



# ORSAM WATER BULLETIN

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14 November 2017 - 20 November 2017

### A Kuwaiti proposal to finance and build a joint water channel with Iraq has been unveiled

The interim parliamentary committee to follow up the Khawr Abdullah agreement revealed a proposal submitted by the Kuwaiti side to finance the drilling and construction of the joint water channel in Al Khor, calling on the House of Representatives and the government to reject this proposal.

"There is information that the Kuwaiti committee formed for dialogue with the Iraqi side on Khawr Abdullah has allocated \$ 410 million to dig the Creek corridor and another \$ 410 million as a second stage to dig and equip the canal," committee member Zahir al-Abadi told a joint news conference with the committee members on Saturday. "Adding that" these amounts will be paid by the Kuwaiti side only."

He added that "the mechanism of contracting with the company that will carry out these acts will be one-sided, the Kuwaiti side, without any addition to the Iraqi side," noting that "these actions will be an introduction to the future deal on the basis that the channel will be the Kuwaiti side contrary to all legal procedures followed by The Iraqi government and the House of Representatives."

He warned the government to approve the proposal, which will be rejected by Parliament, indicating that the contract should be from the Iraqi and Kuwaiti sides and that the company is chosen from Iraq to be linked to Iraq and not Kuwait, because it is our entitlement and not the entitlement of Kuwait and money should be allocated from Iraq and not from Kuwait Because we are responsible for it because the completion of the channel by Kuwait will end the construction of the port of Faw."

For his part, the head of the committee, Mazen Mazni, said that "the digging of the channel should be from Iraq and is able to complete it. We have precedents in the time of the Iraqi-Iranian war when the channel was destroyed, Iraq has re-dug and completed, so we do not want charity from Kuwait and do not enter it, That "information we have that the President of the Republic will visit Kuwait on Monday with some officials from the province of Basra and ask him to be a positive role towards the Basrien and Iraqis and channel Khor Abdullah, and that the visit is not at the expense of public interests."

19/11/2017 online at: <a href="http://en.economiciraq.com/2017/11/19/a-kuwaiti-proposal-to-finance-and-build-a-joint-water-channel-with-iraq-has-been-unveiled/">http://en.economiciraq.com/2017/11/19/a-kuwaiti-proposal-to-finance-and-build-a-joint-water-channel-with-iraq-has-been-unveiled/</a>

# Agriculture Committee Hosts Minister of Iraqi Water Resources to Discuss Water Shortage Crisis

Agriculture Committee in Iraq hosted Minister of Iraqi Water Resources, Hassan Al-Janabi, to discuss water shortage crisis in the central and southern governorates.

The chairman of Agriculture Committee in Iraq, Furat Tamimi, said in a joint press conference with Minister of Iraqi Water Resources Hassan Al-Janabi on Sunday, that Al-Janabi attributed the crisis to the governorates abuses and to some influentials.

For his part, Minister of Iraqi Water Resources Hassan Al-Janabi said that the water reserves of the country is scarce for this year and the war on ISIS has reduced the water revenues, pointing that the ministry is able to cover the agricultural plan for this year.

20/11/2017 online at: <a href="https://www.u-news.net/en/news/50/3694/Iraq-%7C-Agriculture-Committee-Hosts--Minister-of-Iraqi-Water-Resources-to-Discuss-Water-Shortage-Crisis.htm">https://www.u-news.net/en/news/50/3694/Iraq-%7C-Agriculture-Committee-Hosts--Minister-of-Iraqi-Water-Resources-to-Discuss-Water-Shortage-Crisis.htm</a>

#### Denmark, Iran Sign Water, Wastewater Agreements

A group of Danish water companies signed three memoranda of understanding with Iranian firms operating in water and wastewater engineering projects.

According to the Energy Ministry's news portal, the signing ceremony was overseen by Danish Ambassador to Iran Danny Annan and Alireza Daemi, deputy for planning and economic affairs, in Tehran on Tuesday.

"The MoUs call for collaboration between three Iranian companies, namely Iran Ensheab, Tamin Energy Development Company and Tara Engineering Company, and their Danish counterparts to manufacture water desalination units, set up wastewater treatment plants and produce smart water meters," Daemi said.

The ministry's report did not identify the Danish firms.

Highlighting the potentially huge role of Danish enterprises in providing financial resources and facilitating banking transactions to undertake water and wastewater ventures, the official hoped that Danish investors will take advantage of local workforce and resources in the Iranian market.

According to Daemi, the two countries have held conducive talks and workshops in the water industry since sanctions were lifted in the beginning of last year.

"Not long ago, the Energy Ministry had technical cooperation with Denmark not only in building wastewater treatment plants but also in conducting scientific surveys," the official added, noting that MoUs can pave the way for expansion of ties between the two sides.

Grappling with increasingly dwindling water resources, persistent drought and high levels of consumption, the Iranian government is stepping up efforts to modernize the country's dilapidated water supply network, build new treatment facilities and employ cutting-edge irrigation systems to curb the excessive use of water.

In an effort to help alleviate the country's water woes, the state-owned National Water and Wastewater Engineering Company also signed a preliminary agreement last month with the German Association for Water, Wastewater and Waste, as well as France Water Group, a consortium of French companies operating in the water industry.

#### Wing Energy Cooperation

In line with policies toward international companies, such as Danish wind energy firm Vestas, Iran Power Generation, Distribution and Transmission Company organized a seminar in Tehran on Monday that was attended by Annan.

Pointing to Vestas' new round of cooperation in Iran by helping generate electricity from wind, transferring the know-how of wind power plants and turbines, and integrating wind networks, Annan added that 20 Danish firms are doing direct business with Iran, yet the two sides can further boost their commercial relations.

"Iran's Sixth Five-Year Development Plan (2017-22) entails a 5,000-MW rise in renewable power production capacity annually," he said, noting that in spite of certain challenges, the goal is achievable.

Referring to the fact that 70% of Denmark's electricity needs are supplied by wind power, Annan said although wind power industry is nascent in Iran, there are currently good opportunities for developing the capacity of wind power output in collaboration with foreign partners.

Energy experts believe that generating more green power at home would allow the country to export more of its fossil fuels abroad. Renewables account for less than 500 megawatts of Iran's total installed power capacity of around 77,000 MW.

According to Jafar Mohammad-Nejad, the planning deputy of state-owned Renewable Energy and Energy Efficiency Organization, stable electricity supply is contingent upon diversifying power production resources.

"Research has proven it to be quite feasible in the country, as it enjoys enormous potential for the production of different kinds of renewable energies, including geothermal, solar and wind power," he said.

Iran, an underdeveloped market for renewable by international standards, is laying out plans not to trail behind the global trend in this key sector.

15/11/2017 online at: <a href="https://financialtribune.com/articles/energy/76209/denmark-iran-sign-water-wastewater-agreements">https://financialtribune.com/articles/energy/76209/denmark-iran-sign-water-wastewater-agreements</a>

# Israel to Cut Palestinian Village from Water Source in Order to Take Control of Farming Land

Israel has told residents of the Palestinian village of al-Walaja south of Jerusalem that they are to be cut off from their farmland and farming terraces because of the relocation of a checkpoint, shifting a large segment of land from the Palestinian side to the Israeli one.

A Jerusalem district planning panel said that the Ein Yael checkpoint on road between Jerusalem and Har Gilo would move deeper into the Palestinian area, where it will become part of the Jerusalem metropolitan park.

This land includes Ein Hanya, the second-largest spring in the Judean Hills; for the residents of al-Walaja, the site also provides recreation, bathing, and water for their livestock. Palestinian families from farther afield in the West Bank, such as Beit Jala and Bethlehem, regularly visit the spring and the two deep pools in the area for bathing and picnicking.

Part of al-Walaja falls under Jerusalem's jurisdiction, but the recent completion of the separation fence has cut the village off from Jerusalem entirely. The fence also separates the village from extensive farming areas owned by the residents.

The Israel Antiquities Authority and Jerusalem Development Authority have already started renovation work at the spring and the surrounding area. Now they plan on surrounding the spring with a fence, building a visitors center and a restaurant and turning it into one of the entrances to Jerusalem's metropolitan park, which abuts the capital from the south and west.

Two days ago al-Walaja residents received letters telling them that the checkpoint will be moved closer to their village, some two and a half kilometers deeper into the Palestinian territory. It currently sits near the exit from Jerusalem, a mere one and a half kilometers from the Malha shopping mall.

Once the checkpoint relocated, Palestinians without Jerusalem resident papers will not be allowed to pass through it. They will not be able to visit the spring area or their fields and terraces beyond it.

The villagers were given 15 days' notice to submit an appeal against the decision.

Ironically, the well-groomed, carefully tended terraces that al-Walaja's residents have nurtured over the years were one of the reasons given by the Israeli authorities for setting up a park in the area. However, once the checkpoint is moved, the farmers will be denied access to them.

"The stone steps are one of the park's outstanding features. This landscape has decorated the Judean Hills for longer than 5,000 years, since man started farming the land. The terrace agriculture was preserved in the Arab villages until the War of Independence," the park's information leaflet says.

Aviv Tatarsky, a researcher with Ir Amim, a nonprofit that advocates for a more equitable and sustainable Jerusalem, said "relocating the checkpoint is another step in [Environmental Protection] Minister Zeev Elkin's plan to move al-Walaja and the rest of the neighborhoods beyond the separation fence out of Jerusalem's borders. In Elkin's Jerusalem, Israelis will stroll among the beautiful terraces, tended to and fostered by al-Walaja residents, with the land owners locked behind a barbed wire fence a few dozen meters away, unable to come to the lands that were robbed from them.

"That's the rightist government's vision: instead of peace and justice, fences and increasingly brutal oppression," he said.

16/11/2017 online at: https://www.haaretz.com/israel-news/.premium-1.823113

#### **Wisconsin Water Council signs on for Israeli innovation**

During Wisconsin Governor Scott Walker's trade mission to Israel recently, the state's Water Council signed two agreements to increase collaboration and establish new partnerships between Wisconsin and Israel.

An agreement with the Zuckerberg Institute for Water Research at Ben-Gurion University of the Negev seeks to establish the first National Science Foundation center in Israel as a first step toward collaboration on water-related applied research.

New technologies to come out of this collaboration would be introduced to the global marketplace through Wisconsin's National Science Foundation-sponsored Industry/University Cooperative Research Center for Water Equipment and Policy.

The other agreement authorizes the Water Council and the Israel Innovation Authority (IIA) to develop a new research partnership in which Israeli and Wisconsin water technology startup companies will collaborate on piloting and developing new applications for the Milwaukee Metropolitan Sewerage District (MMSD) and other Wisconsin water utilities.

MMSD will contribute \$100,000 in research funds to be matched by the IIA. Israeli startups will come to the US to commercialize their products for the North American market. MMSD will provide the facilities and will have some preferential access to any resulting technology that is successfully piloted.

"These partnerships will strengthen the sector in both countries, and are expected to open new markets to water technology companies in Wisconsin and Israel," said Walker.

"The Zuckerberg Institute is pleased to be partnering with the Water Council to increase our collaboration opportunities, share our research and explore commercialization opportunities for our innovation," says Zuckerberg Institute Director Prof. Noam Weisbrod. "While we share different water challenges, we look forward to complementing each other in addressing water quality issues."

16/11/2017 online at: <a href="https://www.israel21c.org/wisconsin-water-council-signs-on-for-israeli-innovation/">https://www.israel21c.org/wisconsin-water-council-signs-on-for-israeli-innovation/</a>

#### Are diplomatic tensions sinking prospects of Israel-Jordan water project?

Jordan will forge ahead with the Red Sea-Dead Sea Water Conveyance Project despite Israel's threat to drop it as it is just a propaganda tool to pressure the country to accept the return of its diplomats, according to local experts.

In July, two Jordanians were killed in a shooting at the Israeli embassy complex in the Jordanian capital of Amman, with one embassy staff member being injured, sparking anti-Israel protest.

The incident came at a time of mounting tensions between Israel and the Muslim world over metal detectors it installed around the al-Aqsa Mosque compound in Jerusalem.

Israel was forced to close its embassy in Jordan and withdraw all of its staff members. Now, the Israeli government says they hope Jordan can accept the return of its diplomats and the reopening of the embassy, otherwise, they will withdraw from the Red Sea–Dead Sea Water Conveyance Project.

The Jordanian government said earlier in November that they will push forward with the project with or without Israel.

Dr. Walid Khalid Abu-Dalbouh, director of the International Relations and Regional Studies Department at the University of Jordan, believes the county should not allow itself to be dependent on Israeli water.

"Now, they are trying to establish a gas deal with Jordan. The fear here is that we are becoming very much, very dependent on the Israeli's export of gas. And now we are becoming, I hope not, we are also becoming heavily dependent on the Israeli water," he said.

Dalbouh believes the threat is just Israel's way to pressure Jordan to accept the return of its diplomats.

"They threaten that they can make the Jordanian people thirsty, but I think this is just only propaganda and maybe trying to influence public opinion somehow to push them to accept the return of their ambassador and so on," he said.

Elias Salameh, a professor of hydro-geology and hydro-chemistry at the University of Jordan, believes that despite Israel's threat, Jordan will go ahead with the project because it is in need water.

Statistics show that Jordan's water supply is far from meeting its demand.

"So any other country saying we will stop that project, I don't think that Jordan can afford stopping that project. It will go ahead with it, even if we borrow the money for the whole project, because we are in need of the water. In the next five or six years, all of us will be suffering again of water shortage," he said.

The project was signed in 2013 by Palestine, Israel and Jordan in response to the declining water level of the Dead Sea. It plans to introduce water from the Red Sea to the Dead Sea, which will help Jordan's water shortage problem.

20/11/2017 online at: <a href="http://www.jpost.com/Middle-East/Are-diplomatic-tensions-sinking-prospects-of-Israel-Jordan-water-project-514713">http://www.jpost.com/Middle-East/Are-diplomatic-tensions-sinking-prospects-of-Israel-Jordan-water-project-514713</a>

#### Jordan to go ahead with Red Sea-Dead Sea project despite Israel's withdrawal threat

Jordan on Tuesday said it was going ahead with the Red Sea-Dead Sea water conveyance project with or without Israel, which threatened on Tuesday to withdraw from the project until it is staff are allowed to return to the Israeli embassy in Amman.

"We are going ahead with the project with or without Israel," a government official told The Jordan Times on Tuesday.

Israel has reportedly told Jordan that a joint agreement for the construction of a pipeline transferring water from the Red Sea to the Dead Sea will not go ahead until Israel is allowed to reopen its embassy in Amman, Israeli media reports indicated Tuesday.

Citing Israeli officials, the reports said Israel notified Jordan that the water project will not move forward until Ambassador Einat Schlein and her staff are permitted to return to their posts.

The source said that Jordan would not allow the reopening of the Israeli embassy in Amman and the return of its crew until legal action is taken against an Israeli staffer who had killed two Jordanians.

"We are asking for justice and legal steps to address the embassy incident," the official said Tuesday.

The official said that bilateral relations with Israel are important for both countries "and probably more for Israel."

On July 23rd, sixteen-year-old Mohammad Jawawdeh was killed, along with Bashar Hamarneh, a doctor, by an Israel embassy employee at a residential building rented by the Israeli embassy in Amman. The killer, who shot both Jawawdeh and Hamarneh, left Jordan to Israel protected by his diplomatic immunity, a matter which triggered widespread public anger in Jordan.

On his return to Tel Aviv, the guard was warmly welcomed by Israeli Prime Minister Benjamin Netanyahu, with the footage of the encounter insulting the sentiments of Jordanians.

"The Israeli PM sacrificed the relationship with Jordan to improve his electrical approval rating," said the official, who preferred not to be named.

Under the first phase, a total of 300 million cubic metres (mcm) of water will be pumped each year. In its following phases, the Red-Dead project will see up to 2 billion cubic metres of seawater transferred from the Red Sea to the Dead Sea annually, according to the Water and Irrigation Ministry.

The Red-Dead project's main components are a seawater intake structure; an intake pump station; a seawater pipeline; a desalination plant with a capacity of 65-85mcm per year; a desalination brine conveyance pipeline; two lifting pump stations; hydropower plants; and discharge facilities at the Dead Sea.

The seawater will be pumped out from an intake located in the north of the Gulf of Aqaba.

In addition to providing much needed water to Jordan, Palestine and Israel, the project has an ecological dimension as it seeks to stop the continuous diminishing of the Dead Sea, whose water level drops one metre each year, according to the ministry.

 $15/11/2017 \ online \ at: \ \underline{http://www.jordantimes.com/news/local/jordan-go-ahead-red-sea-dead-sea-project-despite-israels-withdrawal-threat}$ 

#### Switzerland voices support to Jordan's efforts to solve water problem

Switzerland stressed its support to Jordan in its efforts to find solutions to water scarcity by financing and implementing various projects where Swiss expertise in the field of water management is a key factor to success.

A statement by the Swiss Embassy in Amman, said Jordan has recently been declared the 2nd water-scarcest country in the world, adding that water and effective water management are thus increasingly becoming important topics in Jordan and the region.

"Since raising awareness among local communities and policy makers about water management that must go hand in hand with the implementation of projects, a series of workshops targeting journalists, bloggers and social media reporters from Jordan, Iraq, Iran, Lebanon, Syria and Turkey is being organized by the Swiss Cooperation Office (SCO) in Amman," the statement added.

The first of four workshops in Jordan is taking place in Amman today and more workshops will follow in Beirut, Istanbul, Tehran and Erbil.

The statement affirmed that the topic of water is still only sparsely covered by Middle Eastern media and public knowledge on water topics remains low. "To increase awareness, workshops are being organized where participants will focus on conflict sensitive journalism, water-related knowledge and journalistic skills".

14/11/2017 online at:

http://www.petra.gov.jo/Public\_News/Nws\_NewsDetails.aspx?lang=2&site\_id=1&NewsID=327208&Type=P

#### Lebanon Resumes Pumping Water from Wazzani River

Lebanon resumed pumping water from the Wazzani River several days ago. The pumping station situated along the southern Lebanese river was destroyed by floods last winter.

During the course of U.S. Secretary of State Colin Powell's visit to the region, it was agreed that Israel and Lebanon will attempt to come to an agreement on the amount of water to be pumped from the Wazzani.

Israel vigorously opposed the Lebanese move last year to pump water from the Wazzani, fearing that increased diversion would cut into supplies that feed Israel's Hatzbani and Jordan Rivers.

The Wazzani is a tributary of the Hatzbani that runs for 40 kilometers in Lebanon before crossing the border and joining with the Banias and Dan rivers to become the Jordan.

Prime Minister Ariel Sharon said that Israel cannot accept a diversion of the Wazzani's waters for irrigation purposes.

Then-foreign minister Shimon Peres warned Lebanon not to interfere with Israel's water sources via diversion of the Wazzani. Peres also said Israel reserves the right to defend it's water according to accepted international laws.

The Lebanese government officially opened the Wazzani pumping station, located some 300 meters from the northern border town of Rajar, in October 2002. Two weeks later, authorities began pumping water from the Wazzani to eight villages in the Marjayoun area. According to Lebanese water authorities, up to 40 villages are to receive water from the Wazzani.

The total amount of water Lebanon intends to pull from the Wazzani is unknown. Due to the lack of clarity regarding Lebanon's intentions, Israeli water authorities were divided last year on the potential impact the pumping might have on the Hatzbani River. However, there was no drop in the Hatzbani's water level last year.

14/11/2017 online at: <a href="https://www.haaretz.com/news/lebanon-resumes-pumping-water-from-wazzani-river-1.10089">https://www.haaretz.com/news/lebanon-resumes-pumping-water-from-wazzani-river-1.10089</a>

#### Clean and Continuous Water for 1.6 Million People in Lebanon

The Water Supply Augmentation Project, led by the Lebanese government, aims to increase the volume of water available to the Greater Beirut and Mount Lebanon area where approximately half of the Lebanese population lives. The Project is financed by the World Bank, Islamic Development Bank and Government of Lebanon. In this Q&A, Saroj Kumar Jha, World Bank Regional Director, for the Middle East, explains the importance of the Bisri Dam project for resolving Beirut's long-lasting water shortage problem.

Q 1: Why is there a need for a dam in Bisri? Who will benefit from it?

SKJ: The Bisri Dam will resolve one major problem that Lebanon's residents have faced since the civil war: severe and chronic water shortages.

Over 1.6 million people living across the Greater Beirut & Mount Lebanon (GBML), including 460,000 living on less than \$4 a day, will have improved access to clean water. Once the dam is built, households will be able to depend on the public water network and will no longer need to rely on alternative water sources. They will hence see substantial reductions in their household water expenditures.

Q 2: What is the dam storage capacity? Will the water be treated before reaching households?

SKJ: It is worthwhile to note that the Bisri Dam will capture rainwater that is normally flowing to the sea and will allow Lebanon to store the water in winter to be used during the dry season, when people need water the most.

The Bisri Dam will be constructed immediately upstream of the village of Bisri on the Bisri river. It will store 125 million cubic meters of water, and will fill up naturally in the winter and spring for use during the summer and fall. Without pumping, the water will flow to the GBML area entirely by gravity. It will go through a 26-kilometer underground tunnel, treated through the Ouardaniyeh water treatment plant, and distributed though networks that are currently being rehabilitated as part of the Greater Beirut Water Supply Project.

Q 3: How long will it take for the dam to be built?

SKJ: Construction of the dam will take about five years from the signing of the contract.

Q 4: Will the Bisri Dam be safe?

SKJ: Thank you for this question. Yes, the Bisri Dam will be safe.

The Government of Lebanon designed the Bisri Dam per the state-of-the-art seismic hazard assessment and design. An independent panel of international experts has reviewed the design of the dam and the geological studies and confirmed that it is safe.

These are internationally renowned technical experts in dam engineering, geology, and seismology who have worked on dams around the world, including dams located in seismic areas. In short, they confirmed that the Bisri Dam is designed to withstand the worst earthquakes and it will not in itself trigger them. Also, the Bisri Dam will be equipped with seismic monitoring instruments that will continuously monitor the structure of the dam.

Q 5: How will local communities be affected by the Bisri Dam?

SKJ: The project was designed according to international best practice in reducing the impacts on local communities. Those who will be impacted by the project are entirely accounted for and measures are put in place to ensure that their livelihoods are sustained and concerns are addressed.

The expropriation of land is ongoing and affects 861 landowners of which only 96 live in the area and rely on the land partially for their income and livelihood. Land owners are provided cash compensation calculated at replacement cost in accordance with the World Bank's policies. Additional assistance will be provided to help restore incomes and rehabilitate livelihoods as needed.

A comprehensive Resettlement Action Plan was developed and details the process through which land expropriation and resettlement is being undertaken. The document was consulted widely with the landowners and their representatives, and is publicly disclosed and available at www.cdr.gov.lb

Q 6: Will the Bisri Dam affect the rich biodiversity in the region?

SKJ: This is an important question. Mitigating the impacts on biodiversity is a key priority of this project.

A detailed action plan was put in place. It is based on a biodiversity survey covering all major taxa, including amphibians, reptiles and macro-invertebrates, as well as location and habitat usage information for flora, mammals, birds and fish. The objective is to fully compensate for biodiversity impacts by having an ecological offset for the habitats that will be lost under the reservoir, through translocating some of the species, conserving or strengthening existing natural habitats. These offsets will be designed in a way that the biodiversity result of the Bisri Dam is ideally with "net gains" and at the minimum with "no loss".

A specialized team of environmental experts is working closely with the Ministry of Environment to monitor the implementation of the Environment and Social Management Plan which was also publicly disclosed and is available at www.cdr.gov.lb.

Q7: What is planned for the cultural and archeological sites in the area?

SKJ: Having worked for a long time in Lebanon, the World Bank is very much aware of the prevalence and value of Lebanon's cultural and archeological wealth. This is why we are supporting the Ministry of Culture in ensuring that the cultural and archeological sites are fully preserved. The Mar Moussa church and the remains of the Saint Sophia monastery will be relocated nearby and made accessible to parishioners and tourists, with the close oversight of the Maronite church authorities and parishioners. As for the archeological sites, they will be investigated and preserved with close coordination and supervision of the Directorate General of Antiquities. Archeological works will be financed by the project.

Q 8: Aren't there simpler and cheaper ways to increase water supply to GBML?

SKJ: For decades, the Lebanese government, civil society, academia and their international partners have examined the most cost effective, sustainable and least impactful way to ensure safe drinking water to Lebanon's residents. The Lebanese National Strategy for Water, which was based on a nationally-owned process, concluded that the construction of a dam at the Bisri site was one of the ways in which Lebanon can capture and utilize its water resources effectively.

Indeed, during the design of the project, the Government commissioned a detailed Analysis of Alternatives, which examined the technical, economic, environmental and social aspects of four dam options (Bisri, Janna, Damour East and Damour West) and several non-dam options, including improved groundwater management, desalination, demand management and treated wastewater reuse. The analysis showed that a combination of non-dam and dam actions was needed to increase the volume of water provided to the GBML on the long-term.

The Bank is working closely with various actors in the sector to support the implementation of several non-dam actions that are also critical to the full implementation of Lebanon's water strategy.

Q 9: Why the focus on the Greater Beirut and Mount Lebanon region?

SKJ: The Government of Lebanon has prioritized this project as a way to ensure that 1.6 million people living in the Greater Beirut and Mount Lebanon area have improved access to safe and clean water. Meanwhile, the Bank is also working closely with the Government across many sectors and across the entire territory of Lebanon. We are supporting the environment, transport, health, education and social protection sectors across Lebanon, including those areas that are directly impacted by the large influx of Syrian refugees.

Q 10: Was civil society involved in the process? Were their concerns taken into account?

Absolutely. During preparation and implementation, between April 2012 and May 2017, 28 public meetings and focused group discussions were conducted with beneficiaries, project-affected persons, NGOs and civil society groups. Meetings were announced through local newspapers, and several representatives from NGOs and civil society groups attended the sessions.

Mitigating environmental and social risks during the construction and operation of dams is a high priority. An Environment and Social Impact Assessment was carried out in close collaboration with government agencies, civil society, the private sector and community members and has been approved by the Ministry of Environment. A detailed Resettlement Action Plan was also developed and details the process through which land expropriation and resettlement will be undertaken. Both documents were publicly disclosed and are available at www.cdr.gov.lb

Q 11: Would you like to add anything else?

SKJ: Yes. The Lebanese government has been considering the Bisri Dam project for over 30 years and it is a crucial part of Lebanon's National Water Strategy. For our part, the World Bank aims to support this pro-poor project and we will supervise its implementation very closely to ensure it meets the highest international standards.

20/11/2017 online at: <a href="https://reliefweb.int/report/lebanon/clean-and-continuous-water-16-million-people-lebanon">https://reliefweb.int/report/lebanon/clean-and-continuous-water-16-million-people-lebanon</a>

#### Three Yemen cities run out of clean water due to lack of fuel for pumps: ICRC

Three cities in Yemen have run out of clean water because a blockade by a Saudi-led coalition has cut imports of fuel needed for pumping and sanitation, the International Committee of the Red Cross (ICRC) said on Friday.

As a result of the development in Taiz, Saada and Hodeidah close to one million people are now deprived of clean water and sanitation as Yemen emerges from the world's worst cholera outbreak in modern times, the ICRC said.

Other cities, including the capital Sanaa, are expected to be in the same situation within two weeks, ICRC said in a statement.

"With imports of fuel and other essential goods at a standstill for the past ten days, three Yemeni cities had to stop providing clean water in recent days, putting close to one million people at risk of a renewed cholera outbreak and other water-borne diseases," it said.

"The water and sewage systems in Hodeidah, Saada and Taiz stopped operating because of a lack of fuel," the head of the ICRC in Yemen, Alexandre Faite, said in the statement.

The coalition closed all air, land and sea access to Yemen on Nov. 6 following the interception of a missile fired towards the Saudi capital, saying it had to stem the flow of arms from Iran to its Houthi opponents in the war in Yemen.

The United Nations has said the blockade could lead to "untold thousands" of deaths, and that its partial lifting by the Saudi-led coalition is not enough.

Iolanda Jacquemet, an ICRC spokeswoman in Geneva, said the shutdown of water services was a very bad sign for the fight against cholera, which had been on the wane for weeks in Yemen, although new cases are still running at about 2,600 per day.

"We're very scared that cholera might come back," she said, noting that the huge outbreak, which has sickened over 900,000 people, started in the capital Sanaa in April just 10 days after the sewage treatment plant had stopped working for lack of fuel.

"If these water treatment plants and sewage plants stop working, it can only bring cholera back and other water-borne diseases," she said.

As medical supplies run down because of the blockade, ICRC staff had been approached for help by five medical centers that it does not normally support.

Already 7 million people are in "famine-like conditions", and the U.N. has said that number could rise to over 10 million if Yemen does not get food and nutritional supplies fast.

Famine is only officially declared after an inspection team has carried out a formal survey on the ground, so there is no guarantee that famine is not already underway.

"There may be, as we speak right now, famine happening," U.N. humanitarian spokesman Jens Laerke told a regular U.N. briefing in Geneva. "And we hear children are dying. There is excess mortality as a consequence of under-nourishment."

17/11/2017 online at: <a href="https://www.reuters.com/article/us-yemen-security-blockade/three-yemen-cities-run-out-of-clean-water-due-to-lack-of-fuel-for-pumps-icrc-idUSKBN1DH1Q2">https://www.reuters.com/article/us-yemen-security-blockade/three-yemen-cities-run-out-of-clean-water-due-to-lack-of-fuel-for-pumps-icrc-idUSKBN1DH1Q2</a>

#### 2.5 million Yemenis now lack access to clean water: Red Cross

The capital Sanaa and al-Bayda have joined the list of Yemen cities without clean water due to the blockade by a Saudi-led coalition which has cut off supplies of fuel for pumping, the International Committee of the Red Cross (ICRC) said on Monday.

Some 2.5 million Yemenis now lack access to clean water in crowded cities, "putting them at risk of another major outbreak of water-borne disease", and other cities are running out of fuel, ICRC spokeswoman Iolanda Jaquemet said.

Since April, some 940,768 people in Yemen have been infected with cholera, a water-borne disease, in the world's worst epidemic in a single year that has killed at least 2,200, and cases of dysentery are being reported, she said.

"The water and sewage systems in Dhamar and Amaran are now providing only half the normal coverage," Jaquemet added.

The Saudi-led coalition closed all air, land and sea access to Yemen on Nov. 6 following the interception of a missile fired towards the Saudi capital, saying it had to stem the flow of arms from Iran to its Houthi opponents in the war in Yemen.

On Friday, the ICRC said three cities - Saada, Taiz and Hodeidah - had run out of clean water because the blockade had cut imports of fuel needed for pumping and sanitation, depriving close to 1 million people of clean water.

"Today, Sanaa and al-Bayda joined the list," Jaquemet said.

The United Nations has appealed for the blockade to be lifted, saying it could spark the largest famine the world has seen in decades. Some seven million people are already on the brink of famine.

"The situation for dialysis patients, already urgent, is now critical," Jaquemet said.

The ICRC had reports of some 20 kidney patients requiring dialysis having died over the last weeks "due to the non-availability of treatment", she said.

Dialysis centers in the Houthi-held port city of Hodeidah are particularly hard-hit, working at only 30 percent of their capacity, she said. Other centers in Yemen have been forced to close, sending more patients to three ICRC-supported facilities.

"Given the current state of supplies, it is expected that dialysis centers in Ibb, Taiz and al-Bayda will soon be forced to close, leaving close to 1,000 patients without the sort of treatment on which their lives depend," Jaquemet said.

20/11/2017 online at: <a href="https://www.reuters.com/article/us-yemen-security-blockade-redcross/2-5-million-yemenis-now-lack-access-to-clean-water-red-cross-idUSKBN1DK1ZP">https://www.reuters.com/article/us-yemen-security-blockade-redcross/2-5-million-yemenis-now-lack-access-to-clean-water-red-cross-idUSKBN1DK1ZP</a>

#### **Egypt is Building World's Largest Seawater Desalination Plant**

In continuing efforts to fulfill its growing water needs, Egypt is set to build the largest seawater desalination plant in the world in the Red Sea city of Ain Sokha, head of the Egyptian Armed Forces Engineering Authority, Kamal El Wazir, said earlier this week.

Upon completion, the plant will be able to purify 164,000 cubic meters of seawater per day, and will provide water to development projects in the Suez Canal Economic Zone, Wazir said in a phone interview on private TV channel ONTV.

Currently in the process of being built, the plant will "benefit the economic zone located northwest of Suez Gulf, as well as supporting three other giant desalination plants located in al-Galala, east of Port Said Governorate and the New El Alamein city," he explained.

Meanwhile, the Ministry of Housing's facilities advisor Sayed Ismail told ONTV that these other three desalination plants are currently under construction, each with a production capacity of 150,000 cubic meters per day.

Ismail went on to say that the country's overall water desalination capacity at present stands at 700,000 cubic meters per day, representing a tenfold increase in the past two years.

#### **Looming Water Crisis**

Multiple scientific studies have highlighted that Egypt in recent years has increasingly been suffering from a serious problem with water shortage.

The river Nile's fresh water is continuously decreasing due to human activity. Uneven distribution of water, inefficient agricultural irrigation techniques and misuse of scarce water resources are some of the reasons the country's water security is under threat.

"With a population expected to double in the next 50 years, Egypt is projected to reach a state of serious country-wide fresh water and energy shortage by 2025," said a recent report by the Geological Society of America.

Egypt's volume of renewable freshwater is just 20 cubic meters per person, a significantly low figure compared to international standards. CAPMAS, the country's official statistics agency, said in 2014 that since 1947, Egypt's annual water quota per person has declined by

60 percent. By 2025, the situation is projected to become even worse, with the country facing a situation of "absolute water scarcity".

Egypt's water security is further threatened by the Grand Ethiopian Renaissance Dam project currently being built and which Egyptian authorities warn may reduce Egypt's water supply even further. About 70 percent of the water flowing into Egypt derives from the Blue Nile and Atbara River, both of which are located in Ethiopia.

The past two centuries have seen human activity seriously alter the flow conditions of the river Nile in Egypt. The introduction of barrages in the 1800s and the construction of the Aswan Low and High Dams a century later have changed the distribution of water and organic-rich soil in the Nile delta. In addition, the building of 'New Towns' in Egypt's water-scarce vast desert lands since the early 1980s has contributed to decreasing the country's unrenewable groundwater sources.

As the Nile historically has been Egypt's main source of freshwater, the new seawater desalination plants are part of ongoing efforts to diversify the country's freshwater sources and secure its water supply.

17/11/2017 online at: <a href="https://egyptianstreets.com/2017/11/17/egypt-is-building-worlds-largest-seawater-desalination-plant/">https://egyptianstreets.com/2017/11/17/egypt-is-building-worlds-largest-seawater-desalination-plant/</a>

## Egypt's Water Share of the River Nile is a "Matter of Life or Death": Al-Sisi on Ethiopian Dam

Egypt's president Abdel Fattah al-Sisi stressed in a speech on Saturday that no one can touch Egypt's water share of the River Nile.

During the inauguration of development projects in Kafr al-Sheikh governorate, al-Sisi addressed the issue of the Grand Ethiopian Renaissance Dam (GERD) that has recently stirred concerns over Egypt's share of water.

The president said that several talks were held with Ethiopia and Sudan, and Egypt is quite aware of their right in development. However, Egypt's right to its water share of the Nile river is a "matter of life or death".

Al-Sisi also called on Egyptians to support the state, pointing out that any step that is being taken is in favour of the Egyptian citizens.

GERD has recently caused controversy after a tripartite ministerial meeting had failed to reach an agreement on the introductory report prepared by companies conducting the technical studies. These technical studies are commissioned by French companies to study the impact of GERD. Ethiopia stated previously that it will not abide by the results of these studies in the construction process, but rather in the operation process.

The construction of GERD is expected to be concluded by the end of this year.

However, Egypt stressed multiple times that its water share of the Nile River will not be affected whatsoever by GERD.

Egypt generally faces a water shortage problem, Minister of Irrigation Mohamed Abdel Aaty previously stated. He said that the share of water of each individual decreased due to the increasing population.

19/11/2017 online at: <a href="https://egyptianstreets.com/2017/11/19/egypts-water-share-of-nile-river-is-a-matter-of-life-or-death-al-sisi-on-ethiopian-dam/">https://egyptianstreets.com/2017/11/19/egypts-water-share-of-nile-river-is-a-matter-of-life-or-death-al-sisi-on-ethiopian-dam/</a>

#### Kuwait Fund loans \$42.5m to Egypt for water project

The Kuwait Fund for Arab Economic Development (KFAED) has signed a loan agreement, worth \$42.5m (KWD12.5m), with Egypt.

Under the terms of the agreement, the loan will be used to fund an infrastructure project that will provide drinking water in Egypt's Sinai Peninsula, particularly to residents of the city of Al-Arish.

The agreement, signed yesterday, is the 45th loan deal that Egypt has inked with the Kuwaiti fund, bringing the collective value of the aid it has received to \$2.8bn (KWD833m), Kuwait News Agency (KUNA) reported, quoting KFAED's director general, Abdulwahab Al-Bader.

Commenting on the loan agreement, Dr Sahar Nasr, Egypt's Minister of Investment and International Cooperation, noted that the project it would fund, and other projects of similar nature, would help improve the quality of life in a region affected by terrorism.

20/11/2017 online at: <a href="http://www.constructionweekonline.com/article-47212-kuwait-fund-loans-425m-to-egypt-for-water-project/">http://www.constructionweekonline.com/article-47212-kuwait-fund-loans-425m-to-egypt-for-water-project/</a>

#### Sisi warns Ethiopia over water dispute

Egyptian president Abdel Fattah el-Sisi has warned Ethiopia that Egypt's water is a matter of life or death.

Ethiopia is finalizing the construction of the Renaissance mega dam and will now start filling the reservoir to power Africa's largest hydroelectric dam.

Egypt says that the dam will cut its share of water, affecting farmland in Egypt and squeezing its population.

Sisi reassured Egyptians during the opening of a fish farm in the Delta province of Kafr El Sheikh on Sunday, telling them that "no one can touch Egypt's share of water".

The Nile provides Egypt with 90 per cent of its water supply.

Sisi said in Sharm El Sheikh on 8 November, "We view positively the developmental needs of our friends and brothers in Ethiopia."

He added, "We are capable of protecting our national security, and water to us is a question of national security. Full stop."

Israeli experts said that the dam would force Egypt to attempt to negotiate the project through Israel, which has great influence in Ethiopia.

20/11/2017 online at: http://thelenspost.com/en/sisi-warns-ethiopia-over-water-dispute/

#### Ghani warns regarding looming water crisis threatening Kabul city

President Mohammad Ashraf Ghani warned regarding the looming water crisis threatening capital Kabul and other key cities of the country.

Speaking during the 4th round national urban conference in Kabul, President Ghani said the lack of a strategy to manage resources is one of the worst legacies left to the Afghan government.

He said extensive research and studies have been done regarding the water resources and its management over the period of the past three years.

President Ghani further added that the government has important plans on hand particularly for water resources management in Kabul.

According to President Ghani, a major program incuding the construction of a water dam is due to kick off in the near future in a bid to respond to the looming water crisis threatening the capital.

This comes as President Mohammad Ashraf Ghani earlier in August said more water dams will be built in western Herat and other provinces of Afghanistan as he unveiled the government's new economic perspectives.

Earlier, President Ghani had said the government is committed for the administration of the waters despite the objections as he called on the youths of the country to step up efforts to eradicate poverty, discrimination, and violence in the country.

19/11/2017 online at: <a href="http://www.khaama.com/ghani-warns-regarding-looming-water-crisis-threatening-kabul-city-03874">http://www.khaama.com/ghani-warns-regarding-looming-water-crisis-threatening-kabul-city-03874</a>

#### Water insecurity

For many, climate change conjures up images of forsaken polar bears floating on icebergs made from melting ice caps, or hurricanes in the Caribbean turning island paradises into island hells. But the ones who are most affected worldwide are those with the least resources in fragile environments — including people in places like Pakistan.

For people in Pakistan, perhaps the most immediate and serious impact is on water availability. According to a report by the World Resources Institute, Pakistan is on track to become the most water-stressed country in the region, and 23rd in the world, by the year

2040. No person in Pakistan, whether from the north with its more than 5,000 glaciers, or from the south with its 'hyper deserts', will be immune to this.

Pakistan's economy is the most water-intensive worldwide, according to an IMF report. According to the Pakistan Council of Research in Water Resources, Pakistan may run dry by 2025 if the present conditions continue. They claim that the country touched the 'water stress line' in 1990, and crossed the 'water scarcity line' in 2005, more than a decade ago, and that in relation to the scale of the problem relatively little has been done to improve the use or supply of water.

The UN's Food and Agriculture Organisation measures the pressure on national water resources by calculating water withdrawal as a percentage of total renewable water resources (TRWR). Stresses are considered high if the TRWR value is above 25 percent. Pakistan's water pressure amounts to a staggering 74pc. This level of pressure is high, even when compared with neighbouring countries, such as Iran at 67pc, India at 40pc, Afghanistan at 31pc, and China at 19.5pc.

Pakistan must diversify its water resources.

With new challenges in trans-boundary water talks, understandably much focus is directed towards Pakistan's interstate water issues with India and Afghanistan. But international experience shows that water scarcity can exacerbate internal tensions. According to the UN Peace Institute, evidence from Pakistan shows that water scarcity, droughts, floods and domestic mismanagement can prompt tensions locally and this can escalate intrastate water disputes.

As with other diverse and larger countries, Pakistan has defused these tensions — but with current signs pointing towards greater water scarcity these tensions are likely to increase, making improved water management an economic, environmental and political imperative.

Crafting sustainable solutions will require an integrated approach to supply and demand management. In the long-term planning, coming up with strategic conservation strategies is key. Both surface and groundwater resources are being used at capacity, and current methods of extraction and uses are not only unsustainable, they are also damaging to the economy and human security today and in the future.

With the population growing even faster than projected, and the intensity of water use remaining high, if no remedial actions are taken now the water needs of the estimated 208 million Pakistanis will continue to escalate dramatically. While more reservoirs and dams may be a part of the answer, they are just one part. So, apart from building more dams and reservoirs, it is essential that Pakistan diversifies its water resources to ensure water availability. We have examples from many countries that can be adapted to Pakistan.

For instance, Singapore follows The Four Taps Strategy to tackle water shortages, and Japan has invested heavily in water-saving technologies. Similarly, we have plenty of rainwater year-round that can be recycled and stored as is being done in the Maldives.

In all those countries, a price is put on water use, so it's important to note that for a country like Pakis-tan water is almost a free commodity. Unlike electricity, there are no water meters in houses where people pay according to usage. Thus, there is enormous, unmeasured water was-tage. To sensitise the public on water wastage it is critical that water usage is metered. Public outreach campaigns have worked elsewhere for helping put a value on water; and decreasing the intensity of water used.

Current irrigation practices are largely inefficient, and water productivity is lowest in the Indus basin's irrigated agriculture. According to UNDP, the development of laser levelling technology and furrow-bed irrigation has resulted in saving 30pc of water and has led to an increase in productivity by 25pc in Punjab's Okara district. Such a model should be replicated in other areas, as well as other methods, such as expanded drip irrigation farming systems.

Delaying efforts to address Pakistan's water scarcities will intensify tensions between different stakeholders. If more Pakistanis are not to be left behind and the SDGs are to be met rapidly, reducing 'water stress' is crucial. Water management needs to become a top priority for Pakistan.

15/11/2017 online at: <a href="https://reliefweb.int/report/pakistan/water-insecurity">https://reliefweb.int/report/pakistan/water-insecurity</a>

# Pakistan pulls plug on dam deal over China's 'too strict' conditions in latest blow to Belt and Road plans

Pakistan has decided to cancel a US\$14 billion infrastructure agreement with China because it could not accept the hyper strict conditions, local media reported, in another setback to Beijing's overseas ambitions.

The exclusion of the Diamer-Bhasha dam from the China-Pakistan Economic Corridor (CPEC) framework, a key element to Beijing's Belt and Road Initiative, was because China's hyper strict conditions for funding the project were "not doable and against our interests", Pakistan's Express Tribune quoted Water and Power Development Authority chairman Muzammil Hussain as saying on Thursday.

The harsh conditions included China taking ownership of the project, the operation and maintenance costs and pledging to build another operational dam.

The project will go on ahead, however, as Pakistan has decided to finance the project – which will generate 4,500 megawatts (MW) of hydropower – itself.

The decision comes only a few days after Nepal called off a US\$2.5 billion hydropower plant awarded to a Chinese state-owned company, which was also part of the Belt and Road Initiative.

China and Pakistan are due to hold a meeting about the CPEC on November 21. The two sides have prioritised about 15 thermo energy projects valued at US\$2.2 billion.

Although the South Asian countries like Pakistan and Nepal need and welcome China's investment to improve their infrastructure, specialists warned that the latest setbacks are a

reminder that China should be more cautious when it promotes sensitive projects like hydropower in other countries.

"Hydropower projects are particularly complicated and sensitive," said Sun Shihai, a specialist on China's relations with South Asia at the Chinese Academy of Social Sciences.

Pakistan pulled out of the project after deciding it could not accept China's terms. Photo: Imaginechina

Factors such as the environmental impact, resident relocation, the competing interests of upstream and downstream regions – particularly for international rivers – can seriously affect a project.

Sun highlighted the example of the Myitsone dam project involving a Chinese firm in Myanmar that was suspended over environmental concerns.

In the case of the Diamer-Bhasha dam, which is on the Indus River in the region of Gilgit-Baltistan, and borders the Pakistan-occupied part of the disputed territory of Kashmir, India's objections contributed to the difficulty Pakistan had raising money from international institutions.

"India has strongly opposed the CPEC because it includes projects in the disputed region. So there are many more factors China should take into consideration." said Sun.

However, Zhao Gancheng, a South Asia studies expert at the Shanghai Institute for International Studies, said as the US\$46 billion CPEC has already set a few major projects in motion, arguing that the rejection of individual projects was not yet a major problem for the Belt and Road Initiative.

The project intends to build infrastructure and trade links connecting countries across Asia and in Africa.

"It will not be a big surprise if similar problems happen in China's future overseas projects. And that would not change the big picture," said Zhao.

"There is a common misinterpretation internationally that the Belt and Road is something China would want to push forwards at all cost. But in fact, all projects are commercial so they have to be justifiable economically, and agreed mutually," he said.

16/11/2017 online at: <a href="http://www.scmp.com/news/china/diplomacy-defence/article/2120261/pakistan-pulls-plug-dam-deal-over-chinas-too-strict">http://www.scmp.com/news/china/diplomacy-defence/article/2120261/pakistan-pulls-plug-dam-deal-over-chinas-too-strict</a>