska, the focus of irrigation remains on big land areas and such field crops as corn and soybeans.

In Israel, it's been on "mostly high-value crops, vegetables and fruits, both for local consumption and for export," Hillel said.

The irrigation approach he's emphasized is a continuous supply of just enough water to meet a plant's needs, as opposed to flooding large areas at timed intervals.

Much of the objective is to prevent the salt build-up that often goes with the over-saturation of soil.

Lenton credits Hillel for providing "the scientific underpinnings to apply water, not by flooding, but exactly to the root zone of each crop, so the least amount of water is lost to evaporation and percolation."

Hillel's methods are in use around the world, including in Africa, Asia, Australia and Latin America.

In addition to advocating for water efficiency Thursday, he told about his life experiences on the desert, including "a story you won't believe" and the day a black limousine and long procession of military vehicles arrived without advance notice.

Out of the limousine stepped David Ben-Gurion, who had tired of politics and stepped down as the first prime minister of Israel and wanted to devote himself to the basics of agriculture.

"My task as a kid of 22 years, I would say jokingly, I was Ben-Gurion's boss."

Now, Hillel works at Columbia University and for the National Aeronautics and Space Administration, but he spends most of his time in Israel.

"Food Prize winner brings water conservation message to Lincoln", 26/10/2012, online at: http://journalstar.com/news/local/food-prize-winner-brings-water-conservation-message-to-lincoln/article_f973175a-2e86-5a6e-9462-c57d8b6af2a6.html

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❖ Settlers Pump Waste Water into Palestinian Land

BETHLEHEM, October 24, 2012 (WAFA) – Jewish settlers from the illegal settlement of Betar Illit Wednesday pumped waste water coming out from the settlement into Palestinian-owned agricultural land in the village of Nahalin, west of Bethlehem, according to a local source.

Head of Nahalin village council Osama shakareen said that the waste water stemming from the nearby settlement of Beitar Illit, built illegally on confiscated land from the Palestinian villages of Wadi Fukin, Husan and Nahalin, flooded large areas of the village land planted with olives, grapes, and almond trees, causing severe damage to the crops.

He said that this is not the first attack by settlers against the village residents, aiming to prevent farmers' access to their land to pick their olives.

He appealed to the humanitarian organizations to intervene to stop these Israeli arbitrary measures by settlers against the village's residents.

"Settlers Pump Waste Water into Palestinian Land", 28/10/2012, online at:
http://english.wafa.ps/index.php?action=detail&id=20937

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❖ Africa: World Food Prize Laureate Urges Sustainable Food Production

Washington — Ensuring efficient and sustainable management of land, water and biotic resources to produce more food while protecting the environment is a challenge to the current generation and to future generations, says 2012 World Food Prize laureate Daniel Hillel.

"To meet this challenge we must overcome sectarian barriers to promote international and interdisciplinary communication and cooperation," Hillel said at an October 18 ceremony in Des Moines, Iowa, at which he received the award for his pioneering work with micro-irrigation. His work revolutionized food production in some of the driest areas of the world in a way that saved water, increased crop yields and minimized environmental degradation, according to the foundation that awards the World Food Prize.

The ceremony was part of the Borlaug Symposium, an international forum of public and private leaders in agriculture, environmental science, health and education. Secretary of State Hillary Rodham Clinton announced Hillel's selection for the award at a June ceremony at the State Department.

"Today, farmers using micro-irrigation produce high-yield, nutritious crops on more than 6 million hectares worldwide. Dr. Hillel's work will become even more important as we grapple with how to feed the world's growing population," Clinton said at the June ceremony.

Hillel was born in Los Angeles in 1930 and was 1 year old when his family moved to Palestine. At an early age, he was sent to a kibbutz, where he learned to respect land.

He returned to the United States and earned a master's degree at Rutgers University before age 20. He moved to the new state of Israel in 1951 and became involved in drawing up the first map of the country's land and water resources for its Ministry of Agriculture.

With a small group of pioneers, Hillel moved to the Negev Highland, an area that had not been agriculturally productive for centuries. There he studied water and soil and gradually learned to understand the dry climate.

A chance meeting with David Ben-Gurion, Israel's first prime minister, led to Ben-Gurion's sending Hillel to help establish agriculture programs in Burma as part of Israel's earliest development assistance programs.

Returning to Israel, he earned a doctoral degree in soil physics and ecology at the Hebrew University and became an expert in soil, water and irrigation in a way that would transform how water is delivered to crops.

BETTER PREPARED

Addressing the award ceremony, United Nations Secretary-General Ban Ki-moon said that the world draws hope from contributions from people like Hillel. "Imagine trying to coax crops out of the dry ground of the Middle East. Imagine knowing that the only sources of water are a seasonal trickle or an occasional downpour," he said.

Hillel's irrigation system, he noted, made the Negev desert a source of sustenance for Israel.

While the challenge of feeding a growing world population with limited land and water is great, "there are hopeful signs of progress we can build upon," Hillel said.

"Africa: World Food Prize Laureate Urges Sustainable Food Production", 22/10/2012, online at: http://allafrica.com/stories/201210231032.html

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❖ Flood-hit Pakistan moves toward disaster insurance

MINGORA, Pakistan (AlertNet) – Hussain Khan lost everything in the 2010 floods that swept through Pakistan: His two children, his home on the banks of the Swat River, his dozens of cattle, sheep and goats, and his six-acre cherry crop.

Today the 43-year-old farmer, the sole breadwinner for a family of 10, works as a motel waiter in Mingora, a bustling town in the Swat Valley, some 160 kms (100 miles) northwest of Pakistan's capital city Islamabad. He is grateful to no longer be begging to survive, but he doubts he will recover his losses.

Across Pakistan, families hit by three consecutive years of extreme weather disasters – particularly severe flooding and droughts – are struggling to find ways to recover from ever-more-frequent disasters.

According to a report of the Federal Flood Commission, the 2010 floods, the worst in 80 years, alone claimed some 1,985 lives, and affected over 20 million people, 17,553 villages and 2 million hectares of crops.

Insurance, Pakistani officials say, may be one way of coping with the enormous social and economic consequences of such extreme weather.

Zafar Iqbal Qadir, chairman of the National Disaster Management Authority (NDMA), based in Islamabad, said the country has hammered out a plan to create national disaster risk insurance, which aims to eventually make it mandatory for Pakistan's entire population to be insured against disaster risks.

FREE OR SUBSIDISED POLICIES

A pilot phase of the programme, to be implemented starting in March 2013 with funding support from the World Bank, will provide free or subsidised insurance to those judged the country's poorest and most vulnerable. Eventually, officials hope farmers, livestock producers and others will be

included as well, said Ahmad Raza Sarwar, director of the **National Institute of Disaster Management**.

Sarwar told AlertNet that the size of the insurance premiums each person or family might pay is still being negotiated with insurance firms, as is the amount of coverage.

Details of the insurance are still being worked out among the disaster management authority, the Ministry of Climate Change, the Finance Ministry, and the Federal Economic Affairs Division, but authorities are confident it will soon be completed, said Mehmood Alam, federal secretary of the Pakistani climate change ministry.

The plan has enthusiastic support from at least some of the families hit hard by worsening extreme weather.

"We have been waiting for such insurance that will help us recover economic damages," said Khan, of the Swat Valley. "The government's aid flow for people affected (by disasters) remains too slow."

Now "such insurance will be of great help for a farmer like me in the future to claim losses quickly if, God forbid, any disaster should happen again," Khan said.

The insurance, developed after extensive consultations with insurance companies, financial regulators, banks, businesses and international financial institutions, aims to cover the risks posed by the climate-induced natural disasters that are becoming more frequent in the country.

Qadir, of the National Disaster Management Authority, said the World Bank will set aside around five percent of the development funds the Bank has committed for Pakistan for the project.

According to the World Bank's Country Partnership Strategy (CPS) document, the Bank has committed $5 billion to Pakistan for 30 projects.

The programme, which the disaster management authority says would be the biggest insurance venture of its kind in the world, aims to eventually cover Pakistan's 180 million people for the loss of human lives, livelihoods, shelter and livestock.

One early question raised about the insurance effort is how the poor will be able to afford premiums for insurance cover.

"This matter has also come under discussion and it has been now decided that premiums for those who can't afford will be subsidised and full premium for those living below the poverty line will be paid by the government," Qadir said.

"We are also negotiating with the potential insurance companies to discard their requirement for the insured to file claims. For, this is a time-taking exercise and we want the insurance cover to reach quickly to the disaster-hit people," he added.

He said disaster victims need to get insurance payouts as quickly as possible after a disaster occurs.

WILL IT BE IMPLEMENTED?

Independent climate change and disaster experts said that although this is a welcome move, it remains to be seen whether the NDMA would be able to effectively implement its plan and provide relief to disaster-struck communities.

"In the past, we have seen the launching of good initiatives with much fanfare. But these then remain on paper only. What is seriously needed is a mechanism that allows for disaster mitigation and adaptation projects to be implemented in a true spirit," said Sattar Zangejo, a disaster management expert who has worked with Oxfam International, the U.N. Development Programme, Australian AID and Plan International, said,

If and when a national insurance plan is initiated, an awareness campaign must be launched simultaneously to educate people about benefits of disaster risk insurance, he said. This will help boost people's interest in the program, he suggested.

Across Pakistan, the devastating 2010 deluge caused agriculture and infrastructure damage worth over $84 million, while floods in 2011 cost the national exchequer an estimated $63 million, according to the federal finance ministry.

Economic damages from this year's torrential monsoon rain during first three weeks of September are estimated at $35 million, according to NDMA's latest damage estimate reports.

"Flood-hit Pakistan moves toward disaster insurance", 26/10/2012, online at: http://www.trust.org/alertnet/news/flood-hit-pakistan-moves-toward-disaster-insurance/?utm_source=Circle+of+Blue+WaterNews+%26+Alerts&utm_campaign=4bf025851e-RSS_EMAIL_CAMPAIGN&utm_medium=email

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❖ Nearly 5 mln affected by floods in Pakistan: UN spokesman

UNITED NATIONS, Oct. 23 (Xinhua) -- Nearly five million people have been affected by the flooding in southern Pakistan, UN spokesman Martin Nesirky told reporters here Tuesday, citing estimates from the Pakistani government.

"UN agencies and non-governmental organizations are delivering assistance in support of government-led relief efforts," Nesirky said at a daily press briefing here.

In early September, flash floods affected Pakistan's Sindh, Punjab and Balochistan provinces, displacing 270,000 people.

"While thousands of food packages and other supplies have been distributed, people's lives are still in jeopardy in flood- affected areas of the country," Nesirky quoted the UN humanitarian coordinator in Pakistan as saying.

"We must not allow the flood crisis to become a forgotten emergency," said the spokesman.

The Central Emergency Response Fund, a division of the UN office of Humanitarian Affairs, has allocated 10 million U.S. dollars to provide assistance in the form of food, water, healthcare and shelter for families affected by the flooding.

"Nearly 5 mln affected by floods in Pakistan: UN spokesman", 24/10/2012, online at:
http://news.xinhuanet.com/english/world/2012-10/24/c_123860850.htm?utm_source=Circle+of+Blue+WaterNews+%26+Alerts&utm_campaign=a20e1cad1b-RSS_EMAIL_CAMPAIGN&utm_medium=email

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❖ Controversial project: ANP criticises LHC's remarks on Kalabagh Dam

PESHAWAR: The Lahore High Court endorses provincialism, which is evident in its comments on the Kalabagh Dam, said Awami National Party (ANP) Khyber-Pakhtunkhwa (K-P) President Senator Afrasiab Khan Khattak.

Speaking at a press conference on Friday, he said that the construction of the Dam will be unjust to K-P as it would increase the chances of the province being flooded as witnessed in the 2010 floods. The LHC is urrently hearing a petition filed by the chairman of the judicial activism panel and others claiming that if Kalabagh Dam is not made, Punjab will become an agriculturally barren land. While deferring the case till October 31, the court said there should be consensus on the project, terming it in the "national interest".

"The purpose of making the Dam is to stop the flow of River Indus into Sindh, which would flood K-P more frequently," said Khattak.

"The Kalabagh Dam is a matter of life and death for K-P and we will never support its construction," said Khattak adding that the judiciary should abstain from fuelling controversies between provinces. Khattak also strongly opposed the LHC chief justice's remarks that objections to the project by Sindh and K-P were political, saying: "It was a technical issue and no party has played politics on it."

"We honour the independence of the judiciary and stood by it against dictators. The judiciary should not make itself a controversial institution," Khattak added.

Any chances of deliberating this issue in the Council of Common Interest (CCI) as LHC suggested in its remarks were also rejected by the senator.

"The LHC is basically fighting the case for the Punjab Government and the court's remarks are the sentiments of the provincial government," said Khattak.

He said the LHC's verdict is bound to be partial since Punjab is the only province that supports the construction of the dam.

Khattak requested the Supreme Court to intervene in the issue and restrain the LHC from getting involved.

He believed that if smaller provinces' interests continue to be ignored, it will destroy their faith in the judiciary.

Talking about other coalition parties in the government, he said the Pakistan Peoples Party and the ANP are united in their standpoint. Prime Minister Raja Pervaiz Ashraf had also opposed the construction of this Dam when he was the minister for water and power.

"It would be in the interest of the nation to focus on the construction of Bhasha and Katzara Dam which have been approved as feasible projects by experts," said Khattak.

He told journalists that the construction of these Dams would fulfil the energy requirements of the country for at least 100 years, adding that the Kalabagh Dam is technically not as effective.

"Controversial project: ANP criticises LHC's remarks on Kalabagh Dam", 27/10/2012, online at: http://tribune.com.pk/story/457565/controversial-project-anp-criticises-lhcs-remarks-on-kalabagh-dam/

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❖ 'Objections over Kalabagh Dam construction are political'

*LAHORE: While deferring till October 31 the hearing of petition seeking construction of Kalabagh Dam (KBD), Lahore High Court Chief Justice Umar Ata Bandial on Thursday said consensus should be developed over the project***.**

The chief justice remarked that objections raised by Sindh and Khyber Pkhtunkhwa over the construction of the KBD were political. He added that such objections can be addressed through dialogues.

Global warming is causing more floods and water reservoirs were the need of the hour for water storage, he said.

The petition was filed by the Judicial Activism Panel chairman and others claiming that the non-construction of the dam would make agricultural land barren.

They said that this project was in the interest of all provinces and the objections raised against it were of a technical nature and could be removed.

"Resolutions passed against the dam by the provinces were a result of ignorance," they said.

The petitioners' counsel had earlier informed the court that the technical committee on water resources had on April 11, 2005, given a green signal for the construction of the dam.

Counsel Muhammad Azhar Siddique said the court should issue clear-cut directives for the completion of this project, which was of national importance. He said in June 1985 and July 1989 the Planning and Development Division had decided to construct the KBD. In 2004, the LHC, too, had ordered the department concerned to take measures to construct the dam. In India, he said, the superior courts had not only dismissed petitions against the construction of dams, but also admonished those who took the matter before the court.

"'Objections over Kalabagh Dam construction are political'", 25/10/2012, online at: http://tribune.com.pk/story/456830/objections-over-kalabagh-dam-construction-are-political/

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❖ Questions over China dams

Some questions remain about whether hydro dams on the upper Mekong River in China exacerbated conditions during Cambodia's devastating drought of 2010, environmental groups say, as China's dam program powers ahead.

When the first power-generating unit was switched on last month at China's giant 262-metre tall Nuozhadu hydroelectric dam, which will be the largest on the river when completed in 2014, state-run newspaper the China Daily sang its praises as a dam that would significantly reduce carbon dioxide emissions.

Extensive research, the China Daily added, also showed potential impacts of the Nuozhadu and others dams on countries downstream – including Cambodia, where fishing communities along the Mekong fear Laos's proposed Xayaburi dam – would be minimal.

Research showed "water flow in the river's China section accounted for only 13.5 per cent of the river's total, making the country's hydropower development have little impact downstream", it said.

Ame Trandem, Southeast Asia program director for International Rivers, said, however, that China's section of the Mekong, known in that country as the Lancang River, provided as much as 50 per cent of the river's total water flow during the dry season, when countries including Cambodia depend on it most.

An example of how important this flow is to Mekong countries, Trandem said, was the 2010 drought – one of the worst in 50 years – when China began filling the reservoir of its giant 4,200-megawatt Xiawan dam.

"[This] exacerbated the drought that the region was experiencing, because there was little rainfall in the dry season that year," she said.

"Essentially, they were holding back water that could have come downstream."

NGO collective Save the Mekong Coalition wrote to the Mekong River Commission at the time, inquiring about the potential effects China's dams were having on drought conditions and had been promised a detailed report, Trandem said.

The coalition has yet to receive this analysis, she said, while China is not obliged to provide Mekong countries details of their research.

In an emailed response this week, the MRC secretariat said it had not undertaken specific analysis of the effects of China's dams on Cambodia during the 2010 dry season.

"The MRC released various assessment reports at the time of the 2010 drought and also carried out analysis at the request of member countries," the statement says.

"Additional data from China was also released. The MRC in 2010 provided its analysis on the drought situation in an opinion-editorial piece published in the Bangkok Post newspaper.

"The analysis revealed that the low water levels in the Mekong and its tributaries were the result of extreme natural conditions. Very low rainfall for this dry season, following a particularly early end to the wet season in 2009, led to river levels below those seen in at least 50 years."

Srisuwan Kuankachorn, co-director of Towards Ecological Recovery and Regional Alliance, a member the Save the Mekong Coalition, said it was "not an overstatement" to draw a link between China's dams and the drought situation in Cambodia in 2010.

China has announced plans for at least seven hydroelectric dams on its section of the Mekong, although reports outside of China suggest it plans to build more.

"Questions over China dams", 23/10/2012, online at: http://www.eco-business.com/news/questions-over-china-dams/

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❖ WWF to survey endangered porpoises in Yangtze River

CHANGSHA, Oct. 25 (Xinhua) -- The World Wide Fund for Nature (WWF) will launch a survey of endangered finless porpoises on the Yangtze River, China's largest river, in November and December, the head of WWF's China office said Thursday.

The 40-day survey, the first of its kind to take place in six years, comes after more than 20 finless porpoises were found dead on the Yangtze River and two nearby lakes earlier this year.

The alarming deaths, which many believe were caused by pollution and human activity, have led some to worry that the porpoises could go extinct within decades if efforts are not made to preserve them.

WWF, together with the Ministry of Agriculture and Institute of Hydrobiology under the Chinese Academy of Sciences, will analyze the animal's population and distribution and evaluate the threats it faces, according to Peter Beaudoin, head of WWF's China office.

Based on the survey data, the agencies will offer suggestions regarding further protection efforts, including setting up new nature reserves, Beaudoin said.

"We just hope that the survey results won't be too pessimistic. We hope they will help to beef up protection efforts," said Wang Kexiong, deputy commander of the survey team.

A 2010 WWF report blamed illegal fishing, inadequate water conservancy facilities and pollution for the declining freshwater dolphin population. Finless porpoises are on the brink of extinction, the report added.

A 2006 survey showed that some 1,200 finless porpoises were left in the river. Just 600 porpoises were found in the nearby lakes of Poyang and Dongting.

If strong measures are not taken, the number of porpoises could decline to 200 by 2035, scientists warned.

"WWF to survey endangered porpoises in Yangtze River", 25/10/2012, online at: http://news.xinhuanet.com/english/china/2012-10/25/c_131930713.htm?utm_source=Circle+of+Blue+WaterNews+%26+Alerts&utm_campaign=4bf025851e-RSS_EMAIL_CAMPAIGN&utm_medium=email

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❖ Fund launched to protect "China's water tower"

XINING, Oct. 22 (Xinhua) -- China launched a fund on Monday to protect its far-western Sanjiangyuan nature reserve, the source of the country's major rivers.

Ma Fuhai, director general of the environmental protection fund, said it will aim to take full advantage of market resources to raise money through various channels.

The fund will seek to set up a long-term mechanism to push for more progress in environmental protection at the source of the Yangtze, Yellow and Lancang rivers in Qinghai province, according to Ma.

The China Construction Bank donated 3 million yuan (480,000 U.S. dollars) to the pot at the launch ceremony.

Zhang Shoucheng, director of the Qinghai provincial development and reform commission, said the initiative has two advisory committees, the first formed of six former senior central and local governments officials, and another formed of 124 experts.

The Sanjiangyuan reserve, located on the Qinghai-Tibet Plateau and described as "China's water tower," provides the lower reaches of the Yangtze, Yellow and Lancang rivers with 60 billion cubic meters of water annually.

However, the reserve has become ecologically vulnerable due to global warming and human activity.

"Fund launched to protect "China's water tower"",22/10/2012, online at: http://news.xinhuanet.com/english/sci/2012-10/22/c_131922350.htm?utm_source=Circle+of+Blue+WaterNews+%26+Alerts&utm_campaign=a20e1cad1b-RSS_EMAIL_CAMPAIGN&utm_medium=email

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❖ African viewpoint: Nigeria's water woes

In our series of viewpoints from African journalists, Sola Odunfa in Lagos considers the torrent of problems facing Nigeria's president.

The look I have been seeing on Nigerian President Goodluck Jonathan's face in newspapers and on television these last few weeks is enough evidence of the very serious trouble he is grappling with both privately and officially.

The skin on his face and neck is drawn.

His eyes have lost the sparkle which was a big asset at last year's presidential election.

Even when he manages to put on a smile it sticks out a mile that it is fake.

The man seems to have aged suddenly.

Who would not in his shoes?

His wife Patience, who returned home from Germany a few days ago, had been in hospital for more than four weeks for an ailment which has so far not been disclosed to Nigerians who, I believe, were paying the bill.

Except for two fleeting visits, Mr Jonathan was unable to play the caring husband at Patience's bedside as, I am sure, he would have liked to do.

Midnight oil

Meanwhile Islamist insurgents are throwing bombs and firing Kalashnikovs with dastardly effects all over northern Nigeria every day to ensure that the president does not sleep.

Down south criminal youths are on an intensifying spree of kidnapping for ransom.

The army and police are stretched thin.

Many officials who should be seen burning the midnight oil - literally as there is no electricity - devising strategies to assist the president are instead spending their time devising new strategies to steal public funds.

Now the mother of all problems has landed on the president's weakening shoulders: Water, water, water in furious torrents wreaking death and destruction across the country.

The floods are of such magnitude that they stretch for several miles in width and are unstoppable in their flow, submerging whole towns and villages from the north-east near the Cameroon border through the central region down to the south-eastern coastal states.

Meteorology officials say it is the worst in Nigeria for 50 years.

According to official accounts at least 200 people have died - and the count is still on - more than a million others have been made homeless and hundreds of thousands of hectares of farmland have been destroyed.

An overwhelmed president said earlier this month on a visit to some of the camps set up for displaced people that this was "a national disaster".

A disaster indeed for the picture on the horizon is gloomy with a food crisis of epic proportions and massive homelessness.

The food basket of the nation has been devastated by the floods, resulting in the destruction of most of this year's food crop harvest.

Yams, beans, maize and more - all gone, bringing the spectre of massive food imports next year.

At another level, various agencies directly involved in the relief efforts are going about with lengthy shopping lists for the displaced.

Their immediate needs are foam mattresses, blankets, mosquito nets - preferably treated - and clothing.

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The task in hand is so massive that there already is talk of an appeal for international aid to deal with the full consequences of the floods.

Now I think I understand why the president does not cut the picture of a poster-boy any more.

His many headaches have been increased by the peculiarly Nigerian problem of an inability to guarantee that a larger part of the $120m (£74.9m) which he has allocated for flood relief will not end up in the foreign accounts of officials and that subsequent food imports will indeed be delivered in Nigeria after payment to the importers.

"African viewpoint: Nigeria's water woes", 23/10/2012, online at: http://www.bbc.co.uk/news/world-africa-20042801?utm_source=Circle+of+Blue+WaterNews+%26+Alerts&utm_campaign=a20e1cad1b-RSS_EMAIL_CAMPAIGN&utm_medium=email

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❖ Green buildings on the rise in Middle East

With massive steel Sidra trees sprouting from the base of the building and a 9-meter (yard) high sculpture of a spider in the lobby protecting a sack of grey and white eggs, Qatar National Convention Center is hard to ignore.

But it's what most visitors don't see that may become the building's lasting legacy in a region far better known for over-the-top excesses than conservation.

From the sustainably logged wood used in its construction to the 3,500-square-meters of solar panels on the roof, the building designed by Japanese architect Arata Isozaki is considered one of the most environmentally sound convention centres in the world.

'We want to change people's mindsets,' said Ali Al Khalifa, as he led a visitor through an exhibition hall where dozens of ceiling windows helped cut down on electricity. It will take centre stage in November when it hosts the UN Climate Change Conference, the first to be held by a top oil producer.

'We have to make something stay friendly to the environment. We are part of this earth,' said Al Khalifa, the chief executive officer of Astad Project Management which oversaw the construction. 'All the oil and gas countries are moving to a green concept to insure the new generation understands they have to preserve this energy and have something efficient.'

Green buildings would seem an oddity in this tiny Gulf nation which has plenty of oil and gas and, according to the International Energy Agency, the highest per capita emissions in the world, closely followed by Gulf neighbours Kuwait, Bahrain and the United Arab Emirates.

But attitudes about energy use are changing across the Gulf. There is a growing recognition that the once seemingly limitless fossil fuels will someday run out and that these countries need to chart a more sustainable path.

Buildings are a logical place to start. They consume up to 70 percent of energy in parts of the Gulf — compared to 40 percent worldwide — due to the preponderance of glass skyscrapers and brutally hot

conditions from Dubai to the Saudi city of Jeddah, according to Thom Bohlen, chief technical officer for the Middle East Centre for Sustainable Development.

The Middle East has come late to the green building movement, lagging far behind the United States, Europe and Asia in building structures that emit fewer emissions and consume less water, according to the United States Green Building Council. The USGBC's voluntary program, Leadership in Energy and Environmental Design, or LEED, is used internationally to certify green buildings.

But when it comes to buildings in the works that are trying to earn LEED status, the Middle East is among the leaders. It has 1,348 LEED-registered buildings which surpasses all but Asia and the United States.

'Over the past couple of years, there has been a focus on trying to drive sustainable construction practices,' said Peter Templeton, senior vice president of global market development for the USGBC. 'It is mostly focused on new construction rather than retrofits of existing building.'

Dubai in the UAE is home to one of the region's first green shopping malls and is building an eco-friendly mosque in 2013. On the outskirts of the country's capital, Abu Dhabi, the government-run Masdar Institute has built the first phase of a pre-planned city that aims to be powered by renewable sources including solar.

Qatar and Saudi Arabia, though, appear to have even bigger ambitions.

In Doha, work started in 2010 on Msheireb Downtown Doha, which promises to be the world's largest sustainable community with 100 buildings using an average of a third less energy.

Lusail City, a planned development for nearly 200,000 people on the edge of Doha, has promised to adhere to the country's voluntary green building guidelines — similar to those in the UAE and other Gulf countries — which set standards for everything from water consumption to traffic congestion.

In Saudi Arabia, authorities have applied for LEED certification for the King Abdullah Financial District in Riyadh, which will be home to the country's stock exchange. The nation's first LEED-certified project, the 26-building campus of the King Abdullah University of Science and Technology, opened in 2009 and

recycles all its wastewater, uses 27 percent less energy than a typical campus and was built with 20 percent recycled content.

Most of these green buildings rely on 21st century solutions to reduce their footprint — high tech operating systems that ration electricity and power, additional insulation and thicker glass to reduce heat coming into the building and designs that orient the structure to limit the sun exposure.

But as the university campus shows, the region is also tapping technologies that are centuries old to solve its energy problems.

Along with its water savings and solar power, the project features wind towers, lattice-like shading on windows known as mashrabiya and a tent-inspired roof system that blocks the sun and extends throughout the campus.

'When we start a project, we will do some research on what people built in this location before they had electricity. How did they keep buildings warm or cool?' said Bill Odell, a senior vice president for HOK Architects who designed the KAUST campus. 'We did that on this project and there were serious techniques that clearly worked. ... All these ideas we took out of traditional Islamic architecture.'

The challenge now, experts say, is going beyond a handful of high profile projects and applying green building practices to the bulk of Gulf construction — such as low-rise office towers or residential housing projects.

To do that, governments in the region will have to make green building codes compulsory — most are now voluntary — and provide greater incentives for developers to build or retrofit more sustainably.

The other hurdle is sourcing building materials locally, which would cut down on emissions from transporting such things as steel, cement and wood to the region. Due to the lack of resources in the Gulf, most everything is imported and companies producing things like recycled steel are still too few to meet demand.

'If you want to build a green building, you need environmentally-sourced concrete, glass, aluminium,' said Steven Platt, a UAE-based expert on LEED. 'Although there are local suppliers, they aren't the greenest materials available.'

Those were among the challenges Qatar faced when it set out to design an exposition centre that met LEED's Gold certification. With few green construction materials at home, it went as far as Belgium and South Korea to get the environmentally-certified wood, steel and glass. It increased the initial cost — and contributed additional carbon emissions from shipping — but in the end helped ensure the building produces 32 percent less energy than a comparable convention centre.

'There are limitations for how much you can do,' Al Khalifa said.

'We don't want to fool ourselves. We were trying to be part of the system,' he said. 'We went to the greenest whenever we could find it. When we selected manufacturers, we didn't go for a cheaper supplier who didn't use recycled materials.'

"Green buildings on the rise in Middle East", 23/10/2012, online at: http://www.khaleejtimes.com/kt-article-display-1.asp?section=environment&xfile=data/environment/2012/October/environment_October26.xml

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❖ AP Interview: Japan Nuke Plant Water Worries Rise

Japan's crippled nuclear power plant is struggling to find space to store tens of thousands of tons of highly contaminated water used to cool the broken reactors, the manager of the water treatment team said.

About 200,000 tons of radioactive water — enough to fill more than 50 Olympic-sized swimming pools — are being stored in hundreds of gigantic tanks built around the Fukushima Dai-ichi plant. Operator Tokyo Electric Power Co. has already chopped down trees to make room for more tanks and predicts the volume of water will more than triple within three years.

"It's a pressing issue because our land is limited and we would eventually run out of storage space," the water-treatment manager, Yuichi Okamura, told The Associated Press in an exclusive interview this week.

TEPCO is close to running a new treatment system that could make the water safe enough to release into the ocean. But in the meantime its tanks are filling up — mostly because leaks in reactor facilities are allowing ground water pour in.

Outside experts worry that if contaminated water is released, there will be lasting impact on the environment. And they fear that because of the reactor leaks and water flowing from one part of the plant to another, that may already be happening.

Nuclear engineer and college lecturer Masashi Goto said the contaminated water buildup poses a long-term health and environmental threat. He worries that the radioactive water in the basements may already be getting into the underground water system, where it could reach far beyond the plant, possibly the ocean or public water supplies.

"You never know where it's leaking out and once it's out you can never put it back in place," he said. "It's just outrageous and shows how big a disaster the accident is."

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The concerns are less severe than the nightmare scenario TEPCO faced in the weeks after the March 11, 2011, earthquake and tsunami knocked out power and cooling systems at the plant, leading to explosions and meltdowns of three reactor cores in the world's worst nuclear disaster since Chernobyl. The plant released radiation into the surrounding air, soil and ocean and displaced more than 100,000 residents who are uncertain when — or if — they will be able to return to their homes.

Dumping massive amounts of water into the melting reactors was the only way to avoid an even bigger catastrophe.

Okamura remembers frantically trying to find a way to get water to spent fuel pools located on the highest floor of the 50-meter-high reactor buildings. Without water, the spent fuel likely would have overheated and melted, sending radioactive smoke for miles and affecting possibly millions of people.

"The water would keep evaporating, and the pools would have dried up if we had left them alone," he said. "That would have been the end of it."

Attempts to dump water from helicopters were ineffective. Spraying water from fire trucks into the pools didn't work either. Okamura then helped bring in a huge, German-made concrete-making pump with a remote-controlled arm that was long enough to spray water into the fuel pools.

The plan worked — just in time, Okamura said.

Those measures and others helped bring the plant under tenuous control, but it will take decades to clean up the radioactive material. And those desperate steps created another huge headache for the utility: What to do with all that radioactive water that leaked out of the damaged reactors and collected in the basements of reactor buildings and nearby facilities.

Some of the water ran into the ocean, raising concerns about contamination of marine life and seafood. Waters within a 20-kilometer (12-mile) zone are still off-limits, and high levels of contamination have been found in seabed sediment and fish tested in the area.

Okamura was tasked with setting up a treatment system that would make the water clean enough for reuse as a coolant, and was also aimed at reducing health risks for workers and environmental damage.

At first, the utility shunted the tainted water into existing storage tanks near the reactors. Meanwhile, Okamura's 55-member team scrambled to get a treatment unit up and running within three months of the accident — a project that would normally take about two years, he said.

"Accomplishing that was a miracle," he said, adding that a cheer went up from his men when the first unit started working.

Using that equipment, TEPCO was able to circulate reprocessed water back into the reactor cores. But even though the reactors now are being cooled exclusively with recycled water, the volume of contaminated water is still increasing, mostly because ground water is seeping through cracks into the reactor and turbine basements.

Next month, Okamura's group plans to flip the switch on new purifying equipment using Toshiba Corp. technology that is supposedly able to decontaminate the water by removing strontium and other nuclides, potentially below detectable levels, he said.

TEPCO claims the treated water from this new system is clean enough to be potentially released into the ocean, although it hasn't said whether it would do that. Doing so would require the permission of authorities and local consent and would also likely trigger harsh criticism at home and abroad.

To deal with the excess tainted water, the utility has channeled it to more than 300 huge storage tanks placed around the plant. The utility has plans to install storage tanks for up to 700,000 tons — or about three more years' worth — of contaminated water. If that maxes out, it could build additional space for roughly two more years' worth of storage, said Mayumi Yoshida, a company spokeswoman.

But those forecasts hinge on plans to detect and plug holes in the damaged reactors to minimize leaks over the next two years. The utility also plans to take steps to keep ground water from seeping into the reactor basements.

Both are tasks that TEPCO is still not sure how to accomplish: Those areas remain so highly radioactive that it is unclear how humans or even robots could work there.

There's also a risk the storage tanks and the jury-rigged pipe system connecting them could be damaged if the area is struck by another earthquake or tsunami.

Goto, the nuclear engineer, believes it will take far longer than TEPCO's goal of two years to repair all the holes in the reactors. The plant also would have to deal with contaminated water until all the melted fuel and other debris is removed from the reactor — a process that will easily take more than a decade.

He said TEPCO's roadmap for dealing with the problem is "wishful thinking."

"The longer it takes, the more contaminated water they get," he said.

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Associated Press Writer Malcolm Foster contributed to this report.

"AP Interview: Japan Nuke Plant Water Worries Rise", 25/10/2012, online at: http://abcnews.go.com/International/wireStory/ap-interview-japan-nuke-plant-water-worries-rise-17558654?utm_source=Circle+of+Blue+WaterNews+%26+Alerts&utm_campaign=052c61a30d-RSS_EMAIL_CAMPAIGN&utm_medium=email#.UIriH7E2bf9

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❖ S.Korean firms win $1bln hydroplant deal in Laos

SEOUL — South Korean builder SK Engineering and Construction and state-run Korean Western Power have won a $1.0 billion deal to build and operate a hydropower plant in Laos, an official said on Tuesday.

Under the deal with the Laotian government, SK Construction will build three dams and a hydropower plant at the Mekong River in the southern plateau of Bolaven by 2018, an SK Construction spokesman told AFP.

The Xe-Namnoy plant -- with an estimated capacity of 410 megawatts -- will be owned and managed by Korean Western Power until 2045, after which it will be taken over by the Laotian authorities, he said.

The electricity generated at the plant will mostly be sold to Thailand while the Laos will earn an estimated 33 billion won ($30 million) annually in taxes and other fees, he added.

"S.Korean firms win $1bln hydroplant deal in Laos", 23/10/2012, online at: http://www.google.com/hostednews/afp/article/ALeqM5jWs_JfoSL1SrQYvA2BgLHlvheeKQ?docId=CNG.71937cfa6661445645d0150e6336fadd.161

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❖ Water Leadership Forum to Open Tomorrow in Southern California

A two-day water leadership forum on the challenges that industries face in a more water-stressed world opens tomorrow in San Diego, attracting policy-makers and executives from the energy, fracking and power sector.

Bloomberg New Energy Finance is hosting its first water forum as part of an examination the London-based research group is making of the global challenges that businesses face at a time when water plays a larger role in resources planning.

Studies show that from 2015 to 2025 the average country expenditure on water infrastructure will increase by almost 30 percent when "all of the Middle East and North Africa, sub- Saharan Africa and South Asia will be severely stressed for freshwater resources," BNEF said.

China and the U.S., both suffering from drought this year that pushed food prices higher, "will face high stress levels" during that period, said BNEF, a unit of Bloomberg LP. Average per capita consumption of water in the U.S. is four times that of China or India, the most populous nations, it said.

The meetings open tomorrow by discussing the need for more integrated planning amid regional water scarcity issues by the municipal, power and agriculture sector and a look at managing water risks by companies to minimize exposure to water scarcity.

The forum closes on Oct. 24 with sessions on water and power, "war games" and looking at water and its role "front and center in the shale industry."

"Water Leadership Forum to Open Tomorrow in Southern California", 22/10/2012, online at:
http://www.bloomberg.com/news/2012-10-22/water-leadership-forum-to-open-tomorrow-in-southern-california.html

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❖ Americans favor water recycling, but there's an 'ick factor'

Toilet-to-tap raises some concerns, survey finds

* GE looking for education on water re-use

By Deborah Zabarenko

WASHINGTON, Oct 23 (Reuters) - Most Americans have scant understanding about their water supply, but they are concerned about it, and believe recycling water gives the United States an advantage over other countries, a survey said on Tuesday.

However, Americans are less accepting of drinking recycled wastewater in a practice known as toilet-to-tap, the survey found.

With clean water growing scarce in much of the world, and with shortages possible in 36 U.S. states in the next year, according to the General Accountability Office, the survey conducted for Ge n eral Electric Co found 66 percent of Americans feel positive about water re-use.

Eighty-three percent of Americans surveyed said they were concerned about the availability of clean water in the future.

GE makes water treatment equipment and technology. It commissioned the survey to figure out whether there was opposition to re-using water as a solution to water scarcity.

"We see water re-use as one of the key methods of addressing water scarcity that we have and the increasing gap between water demand and supply," said Heiner Markhoff, president and CEO for water and process technologies for GE Power & Water. "For us, it's an interesting and important driver in the markets around the world that we serve."

The online survey of 3,000 people in the United States, Singapore and China showed Americans' understanding of water issues lags behind those surveyed in the other two countries.

It also found what it termed an "ick factor" when Americans were asked about having wastewater recycled into drinking water - only 30 percent supported this - though 51 percent were in favor of swimming in recycled water and 51 percent agreed that it was drinkable.

However, eight out of 10 Americans favor using recycled water for other uses, including power generation, landscaping, industrial processing and manufacturing, toilet-flushing, car washing and agricultural irrigation.

While Americans generally feel water is the single most important service they receive, beating out electricity and heat, 31 percent don't know where their water comes from, compared with about one in 10 in China and Singapore.

The survey found that those who know more about water use and scarcity are much more likely to support water re-use, and Markhoff said public education and possible policy changes could raise that knowledge among Americans.

Emily Wurth of the Washington-based Food and Water Watch interest group said it makes sense to investigate re-use of some water, but stressed the need for water efficiency.

"Where we get concerned is about programs like toilet-to-tap, where they're presented as a panacea, as opposed to making some of the tougher policy decisions about how we should manage our existing fresh water resources," Wurth said in a telephone interview about the survey.

"If we take public water, allow industries to pollut e it and then allow other industries to clean it up, we don't believe that is a wise policy," she said.

"Americans favor water recycling, but there's an 'ick factor'", 23/10/2012, online at: http://www.reuters.com/article/2012/10/23/environment-water-survey-idUSL1E8LN7TF20121023?utm_source=Circle+of+Blue+WaterNews+%26+Alerts&utm_campaign=a20e1cad1b-RSS_EMAIL_CAMPAIGN&utm_medium=email

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❖ Feds remove water protection from historic law

OTTAWA-The Harper government is proposing to stop one of Canada's oldest laws protecting bodies of water across the country.

The changes, introduced as part of a 443-page budget implementation bill tabled Thursday in Parliament, would replace the Navigable Waters Protection Act, first introduced in 1882, with a new Navigation Protection Act covering a list of 97 lakes, 62 rivers and the three oceans on Canada's coasts.

Transport Minister Denis Lebel suggested that the changes could ease the burden on companies seeking approval on new industrial projects such as oilsands development or mining extraction.

For example, under the existing law, Transport Canada had urged Shell Canada to provide more information about a proposed "diversion" of the Muskeg River for a new oilsands project.

While this process would continue, future project approvals on that river or many others would not be subject to a review under the new law unless Transport Canada expands its list of protected bodies of water.

"All projects that are actually in the middle of the (approval) process must be held to the existing rules," said Lebel at a news conference. "The day when this new law comes into force, it will be another thing."

A First Nations group promptly slammed the proposed changes, suggesting that it was giving industry a green light to destroy vital waterways in its community, violating existing treaty rights in Canada.

"I am seriously concerned this is an indication of corruption in our current government," said Chief Allan Adam of the Athabasca Chipewyan First Nation. "We hope there will be a public outcry that echoes our sentiment. After all, we all share the responsibility to protect mother earth."

Transport Canada said it was prepared to revise the list, which records the Atlantic Ocean as number 97 on a list of 100 oceans and lakes.

Previous changes introduced to the same law in the last major budget legislation removed pipeline projects from its scope.

Lebel said other environmental laws would still apply to assess potential impacts of projects, but that the changes, endorsed at his news conference by the Federation of Canadian municipalities, would remove excessive administrative delays on minor projects such as boat docks for cottages on lakes.

"Over time, the scope and application of a law that was designed to protect navigation has expanded to the point where it now applies to brooks, streams, ditches," said Lebel, noting that 80 separate assessments were done for docks on a single lake near Edmonton. "So now, even the most basic foot bridges over small streams still require pages of paperwork, even when the stream is clearly not used for any kind of boating."

He added that the existing law also slows down the building of bridges and repairs to the old ones.

But Green Party leader Elizabeth May suggested Lebel was misleading Canadians, since previous changes to environmental laws introduced by Prime Minister Stephen Harper's government have already largely removed federal environmental oversight on industry.

"The destruction of the Navigable Waters Protection Act and renaming it the Navigation (Protection) Act is part of a consistent pattern of Stephen Harper trying to remove constitutional authorities for the environment," May said at a news conference. "Harper clearly does not believe the federal government should be responsible for environmental protection. So they are trying to rewrite history."

But May said the changes would also give the minister more powers to crack down on abandoned vessels in the water.

The legislation would also provide for new fines or penalties for some offenses.

The new budget bill also proposed to make some corrections to its predecessor from the summer, which introduced a new regime for assessing the environmental impacts of industrial development.

A spokesman for Environment Minister Peter Kent said most of the changes were "technical" in nature, along with the correction of a "loophole" that "came to our attention."

The Federation of Canadian Municipalities also issued a similar statement of support of the federal government's proposed overhaul of the Fisheries Act last spring, which removed protection of fisheries and gave the government new tools to "authorize" water pollution.

But municipalities in the federation later adopted a motion demanding that the government withdraw the proposed changes for further analysis of the consequences.

The last budget implementation law, adopted in July eliminated about 3,000 federal environmental assessments and was slammed by economists, environmental groups and opposition critics for weakening existing laws.

The previous legislation also gave the government new tools to investigate environmental groups, weaken protection of endangered species and limit public participation in consultations and reviews of proposed industrial projects.

"Feds remove water protection from historic law", 22/10/2012, online at: http://www.vancouversun.com/news/national/Feds+remove+water+protection+from+historic/7411964/story.html?utm_source=Circle+of+Blue+WaterNews+%26+Alerts&utm_campaign=ffa4ff2087-RSS_EMAIL_CAMPAIGN&utm_medium=email

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❖ Natural Resource Districts Working Together to Increase River Flows

Four of Nebraska's natural resource districts are proposing a land buy that would help increase water flows to the Republican and Platte Rivers.

District officials have agreed to join together and buy a farm south of North Platte and retire approximately 15,800 acres from agricultural production.

Taking the farm out of commission will allow the districts to save the water that would otherwise be used for irrigation, and instead send it down to the rivers when there is a threat of being out of compliance with interstate water agreements.

The districts are expected to split the $83 million cost to buy the property and make upgrades to help ship the water. It is estimated that they will need 17 miles of pipeline to send the water to both rivers.

The project could add about 45,000 acre-feet of water to both rivers.

"Natural Resource Districts Working Together to Increase River Flows", 24/10/2012, online at: http://www.nebraska.tv/story/19905629/natural-resource-districts-working-together-to-increase-river-flows

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