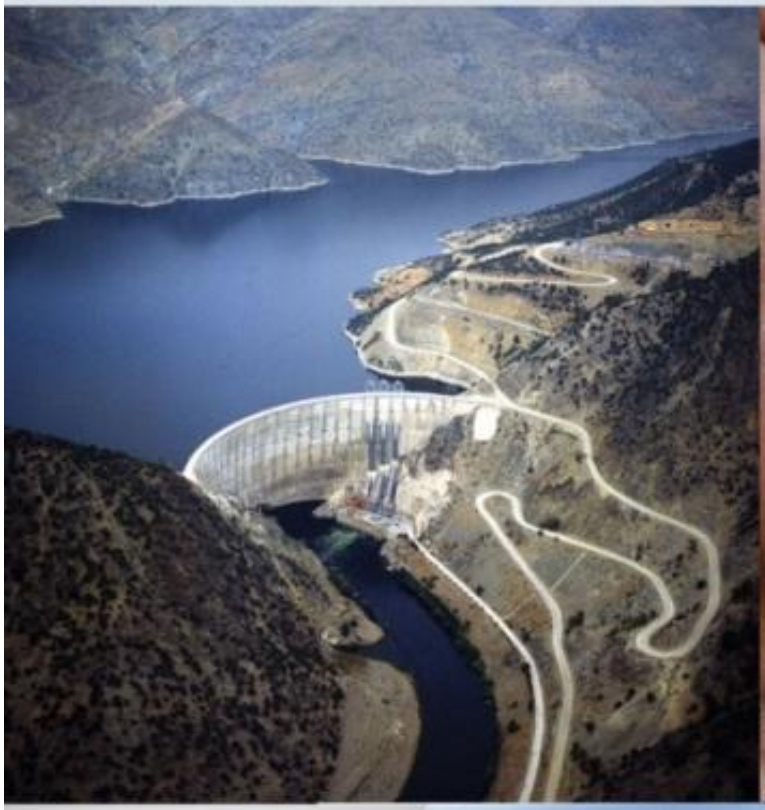


ORSAM WATER BULLETIN

Weekly Bulletin by ORSAM Water Research Programme

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





Issue 142

ORSAM WATER BULLETIN

19 August 2013 – 25 August 2013

- **Turkey-TRNC Water Procurement Project to mark a first**
- **India and Iraq singed MoUs during the visit of Nouri al-Maliki to India**
- **Iran wastes 65 percent of its water sources**
- **Iran may stop building dams around lake Urmia to restore its water reserves**
- **Iran, Afghanistan, Tajikistan hold trilateral meeting on water, energy**
- **Jordan to Sell Desalinated Water to Israel, Jordan Times Reports**
- **Jordan and Israel to Trade Water in New Venture**
- **Jordanian PM: Sell future desalinated water to Israel, purchase more Kinneret water**
- **Jordan, Israel in advanced talks on water deal**
- **Dead-Red Canal Project Launched in Jordan**
- **Jordan set to plunge into billion-dollar Red-Dead Canal**
- **Jordan approves USD980m water project**
- **It's still miserable to be a Palestinian in Gaza**
- **Palestinians, Israelis work together to clear medicines from water**
- **Jordan to launch 'first phase' of Dead Sea canal**
- **Cyprus and Israel discuss water development, management and protection**
- **Advances in Israeli Water Technology Assisting in Worldwide Food Production**
- **How do you provide water and sanitation to 50,000 people in the middle of the desert?**
- **Water scarcity**
- **Singapore Water Companies Set To Make Waves With Advanced Water Technologies At IWS 2014**
- **Yemen water woes**
- **Evacuating 30 Islands Threatened with Flood in River Nile**
- **How Resource Shortages Sparked Egypt's Months-Long Crisis**
- **PFF voices against Bhasha Dam**

Mithat Paşa Caddesi 46/4 Kızılay-Ankara TURKEY
Tel: +90(312)4302609 Fax: +90(312)4303948 orsam@orsam.org.tr

- **China less than enthusiastic to Indian proposal on water issue**
- **China will build and finance two dams in Patagonia equivalent to 10% of Argentine power demand**
- **Fish Ecosystem on Yangtze River on Verge of Collapse**
- **It's a mistake for NGOs not to engage with hydropower companies**
- **Southern Africa Shows the Way With Water**

Mithat Paşa Caddesi 46/4 Kızılay-Ankara TURKEY
Tel: +90(312)4302609 Fax: +90(312)4303948 orsam@orsam.org.tr

❖ Turkey-TRNC Water Procurement Project to mark a first

75 million cubic meters of water will be transferred annually from Turkey to Turkish Republic of Northern Cyprus via a pipeline under the sea

A new step has taken in Turkish Republic of Northern Cyprus (TRNC) Water Procurement Project connecting Turkey and TRNC via a water pipeline under the sea.

The 80-kilometer long pipeline built 250 metres pendant under the sea will mark a first, Turkish Ministry of Water Works and Forestry said.

A total of 75 million cubic metres of water will be transferred annually from the Alakopru Dam being built on the Anamur-Dragon watercourse in Turkey's Mersin province to Gecitkoy Dam still under construction near Girne in TRNC.

50.3 percent of the 75 million cubic metres of water transferred will be drinking water and the remainder 49.7 percent will be used for irrigation purposes.

Once the project is completed, water need of TRNC, currently suffering from water shortage, will be met for 50 years.

Water transfer is scheduled to begin on March 7, 2014 with the instruction of Turkish Prime Minister Recep Tayyip Erdogan.

"Turkey-TRNC Water Procurement Project to mark a first", 21/08/2013, online at: http://www.worldbulletin.net/?aType=haber&ArticleID=115604

BACK TO TOP

Mithat Paşa Caddesi 46/4 Kızılay-Ankara TURKEY
Tel: +90(312)4302609 Fax: +90(312)4303948 orsam@orsam.org.tr

❖ India and Iraq singed MoUs during the visit of Nouri al-Maliki to India

Nouri al-Maliki, the Prime Minister of Republic of Iraq was on a state visit to India from 22 to 25 August 2013. During his visit and stay in India, he met with the Prime Minister of India, Manmohan Singh and President of Indian Union, Pranab Mukherjee, Vice President of India, Hamid Ansari and several other dignitaries.

This was the first visit of Maliki to India. During his visit, he was accompanied by a high-level delegation that comprised ministers, senior officials and business leaders. Prime Minister Maliki was accorded a ceremonial welcome in the forecourt of the Rashtrapati Bhavan on 23 August.

The Prime Ministers of both the nations exchanged views on bilateral, regional and multilateral issues of mutual interest and reached a broad consensus. The discussions enabled better understanding and appreciation of each other's concerns and perspectives and helped in forging closer understanding at the highest political level.

During the state visit of al Maliki to India, several MoUs were inked between the two nations. The Memorandum of Understanding (MoUs) signed include:

1. **MoU in the field of Energy** between the Ministry of Petroleum & Natural Gas of the Republic of India and the Ministry of Oil of the Republic of Iraq. – The MoU was signed between, Veerappa Moily, the Union Minister of Petroleum and Natural Gas and Abdul Kareem Luaibi Bahedh, Minister of Oil of Iraq. The MoU envisages cooperation in the areas of upstream and downstream oil & gas activities and related infrastructure.**The areas includes are:**

- Conclusion of contract of Exploration Block-8 awarded to ONGC Videsh Limited
- Offer of data of Middle Furat group of Fields for due diligence
- Natural Gas
- Petroleum Refineries
- Training

Mithat Paşa Caddesi 46/4 Kızılay-Ankara TURKEY
Tel: +90(312)4302609 Fax: +90(312)4303948 orsam@orsam.org.tr

2. MoU between the Ministry of External Affairs of the Republic of India and the Ministry of Foreign Affairs of the Republic of Iraq on **Foreign Office Consultations**. – The MoU was signed between, Ashok K. Kantha, Secretary (East), MEA and Nazar Al-Khairullah, Deputy Minister for Foreign Affairs, Ministry of Foreign Affairs of Iraq. The signed MoU It enables high ranking officials from Foreign Ministries of both countries to discuss periodically bilateral and international relations of mutual interest.

3. MoU between the Foreign Service Institutes of MEA and Ministry of Foreign Affairs of Iraq. – The MoU was signed between, Nengcha Lhouvum, Dean, Foreign Service Institute and Nazar Al-Khairullah, Deputy Minister for Foreign Affairs, Ministry of Foreign Affairs of Iraq. This MoU It enables exchange of information regarding structure and content of training programmes for diplomats.

4. MOU between the Ministry of Water Resources of the Republic of India and the Ministry of Water Resources of the Republic of Iraq on **Bilateral Cooperation in Water Resources Development and management**. – The MoU was signed between Alok Rawat, Secretary, Ministry of Water Resource Development and Ahmad Tahsin Ahmad Berwari, Ambassador of Iraq to India. The MOU envisages cooperation at the national, regional and international levels in the field of water resources management and development by collaboration and sharing of expertise in the following areas:

• Project hydrology, practicing hydrology and hydrological modeling, applications of remote sensing & GIS in hydrology and water resources, integrated water resources development and management, flood and drought management, irrigation and drainage surface and groundwater management and development minor irrigation, modernisation/renovation of old irrigation schemes, hydrometeorology, watershed, lakes and wetlands development dam safety and surveillance, reservoir regulation, training and capacity building ,micro irrigation, any other field related to water resources management and irrigation as may be agreed upon between the parties.

Apart from this, during his visit, the Iraqi Prime Minister Nouri al-Maliki, while addressing the gathering of Indian industrialists in Mumbai on 24 August 2013 called upon the Indian industries to invest in Iraq. He said that there existed huge investment opportunities in Iraq in the sector like energy, IT, refineries, fertilisers, infrastructure, health and education.

Nouri al-Maliki also ensured that his government would speed up the visa procedures for investments and opening up of the branches of Indian Banks in Iraq and will provide all possible help to Indian industries willing to set up their projects in Iraq.

"India and Iraq singed MoUs during the visit of Nouri al-Maliki to India", 25/08/2013, online at: http://www.jagranjosh.com/current-affairs/intindia-and-iraq-singed-mous-during-the-visit-of-nouri-almaliki-to-india-1377423312-1

BACK TO TOP

❖ Iran wastes 65 percent of its water sources

Some 65 percent of Iran's water sources have been wasted in agriculture sector due to mismanagement, Member of Research institute of Forests and Rangelands Mohammad Darvish said.

Just 6 percent of Iran's 130 billion cubic meters of extractable water sources are used as drinking water.
Darvish said the figure indicates that Iran should not be facing water shortage, ILNA news agency reported. However, due to mismanagements, the country could indeed face some shortage of water, despite the mentioned 6 percent.

Darvish went on to say that, the annual discharge of the wells has been reduced by a half during the last twenty years, while the number of wells has increased from 336,000 in 1995 to 650,000 in 2012 which indicates an increase by 93 percent.

He added that, irrigation efficiency has not increased in accordance with accepted international standards which caused some 65 percent of water sources of agriculture sector to be wasted.

Iranian officials warned about water shortages in big cities during last month.

Tehran Water and Wastewater Company announced in a statement that if the consumption trend and the high temperature continue, there could be water shortages in Tehran, also asked the citizens to consume water responsibly.

According to the reports, Tehran's people experienced water interruption for few hours in some parts of capital on July 25.

Iran is located in the arid zone and over the past 40 years the country has repeatedly faced drought. The drought of 1992-2002 caused considerable damage to agriculture. Quotas for fresh water were applied in some cities including Tehran.

"Iran wastes 65 percent of its water sources", 21/08/2013, online at: http://www.azernews.az/region/58368.html

BACK TO TOP

❖ Iran may stop building dams around lake Urmia to restore its water reserves

Iran may stop building dams around lake Urmia in a bid to restore its water reserves, ISNA quoted Iranian Energy Minister Hamid Chitchian as saying.

We should revise plans for establishing hydroelectric power plants in the region, he added. We should also modify method of cultivation and irrigation to help save the lake, the minister said.

Some 80 dams have been built or are being built around the lake.

Iranian president Hassan Rouhani has established a working group to tackle the issue of saving the Urmia lake, the official website of Iranian president reported on August 19.

According to the report, after the cabinet meeting, Rouhani spoke to journalists, where he made the remarks regarding the lake Urmia issue.

"As I've promised people before, I established an Urmia lake-saving work group, which will be headed by country's energy minister, Hamid Chitchian," Rouhani said.

Other members of the group include the agriculture Jihad minister, the interior minister, and the head of the Environment Protection Organization and a representative of the deputy president for planning and strategic supervision.

The work group was commissioned to use the background of the already conducted studies and technical research works in the field and to present their proposals for saving the Urmia Lake to the government within a two-month period.

Back in July, Rouhani said that he will put restoring Lake Urmia on agenda on the first day if he is elected as the next president.

"I promise you if I am elected as the head of the executive branch, I will start working to save Lake Urmia on the first day," Rohani said at the time.

Lake Urmia in northwest Iran, is experiencing its worst drought condition for many years, where over 70 percent of its water has dried up. The level has been declining since 1995.

Officials have said if the current restoration efforts are not effective, the lake will be turned into a swamp within four years. Previous reports said Lake Urmia needs 3.1 billion cubic meters of water per year to survive.

Lake Urmia is the third largest salt water lake on earth with a surface area of approximately 5200 square kilometres.

"Iran may stop building dams around lake Urmia to restore its water reserves", 25/08/2013, online at: http://en.trend.az/regions/iran/2182348.html

BACK TO TOP

Mithat Paşa Caddesi 46/4 Kızılay-Ankara TURKEY
Tel: +90(312)4302609 Fax: +90(312)4303948 orsam@orsam.org.tr

❖ Iran, Afghanistan, Tajikistan hold trilateral meeting on water, energy

DUSHANBE (NNI): Officials of water and energy sector from Iran, Afghanistan and Tajikistan held a trilateral meeting on the sidelines of an international conference on water cooperation on Wednesday.

During the meeting, Alireza Daemi, director of Water Catchment Department of the Iranian Energy Ministry and water and energy ministers of Afghanistan and Tajikistan emphasized the necessity of cooperation in implementing joint energy projects.

The construction process of Tajikistans Sangtoudeh-II power plant which will be completed by yearend with joint investment of Iran and Tajikistan was also discussed.

Tajik Minister of Industry and Energy, Golshir Ali termed the implementation of this project which removes Tajikistans shortage of energy to a great extent as an example of good cooperation between the two countries.

This power plant is presently producing 110 megawatt of electricity and its second turbine with the capacity of generating another 110 megawatt of electricity will be inaugurated by yearend, he said.

Meanwhile, the Tajik minister agreed to export 1 billion kw/h of electricity to Afghanistan in the current year. NNI

"Iran, Afghanistan, Tajikistan hold trilateral meeting on water, energy", 21/08/2013, online at: http://www.thefrontierpost.com/article/35036/

BACK TO TOP

❖ Jordan to Sell Desalinated Water to Israel, Jordan Times Reports

Jordan will sell water from a planned Red Sea desalination project to Israel in return for about 50 million cubic meters of drinking water a year from the Tiberias reservoir, the Jordan Times reported.

The kingdom will sell Israel water at a rate of 1 dinar ($1.41) a cubic meter and buy from the country at a rate of 0.3 dinar a cubic meter, the newspaper said, citing Prime Minister Abdullah Ensour. The arrangement will help save Jordan the cost of conveying water from the south to the northern governorates of Irbid, Jerash, Ajloun and Mafraq, he said.

Jordan, one of the world's driest countries, will seek bids this year for a $980 million project to transfer water from the Red Sea to a desalination plant with capacity of 200 million cubic meters a year, the newspaper reported, citing Minister of Water and Irrigation Hazem al-Nasser.

A pipeline will be built from the plant in Wadi Araba to the Dead Sea to discharge the brine. Jordan plans to get $300 million to $400 million in grants for the venture, al-Nasser said, according to the Times.

"Jordan to Sell Desalinated Water to Israel, Jordan Times Reports", 20/08/2013, online at: http://www.businessweek.com/news/2013-08-20/jordan-to-sell-desalinated-water-to-israel-jordan-times-reports

BACK TO TOP

Mithat Paşa Caddesi 46/4 Kızılay-Ankara TURKEY
Tel: +90(312)4302609 Fax: +90(312)4303948 orsam@orsam.org.tr

❖ Jordan and Israel to Trade Water in New Venture

Jordanian Prime Minister Abdalla Ensour and his cabinet approved a new plan to trade water with Israel. In a new Red Sea desalination project expected to cost $1 billion, Jordan will sell part of the resulting water to Israel in exchange for water from the Tiberias reservoir. Middle East countries are known to face chronic water shortages. "We will sell Israel water at a rate of JD1 per cubic metre and buy from them at a rate of JD0.3 per cubic metre. This process will save us the effort and cost of conveying water from the south to the northern governorates," Ensour said, the Jordan Times reported. According to Jordanian Minister of Water and Irrigation Hazem Nasser, the agreement is legal based on Article 2 of the peace treaty signed with Israel in 1994, and is of "strategic national interest" to Jordan.

"Jordan and Israel to Trade Water in New Venture", 23/08/2013, online at: http://www.jewishpress.com/news/breaking-news/jordan-and-israel-to-trade-water-in-new-venture/2013/08/23/

BACK TO TOP

Mithat Paşa Caddesi 46/4 Kızılay-Ankara TURKEY
Tel: +90(312)4302609 Fax: +90(312)4303948 orsam@orsam.org.tr

❖ Jordanian PM: Sell future desalinated water to Israel, purchase more Kinneret water

The Kingdom of Jordan intends to sell Israel water produced by a future Jordanian desalination plant, in return for the ability to purchase an increased amount of fresh water from Israel's Kinneret reservoir, Prime Minister Abdullah Ensour declared on Monday.

Ensour made the announcement at a press conference regarding the launch of the first phase of the Red Sea-Dead Sea Conduit project, which would consist of a desalination plant that is at least 100 million cu.m. in capacity. As part of an agreement with Israel, Jordan would sell its neighbor the desalinated water at 1 Dinar (NIS 5) per cubic meter and would purchase the Kinneret water at 0.3 Dinar (NIS 1.5) per cubic meter, Ensour explained.

Such a move would be ideal for Jordan because transferring the brunt of the water from the desalination plant near Aqaba to the country's water starved north would be much more expensive than embarking upon this plan, the prime minister stressed.

The $980 million desalination plant, slated to be situated in Jordan's south near Al-Risha, will draw water from the Red Sea's Gulf of Aqaba, Ensour explained. Once desalinated, the fresh water will once again return further south toward the city of Aqaba. A portion of the desalinated water as well as an additional 20 million cu.m. from the Al-Wehda Dam on the Jordanian-Syrian border has thus far been allocated for the country's densely populated northern governorates, Ensour said. The prime minister, however, is advocating the water swap with Israel in order to curb the costs associated with transferring the desalinated water to his nation's north. It is unclear whether he intends for the swap to occur in addition to or entirely instead of desalination transports to the north.

Overall, the Red Sea-Dead Sea Conduit project has been highly controversial among Israelis and Jordanians in Israel mainly due to environmental concerns and in Jordan mainly due to the extremely expensive cost of the project.

As the Dead Sea's water level has been declining at a rate of more than a meter per year, the project aims to save the sea from environmental degradation while desalinating water and generating hydroelectricity at affordable prices, a World Bank feasibility study said.

According to project plans, an eastern intake site for sea water would be submerged off the coast of Aqaba, from which a combination of 180 km. worth of tunneling and pipelines would extend to the Dead Sea, with a desalination plant and two hydropower plants along the way all on Jordanian land. Plans had originally called for the desalination plant to have a capacity of 320 million cu.m., rising to 850 million cu.m. by 2060 .

Although the World Bank feasibility study released in January does overall deem the project to be possible as well as environmentally sound with some preventative measures, other World Bank assessments offered more severe warnings. One concern among experts includes the risk that the influx of seawater and brine into the Dead Sea will change both the appearance and quality of the water, and could negatively impact the region's ecology and hydrogeology. In addition, the report warned of the significant presence of nonrenewable energy that would be required to power the desalination plants.

Nonetheless, Water, Irrigation and Agriculture Minister Hazem Nasser described the Red Sea-Dead Sea Conduit project as a national program in Jordan's strategic interest, which the kingdom has "no choice" but to implement due to overall water scarcity. Meanwhile, Jordan's water shortage increases by 7 percent annually, Nasser added.

Water generated by the desalination plant would be sold to citizens at rates lower than water generated by the recently launched Disi Aquifer project, which now supplies Amman with an additional 100 million cu.m. of water from an ancient aquifer.

As far as the trade with Israel is concerned, Nasser explained that the two countries would not need to sign any new agreement, as the peace agreement of 1994 mandates that Israel sell to Jordan no less than 50 million cu.m. of water per year, an amount that can be redetermined. Currently, Israel provides Jordan with about 55 million cu.m. of water from Lake Kinneret each year, Nasser said.

In response to a query about the matter from *The Jerusalem Post*, Israeli Water Authority Spokesman Uri Schor said that "there are ongoing discussions all of time between the Jordanian and Israeli professional bodies, according to the peace agreement and the relationship between the two countries."

Mithat Paşa Caddesi 46/4 Kızılay-Ankara TURKEY
Tel: +90(312)4302609 Fax: +90(312)4303948 orsam@orsam.org.tr

"Exchanges of ideas, requests and other things are taking place not through the press," Schor added.

Gidon Bromberg, Israeli director for the regional environmental organization Friends of the Earth Middle East, said that while his organization praises cross-border cooperation on and commerce of water, this is not the ideal path to take.

"FoEME welcomes creative ideas of water trade between Jordan and Israel and sees the potential environmental, economic and political benefits of exploring these options if done in a transparent manner," Bromberg told the *Post*.

"Linking trade in water Aqaba to Eilat and Kinneret to Amman with the Red-Dead project however makes no sense." Bromberg pointed specifically to one of the World Bank's secondary studies the Study of Alternatives which demonstrates how the Red Sea-Dead Sea Conduit could cause serious environmental ramifications. Instead, his organization champions a partial restoration of the Jordan River, another solution toward rehabilitating the Dead Sea discussed in the Study of Alternatives.

"Over a decade has been lost and tens of millions of dollars spent on the Red-Dead proposal with nothing but poor results environmental and economic," Bromberg said. "The public needs to call on our governments to move on, to deal with the root causes of the demise of the Dead Sea: charging the mineral extraction industry for the water they pump out of the Dead Sea and partially restoring the Jordan River."

"Jordanian PM: Sell future desalinated water to Israel, purchase more Kinneret water", 20/08/2013, online at: http://www.jpost.com/Enviro-Tech/Jordanian-PM-Sell-future-desalinated-water-to-Israel-purchase-more-Kinneret-water-323708

BACK TO TOP

❖ Jordan, Israel in advanced talks on water deal

Hashemite Kingdom, thirsty for water due to huge influx of Syrian refugees, to get Kinneret water in return for desalinated water from Aqaba plant

Israel and Jordan are holding advanced negotiations over water exchanges between the two sides, Israeli news outlet Ynet news reported.

According to the developing outline, a water desalination plant will be built in Aqaba, and Jordan will supply Israel with the product to be used in the Negev.

In return, Israel will supply Jordan with water from the Kinneret to be used in the north of the Hashemite Kingdom, the report said.

This outline is meant to save Jordanians the transport costs involved in moving water from southern to northern Jordan.

The sides are attempting to create an alternative for the outline agreed upon in the 1994 peace accords, according to which Israel supplies Jordan with 50 million cubic meters of water annually.

Jordan's Prime Minister Abdullah Enasour confirmed this week that the kingdom will indeed trade water with Israel. In a press conference in Amman, the prime minister said "we need water in the north, and Israel wants water in the south."

A few weeks ago the Jordanian Water and Agriculture Minister Hazem Nasser revealed that Jordan has adopted a new plan to desalinate water from the Red Sea.

According to the minister, Jordan will issue a tender by the end of 2013 for the construction of the plant, and the laying of a pipe between it and the Dead Sea, spilling there whatever water is left.

Water shortage

The main obstacle facing the project is financial. The World Bank is ready to grant Jordan five billion dollars, but conditions it on cutting subsidies, which the kingdom has yet to comply with.

In addition, Jordan will have to come up with $2.6 billion on its own, which does not seem likely at the moment.

The project has also come under fire from environmental organizations, concerned with the possible damage to the Dead Sea should left-over water be funneled to it from the Aqaba plant.

In recent months Israel raised the amount of water it pipes to Jordan in order to help its neighbor handle the severe water shortage it is facing, also caused by the new demand posed by the gargantuan influx of Syrian refugees into the country.

The number of Syrians fleeing into Jordan from the civil war in their country has crossed the half million mark in the sparsely populated country of 6.3 million.

Improving ties

In addition to the extra three million additional cubic meters of water, Israel has also sold Jordan with 13 million cubic meters of water at cost.

"Creative ideas for the cooperation between Israel and Jordan in the field of water should be welcomed," said Gideon Bromberg, CEO of the Friends of Earth organization, which work to tighten the ties between the two countries in environmental and water issues.

"One of the immediate benefits of the project for Israel is a future solution for water supply to Eilat and the Arava area.

"In light of the city's expected growth and shortage of drinking water, the project exempts Israel from the need to build its own desalination plant in Eilat or connect to the National Water Carrier, steps

which would carry much higher costs.

"Another immediate benefit is the improving of ties between Israel and Jordan, which creates a mutual dependency on regional stability for both sides."

Energy and Water Minister Silvan Shalom's office told Ynet: "The minister is actively pushing this project forward. The matter is yet to be finalized, but it's in its advanced stages."

The minister's office confirmed that a larger amount of water than agreed upon in the peace accords was transferred to Jordan, and said that "we have a chance to help to everyone's benefit." (Ynet)

"Jordan, Israel in advanced talks on water deal", 22/08/2013, online at:
http://en.ammonnews.net/article.aspx?articleno=22885#.Uhm7cNKe_PY

BACK TO TOP

❖ Dead-Red Canal Project Launched in Jordan

AMMAN, Jordan – They may not see eye-to-eye on most issues, but Israel and Jordan are to cooperate in one area they agree must be addressed -- the regional water shortage.

A $980 million project would link the Red Sea with the disappearing Dead Sea while also providing drinking water and water for farming in parts of both countries, according to Prime Minister Abdullah Nesour and other Jordanian officials who announced it this week.

Jordan is one of the most water impoverished countries in the world, ranking third in terms of scarce water resources, according to the World Bank.

Environmentalists, however, are gravely concerned about the project's proceeding without a plan to resolve the impact on the area's ecosystem and the unique nature of the saltiest lake in the world and the Red Sea coral reefs.

The level of Israeli involvement was not clear. Earlier this year, the World Bank said the project was financially feasible, but Israeli environmental groups have been wary of the project.

Both countries are in dire need of fresh water, Nesour said. "Israel needs water in its southern parts. We need water in the north. We will have an exchange agreement," he added.

The project will provide the kingdom with nearly 100 million cubic meters of fresh water annually, Nesour said at the press conference.

It will see Jordan build a 155 mile pipeline between the Red Sea in the south and the Dead Sea, which is shared by both countries and is the lowest place on Earth, 400 meters below sea level.

Midway through the pipeline, a desalination plant is to be set up, powered by either a nuclear power plant or electricity generators.

Fresh water would be pumped south from the plant to cities including Aqaba, Maan, Kerak, Tafilah, and Wadi Arabaa region, bordering southern Israel at that point.

Mithat Paşa Caddesi 46/4 Kızılay-Ankara TURKEY
Tel: +90(312)4302609 Fax: +90(312)4303948 orsam@orsam.org.tr

Israel will benefit from the brine released during desalination, which will be pumped to the Dead Sea to raise its level, Jordanian officials explained at the press coverage.

King Abdullah last month inaugurated the Disi water canal project, whereby Jordan's capital and central cities would be getting 100 cubic meters of fresh water annually.

Jordanian officials say the rising number of Syrian refugees in the north meant they must move ahead with the Dead-Red canal.

Further outlining how Jordan will barter water with Israel, Nesour said: "We will buy water for 25 cents per liter from the Sea of Galilee and sell them desalinated water at the production cost – 80 cents per liter," the premier said.

He noted that sea water will be pumped from the Red Sea to the al Risha area in the south, where it would be desalinated and distributed to southern governates.

Environmentalists, however, have several concerns about the project, particularly its impact on the area around the Dead Sea, which has a unique ecosystem. They worry that pumping the water there will fill the area with mud, threatening the livelihood of thousands of villagers and agricultural land.

They are most concerned about the potential damage to the Red Sea's unique coral reef.

Munqeth Mehyar, chairman of the Friends of the Earth Middle East (FoEME), said part of the coral reefs could thus be lost. "The project would lead to pumping millions of cubic meters from the Red Sea. We do not know what effect that would have on the coral reefs," he told The Media Line.

He admitted, however, that Jordan is caught between a rock and a hard place. While the project poses considerable environmental risks, inaction also poses risks to the environment, including the disappearance of the Dead Sea.

"The Dead Sea is losing one cubic meter every year to evaporation and lack of water coming from Jordan River. The canal could be the solution to save the Dead Sea," he added.

A senior water ministry official said the project also offers major social and economic benefits to citizens in the south, where unemployment and poverty rates have passed the 30 percent mark.

A senior Ministry of Water and Irrigation official, who preferred not to be named, said the canal construction would also help revive the Wadi Araba region, making its vast terrain viable for major agricultural projects.

"We have already started encouraging citizens from the south and other parts of the country to start their agricultural projects in those areas. Tens of thousands of jobs can be created after the canal is operational," he told The Media Line.

The government hopes to achieve several aims, the official explained including saving the Dead Sea, providing potable water to the kingdom's population of 7.5 million and about a million Syrian refugees, and creating tens of thousands of jobs.

"If there is an environmental risk, then we have to take it as the advantages outweigh the disadvantages," he concluded.

"Dead-Red Canal Project Launched in Jordan", 22/08/2013, online at:
http://themedialine.org/news/news_detail.asp?NewsID=38345

BACK TO TOP

Mithat Paşa Caddesi 46/4 Kızılay-Ankara TURKEY
Tel: +90(312)4302609 Fax: +90(312)4303948 orsam@orsam.org.tr

❖ Jordan set to plunge into billion-dollar Red-Dead Canal

Going ahead with plan without Israel or PA, Amman to draw water from Red Sea to the Dead Sea through desalination plan

Jordan announced Monday it is planning to move forward with the first phase of a large-scale water project linking the Dead Sea to the Red Sea.

The Red Sea-Dead Sea Canal, known informally as the Red-Dead project, will help solve the country's massive water shortage and replenish the shrinking Dead Sea, Jordan's Minister of Water and Irrigation Hazem Nasser told reporters Monday.

The cost of the initiative, which is estimated to provide parched Jordan with 3.5 billion cubic feet (100 million cubic meters) of water per year, is between $980 million and $1.2 billion. The government was also seeking to secure several hundred million dollars in grants to offset the cost.

The massive project — the third largest during King Abdullah II's term — was originally to include Israel and the Palestinians, but stalled in recent years, despite numerous studies and international support, in part due to the Arab-Israeli conflict and also because environmentalists on both sides raised concerns about its feasibility.

One report, however, said that the Jordanian project would be conducted in association with Israel, which shares a long border with the Hashemite Kingdom, one of the most water-scarce countries in the world.

Jordanian Prime Minister Abdullah Ensour said the government approved the project "after years of technical, political, economic, and geological studies."

Under the plan, Jordan, most of which is desert, will draw water from the Gulf of Aqaba at the northern tip of the Red Sea and transfer it north to the Araba Valley, where a desalination plant is to be built to treat water. Production at the plant will also generate hundreds of jobs. Another pipeline that extends from the plant to the Dead Sea will help discharge brine back into it, which will help save the natural wonder from drying up, Jordan's Petra News added.

Minister Nasser explained that desalinated water would return south to Aqaba, while salt water would be pulled into the Dead Sea. Environmentalists, however, have warned that filling the Dead Sea with seawater could prove dangerous for the body's fragile ecosystem.

The Dead Sea is the lowest body of water on Earth, as well as the saltiest. It has been drying out for years, and experts believe it is on course to shrink — at least by more than 10 percent — within the next 50 years. The deprivation of the Dead Sea started in the 1960s when Israel, Jordan, and Syria began diverting water away from the Dead Sea's main supply source, the Jordan River.

The idea of a conduit between the two seas was put forward by the British during the 19th century. The idea to build a pipeline from the Red Sea to the Dead Sea — to refill the latter and to provide extra potable water — garnered momentum in the late 20th century and was formally put forward in the 1990s around the time of the Israel-Jordan peace agreement. Jordan had initially agreed to a build a $10-billion pipeline, together with Israel and the Palestinians, but that initiative withered after running up against opposition on both sides.

"The high cost of that project prompted the government to come up with the ideas we announced today, which we call the 'first phase,'" Minister Nasser told the news conference. "We had no other option. We will revive the idea of saving the Dead Sea, while at the same time having drinking water."

Nasser said that Jordan didn't need to reach an agreement with Israel to go ahead with that first phase. The prime minister also mentioned that Jordan was interested in selling desalinated water to Israel, while buying water from the Sea of Galilee.

"We will share water with Israel," the premier added. "Israelis want water in the south, and we need water in the north."

"Jordan set to plunge into billion-dollar Red-Dead Canal", 19/08/2013, online at: **http://www.timesofisrael.com/jordan-set-to-plunge-into-billion-dollar-red-dead-canal/**

BACK TO TOP

Mithat Paşa Caddesi 46/4 Kızılay-Ankara TURKEY
Tel: +90(312)4302609 Fax: +90(312)4303948 orsam@orsam.org.tr

❖ Jordan approves USD980m water project

AMMAN--Water scarce Jordan approved Monday a $980 million project to desalinate water from the Red Sea for drinking water needs, which at the same time would help to replenish the retreating Dead Sea.

The desalination plant will have a capacity of 100 million cubic meters a year in Wadi Araba, Prime Minister Abdullah Ensour told reporters, and a pipeline from the plant will discharge the brine into the Dead Sea.
Jordan is one of the world's most water-poor nations, suffering chronic drinking water shortages. And the Dead Sea is shrinking around one meter every year amid drought, and pumping for mineral extraction and agricultural needs.

"The Jordanian government has decided to go ahead with the project after conducting thorough geological, geographical, environmental and economic studies," Mr. Ensour said.
Jordan would also swap desalinated water produced by the project with drinking water produced by Israel from Lake Tiberias--known as Sea of Galilee--north of the Jewish state.

Mr. Ensour said that Jordan would buy drinking water from Israel produced from Tiberias and sell Israel instead desalinated water produced from the new project in the south in order that the kingdom reduces costs of transporting water from the south to north.

The project will be financed partially by the government, while between $300 million and $400 million would be secured from grants, the Minister of Water and Irrigation Hazem Nasser said in a statement Sunday following a cabinet meeting.

Last month Jordan inaugurated the $1 billion water supply project transporting around 120,000 cubic meters a day from the Disi aquifer in southern Jordan to the capital Amman and nearby provinces.

"Jordan approves USD980m water project", 20/08/2013, online at:
http://www.zawya.com/story/Jordan_approves_USD980m_water_project-ZW20130820000006/

BACK TO TOP

❖ It's still miserable to be a Palestinian in Gaza

The misery inflicted on Palestinians, for years, for decades, gets continually worse.

Aside from being essentially locked-down by the occupying Zionist regime since at least 2006 (closures began way back in the 90s), leaving the vast majority of Gaza's Palestinians unable to freely travel from their tiny, overpopulated, suffocating Strip (not all is bad about the lovely Gaza Strip, but it is extremely difficult and impossible for the majority of the 1.7 million living there), every facet of life in Gaza is either in ruins or devolving towards ruin.

For years Gaza's fresh water has been getting more and more contaminated, to the point where **95 per cent of their already very limited fresh water is now not drinkable** by WHO standards. Solution? There is none, and the water authority in Gaza estimates that by 2016, that's it. Palestinians in Gaza can hardly just build reverse-osmosis machines -- they can't even import building materials to re-build Israeli-bombed homes, buildings, schools. So people buy drinking water from Israel. How benevolent. And the vast majority who are too impoverished (rendered poor by the occupation's policies), drink the contaminated water, consuming alarming levels of nitrates and chlorides, leading to obvious health risks.

There's the same old nasty habit of **Israeli soldiers gunning down or shelling Palestinian farmers** and workers anywhere within 2 km of the border, rendering at least 35 per cent of Gaza's agricultural land off-limits. damn fine land too, rich, formerly host to endless olive, fruit and nut trees now mostly vacant, razed land, by the colonizers to keep Palestinians in misery. Oh yes, and for "security" reasons, of course.

And the same old dirty game of **Israeli soldiers gunning down or shelling Palestinian fishers** anywhere up to just one mile off Gaza's coast -- when fishers have under Israeli-signed accords the right to go 20 nautical miles off Gaza's coast. The "three mile limit" imposed by the Zionists cuts Palestinian fishers off from 85 per cent of their waters. Oh yes, and the Israeli navy loves to abduct fishers, interrogate them on everything but actual fishing, and steal or destroy their boats, nets, radars, lives. What kind of fish does one catch a mile or two off the coast anyway? not much. and the little fish they do catch are the stock fish -- literally little fish -- and now greatly contaminated.

Why the contamination? The same reason the aquifer is polluted: up to 80 million litres of partially or not all all treated sewage pumped into the sea every day, because Palestinians in Gaza don't have the

means to treat and recycle that sewage. Why? Because although for years they have wanted to expand on sewage containment pools and improve sewage plants and lines, the occupying forces do not allow the building materials needed into the Strip and greatly restrict the entrance of chemicals needed in treating the sewage, as well as fuel needed to run the plants when the electricity cuts (as it does daily, from 8 to 16 hours depending on what stage of crisis Gaza is being rendered into). Bombing water and sewage facilities doesn't help much either:

over 30 km of water networks were damaged or destroyed by the Israeli military in addition to 11 wells operated by the water authorities in Gaza. The UN Fact Finding Mission on the Gaza conflict (the Goldstone report) deemed this destruction "deliberate and systematic"; most of the infrastructure is yet to be repaired for lack of access to spare parts. *[lots of info **here**]*

What else is rosy about life in Gaza? The Israeli warplane fly-overs, the drones, the daily power outages (would that they could completely restore their sole power plant, bombed by the Israelis in 2006 and import sufficient fuel to run the maimed plant as best it could be run), the fuel and cooking gas shortages, the ban on exporting, the ban on travel (oh yes, some privileged can travel, those with connections, some of the truly ill -- but not all! -- can leave for treatment in occupied Palestine or Egypt), political in-fighting (engineered by who in the end? Well, who benefits from the rift between the big two parties?), and the psychological torture for the majority in Gaza that is constantly living on the edge.

When will the Zios bomb next? When will the crossing into Egypt (Palestinians sole option, realistically) open and remain open? When will we be allowed to export our produce, furniture, clothing and have a functioning economy? When will we not only have the right to travel for study (of course this applies to **Palestinians in the rest of occupied Palestine**), medical treatment or just for the hell of it like the rest of humanity? When will the world stop screwing us over? When will the **sham of "peace talks"** end? When will our imprisoned loved ones be released from Zionist jails? And when will it become actually *unacceptable* that Israeli politicians and military brass **call for our execution**, **call for our expulsion**, for the **destruction of our infrastructure and means of living**? (Come on Ban, can't you at least utter your pathetic "I strongly condemn" against these racist death-threats??)

Oh, a final note: even those traveling to Gaza in solidarity with Palestinians are subject to some of the wrath of Zionist-supporting regimes. A number of internationals, **including a Canadian doctor and a Canadian film-maker**, are being held under ridiculous pretexts by the coup-regime in Egypt, with

worrying little contact with consular officials (see **here** and **here** for updates and ways to support these men).

"It's still miserable to be a Palestinian in Gaza", 21/08/2013, online at: http://rabble.ca/blogs/bloggers/eva-bartlett-gaza/2013/08/its-still-miserable-to-be-palestinian-gaza

BACK TO TOP

Mithat Paşa Caddesi 46/4 Kızılay-Ankara TURKEY
Tel: +90(312)4302609 Fax: +90(312)4303948 orsam@orsam.org.tr

❖ Palestinians, Israelis work together to clear medicines from water

Joint Israeli-Palestinian research team is working to eradicate pharmaceutical materials from treated waste-water.

For a group of Palestinian and Israeli researchers investigating methods to completely purify water from medicinal materials, working together is nothing short of critical.

"It is a must," Dr. Rafik Karaman, of Al-Quds University's College of Pharmacy in Abu Dis, told *The Jerusalem Post* on Monday.

The joint Palestinian-Israeli research team from Al-Quds University and the Technion-Israel Institute of Technology is working to assess the use of advanced membrane and bio-degradation technologies for eradicating pharmaceutical materials from treated waste-water. Organized by the Peres Center for Peace and sponsored by the French pharmaceutical giant Sanofi, the two-year project aims to investigate the degradation and removal processes of certain drugs found in aquatic environments that come from both domestic and industrial sources.

"In order to facilitate and progress with the research, we need the expertise of the Israeli side," said Karaman, who is the principal researcher on the Palestinian side. "We can learn from them and they can learn from us, and this way you can do good research in Palestine."

The research mechanisms consist of a variety of different removal method studies, examining biological treatments, advanced membrane filtration and absorption technologies.

Over the course of the collaborative project, both leading researchers and graduate students from each institution are to meet regularly to discuss their findings.

These forums, the Peres Center explained, are designed "to facilitate increased cooperation between the Israeli and Palestinian research participants and further advance the academic and peace-building elements of the project."

The project has entered its second of the two years and will conclude in March, according to the researchers.

From the Palestinian side, the team members at Al-Quds are using a series of micelleclay complex membranes to remove byproducts of certain drugs and then test the membranes' removal success rates.

Thus far, the researchers have achieved a 100-percent success rate and have been able to complete removal of all traces of paracetamol, cortisone, ibuprofen, diazepam (known by the common brand name Valium) and cholesterol-lowering statins (such as Lipitor), Karaman explained.

The Al-Quds team has already written three papers on the success of its work, and it will soon begin work on a joint paper with the Technion team, he said.

"We are continuing with some other pharmaceuticals and hopefully we publish another two papers, with the Technion," Karaman said.

"The second year will be a complete collaboration."

While the work together is critical, Karaman stressed that it is nothing new, as Al-Quds researchers have been working with Technion researchers for around a decade on various wastewater projects.

This is the second such project under the auspices of the Peres Center, he explained, crediting the center for enabling them to pursue the research together.

"You learn from the relationship," Karaman said. "I learn a lot and I also give a lot."

From the Israeli side, the Technion research team is led by Prof. Carlos Dosoretz, head of the environmental, water and agricultural engineering division at the Technion's Faculty of Civil and Environmental Engineering.

The Dosoretz lab members have divided their experimentation into two – testing the capabilities of reverse osmosis membranes to remove the drugs as well as biodegradation performance of certain bacteria, explained Sofia Lerman, an engineer in the lab.

"We also had similar results in the membrane system," Lerman said. "Most of the compounds were completely removed to 100%."

Biodegradation was a bit less successful, although more than half of the medicinal materials were still eradicated, she explained. In Lerman's mind, a solution that combines both the use of membranes and biodegradation technologies would be ideal.

Like the Al-Quds lab, the Technion researchers are testing their technologies with paracetamol and ibuprofen, but they are also using carbamazepine (an epilepsy drug), iopromide (a radiography contrast medium), dexamethasone (a steroid), ketoprofen (an anti-inflammatory drug), clopidogrel (a blood thinner) and spiramycin (an antibiotic).

This week, Lerman and the Technion team are hosting some of the Al-Quds students to teach them a new method for using membrane technologies.

This, she explained, is a great testament to the fruits of the two institutions' work together.

"We can compare results and think together, so it's definitely good for brainstorming," Lerman added.

Prof. Emeritus Josef Hagin, of the Technion's Faculty of Civil and Environmental Engineering, is responsible for coordinating the entire cooperative project, and he has been working on Israeli-Palestinian-Jordanian wastewater research collaborations for years.

Hagin described the fact that Al-Quds students are spending time in the Technion working with researchers there as "real cooperation."

Over the course of the project, the teams have had several meetings, including a large one in Cyprus a few months ago, he explained. There, for two days, senior researchers and graduate students presented all of the work that had been accomplished thus far in both places.

This Thursday, another seminar will occur at the Technion.

"They are not so different really – that's the point," Hagin said. "They speak the same language. They are scientists in the same field of science. Personally, we have very good contact and even friendship."

To Karaman, the cooperation taking place here is an indicator that scientists – and the logical personalities they embody – have the potential to be a bridge between peoples.

"They can think about solutions, problems, understand different cultures," he said.

While this project concludes in March, Karaman said he hopes that the process of working together with the Technion researchers will continue.

"We work very, very hard in doing this kind of collaboration," he said.

"Palestinians, Israelis work together to clear medicines from water", 20/08/2013, online at: http://www.jpost.com/Enviro-Tech/Palestinians-Israelis-work-together-to-clear-medicines-from-water-323626

BACK TO TOP

Mithat Paşa Caddesi 46/4 Kızılay-Ankara TURKEY
Tel: +90(312)4302609 Fax: +90(312)4303948 orsam@orsam.org.tr

❖ Jordan to launch 'first phase' of Dead Sea canal

Jordan said on Monday it plans to build parts of a project linking the Red Sea to the shrinking Dead Sea that would supply the parched country with desalinated water.

Prime Minister Abdullah Nsur said the $980-million project is designed to provide Jordan with 100 million cubic metres (3.5 billion cubic feet) of water a year.

"The government has approved the project after years of technical, political, economic and geological studies," Nsur told a news conference.

Under the plan, Jordan will draw water from the Gulf of Aqaba at the northern end of the Red Sea to the nearby Risheh Height, where a desalination plant is to be built to treat water.

"The desalinated water will go south to Aqaba, while salt water will be pumped to the Dead Sea," Nsur said.

The Dead Sea, the world's lowest and saltiest body of water, is on course to dry out by 2050.

The degradation of the Dead Sea started in the 1960s when Israel, Jordan and Syria began to divert water from the Jordan River, the Dead Sea's main supplier.

However, environmentalists fear that an influx of seawater could undermine the Dead Sea's fragile ecosystem.

"We are thinking of selling desalinated water to Israel and buying water from Lake Tiberias (Sea of Galilee)," said Nsur.

The prime minister said Jordan wanted water to supply its northern regions, while Israel also needs water in the south.

Officials say the 500,000 Syrian refugees that Jordan is hosting are stretching its meagre water resources.

The majority of refugees are living in the north, particularly the Zaatari camp, home to about 130,000 Syrians.

"A cubic meter of desalinated water would cost Israel one dinar ($1.4), while buying water from Tiberias will be cheaper for reasons related to transportation, costing us one-third of a dinar per cubic metre. It's a good deal," he added.

The water ministry says Jordan, where 92 percent of the land is desert, will need 1.6 billion cubic metres of water a year to meet its requirements by 2015, while the population of 6.8 million is growing by almost 3.5 percent a year.

Jordan had initially agreed in principle to build, along with its Palestinian and Israeli neighbours, an $11-billion pipeline from the Red Sea to refill the rapidly shrinking Dead Sea and provide drinking water.

"The high cost of that project prompted the government to come up with the ideas we announced today, which we call the 'first phase'," Water Minister Hazem Nasser told the news conference.
"We had no other option. We will revive the idea of saving the Dead Sea, while at the same time having drinking water. And we do not need to reach an agreement with Israel."
Jordan singed a peace treaty with Israel in 1994.
In July, Jordan inaugurated a nearly one-billion-dollar project to supply the capital with 100 million cubic metres of water from the 300,000-year-old Disi aquifer in the south to help meet a chronic shortage.

"Jordan to launch 'first phase' of Dead Sea canal", 19/08/2013, online at: http://phys.org/news/2013-08-jordan-phase-dead-sea-canal.html

BACK TO TOP

Mithat Paşa Caddesi 46/4 Kızılay-Ankara TURKEY
Tel: +90(312)4302609 Fax: +90(312)4303948 orsam@orsam.org.tr

❖ Cyprus and Israel discuss water development, management and protection

Cyprus Minister of Agriculture, Natural Resources and Environment, Mr Nicos Kouyialis, will pay a two-day visit to Israel on 25 and 26 August. The visit is taking place within the framework of the Memorandum of Understanding between Cyprus, Greece and Israel, signed on 8 August, concerning the cooperation of the three countries in the sectors of energy and water resources. The Memorandum is of immense political significance and will reinforce Cyprus' geopolitical position, and thus, the immediate implementation of what has been agreed is deemed necessary. Mr Kouyialis will have a bilateral meeting with the Israeli Minister of Energy and Water Resources, Mr Silvan Shalom, during which there will be a discussion on issues pertaining to water development, management and protection. At the same time, meetings are scheduled, at the technocratic level, aimed at the further reinforcement of the collaboration and the exchange of experiences and knowledge, particularly relating to urban waste water treatment and the use of recycled water in agriculture. Israel invests large sums for the development and technology of water resources and is one of the leading countries worldwide in the development of new water treatment technologies, such as desalination and the treatment and reuse of urban waste water.

"Cyprus and Israel discuss water development, management and protection", 23/08/2013, online at: http://www.balkans.com/open-news.php?uniquenumber=180693

BACK TO TOP

❖ Advances in Israeli Water Technology Assisting in Worldwide Food Production

Earlier this year veteran Israeli journalist and Times of Israel founding editor David Horovitz**evaluated advances** in Israeli water technology and concluded that it had functionally eliminated a water crisis that had been plauging the country:

But for Israel, for the foreseeable future… the water crisis is over…. an insistent refusal to let the country be constrained by insufficient natural water sources — a refusal that dates back to David Ben-Gurion's decision to build the National Water Carrier in the 1950s, the most significant infrastructure investment of Israel's early years — led Israel first into large-scale water recycling, and over the past decade into major desalination projects. The result, as of early 2013, is that the Water Authority feels it can say with confidence that Israel has beaten the drought.

Israeli companies are now successfully distributing those technologies inernationally. Israeli company named **Blue I** sells water monitoring systems that check the purity of water. The so-called "smart" water systems **have been installed** across European and American factories where food is produced:

Now the company, officially founded in 2003, boasts tens of thousands of its "smart" water systems in factories and municipalities around the world. Blue I smart boxes, based on electro-optics, are about to be installed in several American cities, and are found in about 150 locations throughout Barcelona.

Clients include Yoplait yogurt in France; BASF, the largest chemical company in the world; and 25 Coca-Cola bottling plants — including in India and Israel. Israel's national water company Mekorot is another Blue I client, as is Israel's Oil Refineries.

The company, which employs 25 in Israel, tests for two basic water-quality measures — chlorine and turbidity. It is one of few companies that can determine and ensure absolute zero levels of chlorine in the water, which is very important for the food and beverage industry. "We are the gatekeepers there," says CTO Stela Diamant.

The systems not only can ensure the purity of water used in food production, but can also provide early warnings of contaminants that could compromise the water supply.

Another Israeli company, **Netafim**, has developed irrigation technologies, including the**Family Drip System**. This system is designed to, among other things, maximize water efficiency. Israel's Foreign Ministry has introduced this system to **the impoverished country of Malawi**.

"Advances in Israeli Water Technology Assisting in Worldwide Food Production", 20/08/2013, online at: http://www.thetower.org/advances-in-israeli-water-technology-assisting-in-worldwide-food-production/

BACK TO TOP

Mithat Paşa Caddesi 46/4 Kızılay-Ankara TURKEY
Tel: +90(312)4302609 Fax: +90(312)4303948 orsam@orsam.org.tr

❖ How do you provide water and sanitation to 50,000 people in the middle of the desert?

The United Nations estimates that as many as 1 million Syrian refugees will be living in Jordan by the end of 2013. To help accommodate this huge influx, a new camp is being built. UNICEF Jordan's Water, Sanitation and Hygiene Specialist Kitka Goyol takes us on a tour of the camp.

AZRAQ, Jordan, 19 July 2013 – Kitka Goyol stands at the top of a small hill overlooking a vast expanse of inhospitable desert. The barren land is dotted with diggers and cranes at work. From this distance, they look like small toys. This place will be the Azraq refugee camp.

The task at hand is to transform this desert into a habitable site for 50,000 people, with the potential to expand to 130,000 should the need arise.

"The first thing that came to my mind was it doesn't look feasible, because – as you can see – there is virtually little sign of life," Mr. Goyol says. "It's just in the middle of nowhere."

But work has been speeding up over the past two months. "We have seen the place evolve from a road network now being in place to the facilities we are planning for the septic tanks and water, so it's becoming real," he says.

Learning from Za'atari

The first camp for Syrian refugees in Jordan, Za'atari, opened 12 months ago, and it is now home to some 120,000 people. The experiences and opinions of residents living there have been critical in planning for Azraq.

The UN Refugee Agency (UNHCR) and its partners have divided the new site into five 'villages'. Each village will include some 1,000 family compounds with up to 30 people in each.

"They will limit the number of tents within an area to make it more homely. So we've agreed on six tents per extended family compound, and in each of those family compounds will be two latrine units," Mr. Goyol explains.

The initial costs of installing the sanitation facilities will be higher than usual, but once in place they will be handed over to the community. As a result, maintenance costs should be reduced, as those using the toilet and shower blocks will take care of them. In Za'atari, the facilities are much larger and used by many more people, which has resulted in damages and hygiene issues.

The first structure arrives

Mr. Goyol stands next to a large hole in the ground. He's excited but slightly nervous. The first septic tank has arrived from Amman and is being offloaded by a crane.

"Really this is a moment we have been waiting for. We are hopeful that it fits well," he says.

The first of 4,600 septic tanks for the camp is slowly lowered into the hole. The tanks will serve 15 people each and will be emptied by desludging trucks every 25 days. The waste will be taken to a water treatment plant 60 km away.

The tank fits, and now the 'superstructure' follows – the housing for one toilet and a shower.

"Nearly there, nearly there – we are excited now. Got our first prototype ready," Mr. Goyol says while helping to position the block.

The first structure for refugees in Azraq camp is standing.

Coping with water scarcity

The Ministry of Water and Irrigation has identified two sites for boreholes, but accessing water in the fourth most water-scarce country is a serious challenge – and costly.

Water will be pumped from a depth of 500 metres from the second aquifer identified. The first is protected, as it's a source of water for the nearby town of Azraq.

"The water will be delivered from the boreholes directly to overhead tanks, and from there water will flow by gravity to the service areas," Mr. Goyol says.

A total of 1.5 million litres of water a day, 30 per person, will be supplied. It's twice the minimum humanitarian standard of 15 litres per person per day.

With the population of Jordan's towns and refugee camps bursting at the seams, it's a race against time to get the site operational. And after a day in the intense desert heat, Mr. Goyol takes time to reflect.

"As you can see, the terrain and environment is harsh. It's going to be difficult for everybody," he says. "But we hope these facilities and services we've put in place will help make it more habitable for the refugees."

"How do you provide water and sanitation to 50,000 people in the middle of the desert?",19/08/2013, online at: http://www.unicef.org/infobycountry/jordan_69880.html

BACK TO TOP

Mithat Paşa Caddesi 46/4 Kızılay-Ankara TURKEY
Tel: +90(312)4302609 Fax: +90(312)4303948 orsam@orsam.org.tr

❖ Water scarcity

The region of Middle East is at the verge of a serious water crisis. This issue is likely to dominate world politics in times to come, and even lead nations to war. In the 19th and 20th centuries,

Estimates from the United Nations and other international NGOs say that around a billion people of the Middle East, North Africa and Asia are likely to suffer from water scarcity. And especially enough Jordan, Palestinian territories and the state of Israel are likely to cross swords if the live-saving commodity falls short of their needs.

Until and unless that is done and that too under the aegis of the world body, the irritant is likely to take nations to war.

The crises in Africa and food and water scarcity problems over there during the last several decades should serve as a grim reminder.

More than a million deaths took place due to changing climatic conditions in the midst of poverty and warfare. The Mideast should be saved from such a catastrophe.

"Water scarcity", 19/08/2013, online at: http://www.khaleejtimes.com/kt-letter-display.asp?xfile=data/letters/2013/August/letters_August72.xml&section=letters

BACK TO TOP

❖ Singapore Water Companies Set To Make Waves With Advanced Water Technologies At IWS 2014

Singapore, a model city for water and wastewater management, is keen to bring its advanced water resource management solutions to the second International Water Summit (IWS) in Abu Dhabi in January 2014.

At a workshop organised in association with Singapore Water Association (SWA), IWS delegates exchanged ideas and discussed business opportunities with 15Singapore water companies for addressing water challenges of the world's arid regions, including the Middle East.

Thriving economies, rising water demand and fresh-water scarcity issues of the Middle East are becoming a major concern for the region. It is estimated that total water demand of UAE's capital city Abu Dhabi alone could grow to 123% by 20301.

The reliance of most Gulf countries on desalination to produce 90 percent or more of their drinking water is adding to costs and energy footprint of the countries.According to government statistics, the UAE produces 1.7 billion cubic meters of desalinated water annually, in addition to 600 million cubic meters of treated wastewater2 which is mainly used for irrigation. However, at present, 45 per cent of wastewaterin Abu Dhabi is either discharged back into the sea or into the desert3.

Ara Fernezian, Divisional Managing Director – UAE at Reed Exhibitions, said, "Improving cheaper and more environmentally viable options such as wastewater treatment technologies and wastewater reuse is essential."

In its 2030 vision, Abu Dhabi Municipality includes plans for a more sustainable irrigation system, while Abu Dhabi's environment authority, Environment Agency-Abu Dhabi has recently unveiled a new water management strategy and a work plan for 2014-2018. "Abu Dhabi is aggressively adopting an innovative integrated water management approach which is important for the sustainable development of the Emirate's as well as region's water infrastructure", Fernezian added.

Singapore's success story in water management is well known as a pillar of Singapore's water sustainability.NEWater branded recycled water is one of Singapore's main sources of water. There are at present four NEWater plants which can meet 15% of Singapore's water needs, with plans for a

fifth plant underway that will boost the total capacity to 30%.Singapore also has one of Asia's largest seawater reverse-osmosis plant, which produces 30 million gallons of water a day (136,000 cubic metres) to meet about 10% of Singapore's water needs.

Outlining opportunities for Singapore's water firms to partake in Abu Dhabi's sustainable water resource management efforts, Fernezian added, "Singapore's holistic approach to water resource management is one of the main reasons for the islands success in managing its water supply. The arid regions of the Middle East are seeking a similar multifold approach to water management and are investing heavily in water projects. The water and wastewater infrastructure market alone is valued at USD 9 billion4, a lucrative business opportunity for Singaporean companies to establish in Abu Dhabi and cater to the region's needs."

IWS 2014 is a global platform that hosts world leaders, government organizations, policymakers, public and private sector investors, business leaders, consultants and water experts to interact, negotiate and finalise plans to develop diverse and sustainable water portfolios in the GCC and other regions.

It is co-located with World Future Energy Summit, hosted by Masdar, as a part of Abu Dhabi Sustainability Week (ADSW),a global platform that addresses the interconnected challenges that affect the widespread acceleration and adoption of sustainable development and renewable energy. The largest gathering on sustainability in the history of the Middle East, ADSW encourages actionable outcomes to carve a pathway toward sustainability worldwide.

As part of an international roadshow to discuss the opportunities in the GCC water sector and to encourage dialogue and international cooperation at the 2014 event, IWS team has traveled to Japan, France, Singapore and UK, and will head to Switzerland, Germany, Netherlands and USA in coming months.

Building on the success of the inaugural edition of the summit, IWS 2014 is expected to host international delegations and hundreds of exhibitors providing opportunities for businesses, investors and government policy makers to develop their water agendas. It will continue to garner strong local

support from partners such as the Ministry of Environment and Water, Abu Dhabi Water and Electricity Authority (ADWEA), Environment Agency-Abu Dhabi (EAD), Abu Dhabi Sewerage Services Company (ADSSC) and Regulation and Supervision Bureau (RSB).

"Singapore Water Companies Set To Make Waves With Advanced Water Technologies At IWS 2014", 20/08/2013, online at: http://www.abudhabicityguide.com/news/news-details.asp?newsid=12805&newstype=Local%20News

BACK TO TOP

❖ Yemen water woes

Impoverished, ragged and unstable, Yemen continues despite unprecedented international financial sponsorship to titter on the edge of a political and financial abyss, threatening to turn the most populous nation of the Arabian Peninsula into a failed state.

And if Yemen has become a political maze for western and Gulf nations as well as a terror pyre, Yemen's water resources or rather the lack of could be what tip this impoverished nation right over the precipice.

While water scarcity has been on officials minds for over a decade, whatever programs or reforms the former government had put in place were abruptly suspended in 2011 by the Arab Spring and the subsequent departure from power of former President Ali Abdullah Saleh.

Yemen's water woes first made the international headlines back in 2009 when a report of the Times of London entitled "Yemen could become first nation to run out of water," exposed Yemen's dire water reality.

Both the poorest and the most water-scarce country in the Araba world, Yemen faces an uphill battle of titan proportion if it intends to save its dwindling aqua resources and offer its children a future to build on. With millions of lives standing in the balance, Yemen coalition government cannot afford not to pay attention.

Several experts have already warned that water scarcity would ultimately lead to armed conflicts, mass migration and long term political instability. Just as Yemen has managed to avoid a complete institutional meltdown, such warnings will certainly echo among state officials.

In March 2012, a report from the office of the US Director of National Intelligence said the risk of conflict would grow as water demand is set to outstrip sustainable current supplies by 40% by 2030. Then-US Secretary of State Hillary Clinton said on the matter,

"These threats are real and they do raise serious national security concerns."

"Water scarcity is an issue exacerbated by demographic pressures, climate change and pollution," said Ignacio Saiz, director of Centre for Economic and Social Rights.

Mithat Paşa Caddesi 46/4 Kızılay-Ankara TURKEY
Tel: +90(312)4302609 Fax: +90(312)4303948 orsam@orsam.org.tr

In the case of Yemen water scarcity has been exacerbated by chronic mis-management, a pandemic national issue, a lack of political will, corruption and funds.

What water?

With renewable water resources of only 125 cubic meters per capita/year Yemen is one of the most water-scarce countries in the world, a tenth of the threshold for water stress which stands at 1,700 cubic meters per capita/year. Which such a deficit of water, Yemenis stand at greater risk of water-borne diseases and poor sanitation related illnesses, such as cholera and dysentery.

More worryingly yet, Yemen as a country cannot sustain the demands if its growing population, let alone the arrival of tens of thousands of new refugees every year. Yemen's total water demands exceeds its renewable resources by 900 million cubic meters. As a result the country's core aqua-reserves are being depleted to such an extent that experts fear Yemen might never ever be able to recover.

Unless the government begins to invest in water conservation projects as well as water-smart irrigation techniques, Yemen is heading toward a wall.

Moreover with most of Yemen's water being used for agricultural purposes, Qat, the leafy green narcotic so favored by Yemenis could prove to stand against national interest as far as water is concerned.

Qat uses up 37% of Yemen's water resources while having no nutritional value what so ever.

With 40% of its population suffering from malnutrition, Yemen will have to strike the right balance in between its immediate needs and its actual resources.

Richards Tony wrote in his Assessment of Yemen Water Law: Final Report, prepared for: Deutsche Gesellschaft fuer Technische Zusammenarbeit (GTZ) in 2002, “Historically, management of water resources in the Republic of Yemen has been inadequate, with some of the key problems being: water and property rights are not clearly defined; the problems of groundwater mining have led to abstraction rates that exceed recharge by about 80% on average, and in some places abstraction exceeds recharge by 400%; charges for water use are low, or non-existent; water usage is distributed 93% for irrigation purposes, 5% for domestic use, and 2% for industry, and political and economic

upheaval over the past decade has resulted in limited institutional capacity, particularly to bring water demand in line with availability."

A decade on and his analysis remains pertinent; only this time Yemen cannot afford another decade of inertia.

As noted by Rami Ruhayem from the BBC, recent images of Sana'a under water following unprecedented downpours do not quite match with reports of dwindling water resources and droughts.

One just could wonder just how much of Yemen's water woes could be solved by some clever engineering and a good dose of political will.

Just like in North America or again in Brazil, Yemen could use rainwater tanks and slowly manage its way back to self-sufficiency.

"Yemen water woes", 24/08/2013, online at:
http://yemenpost.net/Detail123456789.aspx?ID=3&SubID=7155&MainCat=5

BACK TO TOP

Mithat Paşa Caddesi 46/4 Kızılay-Ankara TURKEY
Tel: +90(312)4302609 Fax: +90(312)4303948 orsam@orsam.org.tr

❖ Evacuating 30 Islands Threatened with Flood in River Nile

Khartoum - The government of the River Nile state started the evacuation of thousands of citizens residing on about 30 islands on the river Nile. Meanwhile, the higher flood committee called on all citizens and concerned authorities to take all necessary precautions and measures to protect lives and property.

The Abu Hamad locality administration started the evacuation of island residents due to the increasing level of the River Nile water in response to directions from higher authorities to evacuate the islands.

Tarig Farah Eisa, Mayor of Abu Hamad, revealed in a statement to SMC that Arkal Island has been completely evacuated and 31 others are being evacuated and more than ten thousand families are being transported to safe locations outside the islands.

The informal mining locations in the valleys and desert f River Nile are undergoing aerial survey operations to ensure no miners are being faced with extraordinary circumstances due to floods, continued the mayor.

He denied that there any miners stuck in mining locations within the locality's borders.

On the other hand, the higher flood committee affirmed in a report released Tuesday that river Nile water level is stable according to readings collected from Aldeem Border station. It also informed that water levels are higher in Damazein and Sinnar and lower in Khashm Algirba and Atbara.

"Evacuating 30 Islands Threatened with Flood in River Nile", 21/08/2013, online at: http://news.sudanvisiondaily.com/details.html?rsnpid=226064

BACK TO TOP

❖ How Resource Shortages Sparked Egypt's Months-Long Crisis

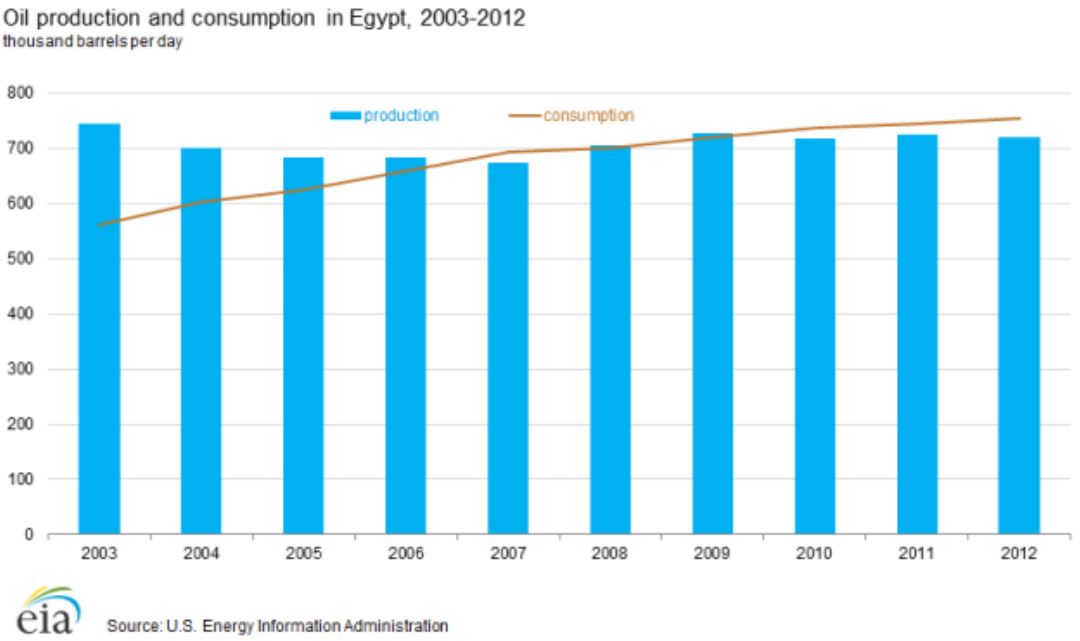
The country has battled water shortages, rising food prices, and declining oil production, and it's fueling the current conflict.

With more than 600 people killed and almost 4,000 injured from clashes between Egyptian security forces and Muslim Brotherhood protesters, the country's democratic prospects look dismal. But while the violence is largely framed as a conflict between Islamism and secularism, the roots of the crisis run far deeper. Egypt is in fact on the brink of a protracted state-collapse process driven by intensifying resource scarcity.

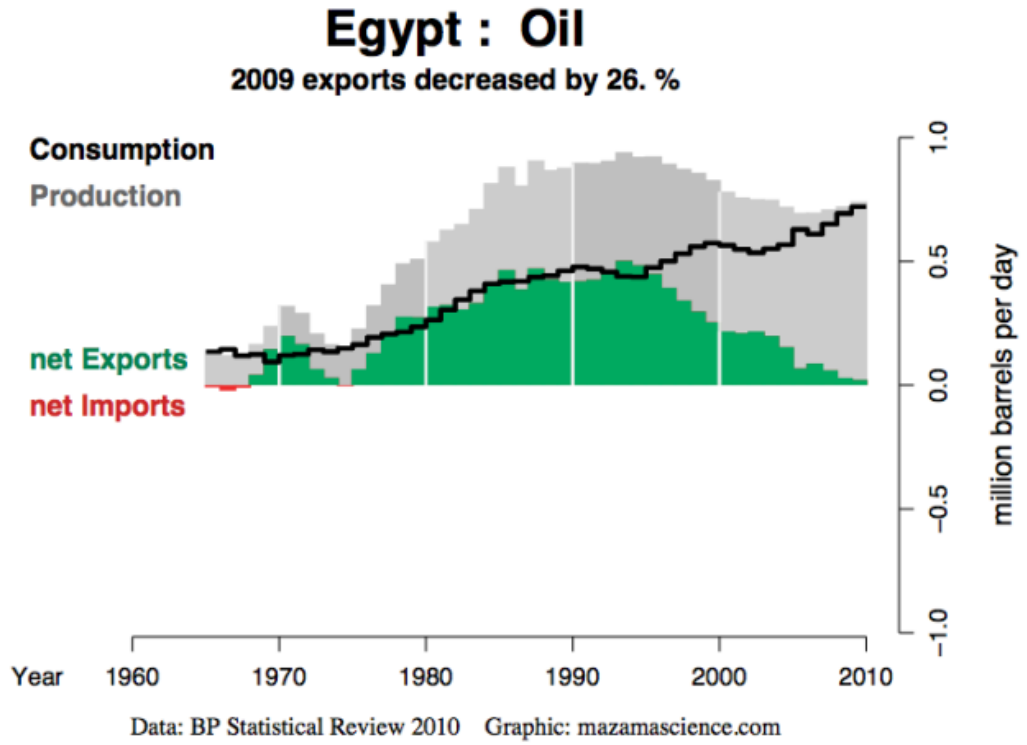
Since the unilateral deposition of President Morsi, the army's purported efforts to "restore order" are fast-tracking the country toward civil war. The declaration of a month-long state of emergency--ironically in the name of defending "democracy"--suggests we are witnessing the dawn of a new era of unprecedented violence with the potential to destabilize the entire region.

Underlying growing instability is the Egyptian state's increasing inability to contain the devastating social impacts of interconnected energy, water and food crises over the last few decades. Those crises, already afflicting other regional states like Yemen and Syria, will unravel prevailing political orders with devastating consequences--unless urgent structural transformation to address those crises becomes a priority. The upshot is that Egypt's meltdown represents the culmination of long-standing trends that, without a change of course, can only escalate with permanent repercussions across the Middle East and North Africa (MENA), and beyond.

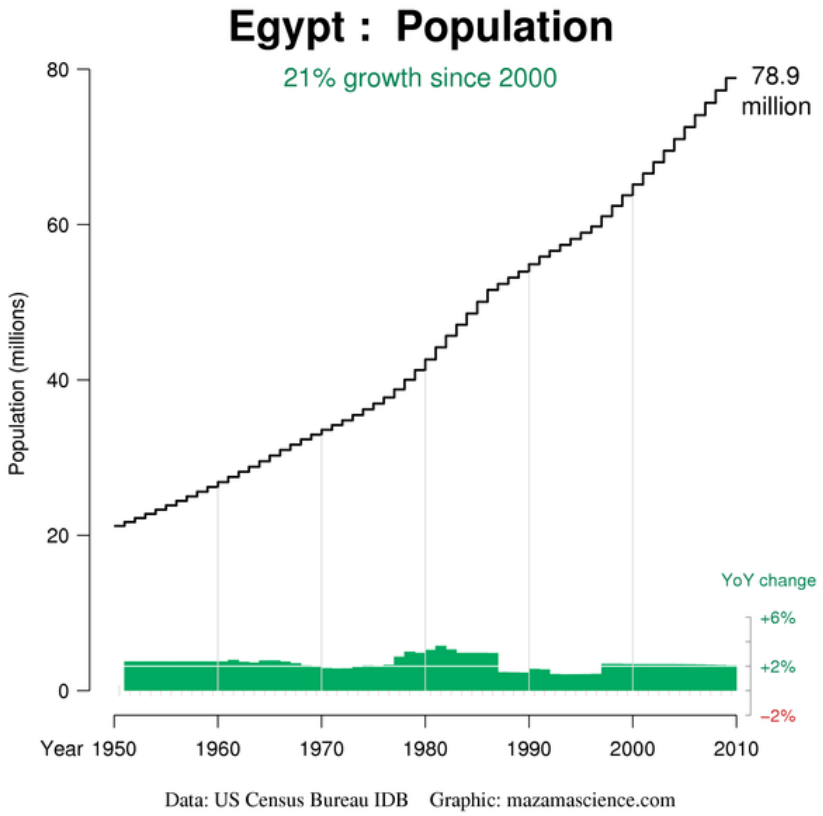
A major turning point for Egypt arrived in 1996, when Egypt's domestic oil production peaked at about 935,000 barrels per day (bpd), dropping since then to about 720,000 bpd in 2012. Yet Egypt's domestic oil consumption has increased steadily over the past decade by about 3 percent a year. Since 2010, oil consumption--currently at 755,000 bpd--has outpaced production. It is no coincidence that the following year, Hosni Mubarak was toppled.



With Egypt's oil production well past its peak, its exports since 1996 have increasingly declined, despite inputs from new gas production. In 2009, oil exports had dropped by 26 percent (pdf). According to Jean Laherrère, a petroleum geologist formerly with the French major Total S.A., two-thirds of Egypt's oil reserves have likely been depleted, and annual decline rates are already at around 3.4 percent.



Mithat Paşa Caddesi 46/4 Kızılay-Ankara TURKEY
Tel: +90(312)4302609 Fax: +90(312)4303948 orsam@orsam.org.tr



Rapid population growth and continued economic mismanagement has meant that youth represent about 25 percent of the population--but more than half of them suffer from poverty and unemployment. Economic mismanagement, much of which was quietly championed by the IMF and the World Bank (though they have now belatedly noticed that much of the policies they previously encouraged are now deeply problematic), has caused a widening of overall poverty while enriching mostly Egyptian elites.

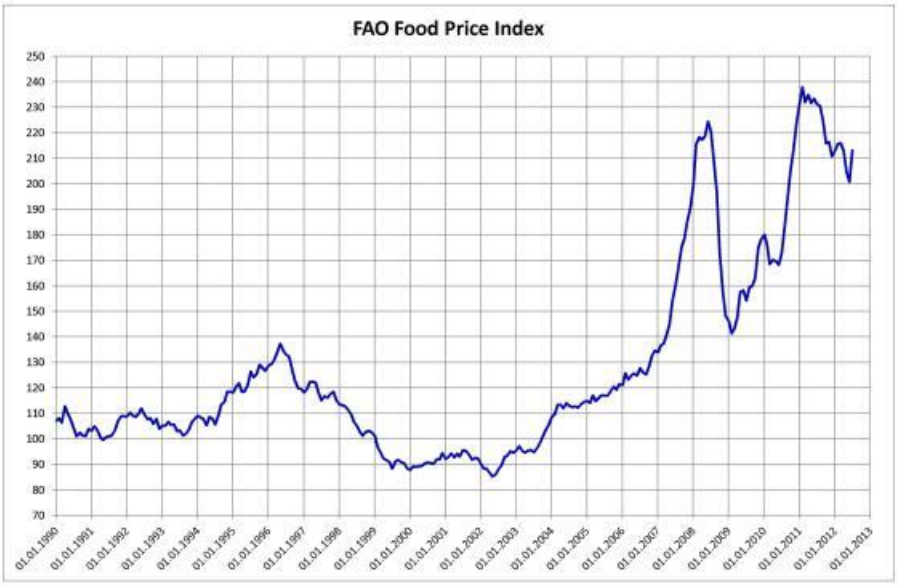
With some 40 percent of the population living on $2 a day or less, and rates of illiteracy and unemployment hovering around a third of the population, it was only a matter of time before economic grievances translated into political outrage. The trigger factor, though, was food--on which a quarter of Egyptians spend more than half their incomes.

As food subsidies have declined in the context of declining state revenues, local food prices have shot up. Once upon a time--in the 1960s--Egypt was completely self-sufficient in food production. Encouraged by international financial institutions to foster its export capacity, Egypt is now a net food importer, importing about 70 percent of its food (paywall), and thus, vulnerable to global food price fluctuations.

As energy accounts for over a third of the costs of grain production (pdf), high food prices are generally underpinned by high oil prices. Since 2005, world oil production has remained on an undulating plateau that has kept prices high, contributing to surging global food prices. According to the New England Complex Systems Institute, if food prices go over a threshold of 210 on the FAO Food Price Index, the probability of civil unrest is greatly magnified.

Global wheat prices doubled (pdf) from $157/metric tonnes ($173/ton) in June 2010 to $326/metric tonne ($359/ton) in February 201 (the same month Mubarak fell) while half the population was dependent on food rations. That year, the FAO Index averaged about 228, the highest since FAO started measuring international food prices in 1990. The second highest average occurred in 2008--the same year Egypt experienced violent clashes over government-subsidized bread in different cities, leading to 15 people being killed and 300 arrests.

Since then, the index has hovered consistently above 210, and in May 2013 before Tahrir Square was flooded by millions of Egyptians, it was at 213. Although currently at 205, the Worldwatch Institute warns that food prices willtrend higher and be more volatile in coming years and decades. This is consistentwith the last decade, over which the World Bank global food price index has increased 104.5 percent, at an average annual rate of 6.5 percent.



Perhaps the biggest driver of rocketing food prices in 2011, however, was the unprecedented impact of climate change in the world's major food basket regions, pushing up global cereal prices to record levels.

Droughts and heat-waves in the U.S., Russia, and China since 2010 led to a sharp drop in wheat yields, on which Egypt is heavily dependent.

That same year, Egypt's water shortages sparked tens of thousands of people to take to the streets in different parts of the country, primarily farmers protesting the growing inability to irrigate their farms--making tens of thousands of hectares of farmland impossible to cultivate. Egyptians in the 1960s enjoyed a water share per capita of 2,800 cubic meters (98,881 cubic feet) for all purposes. The current share has dropped to 660 cubic meters (23,307 cubic feet)--well below the international standard defining water poverty at 1,000 cubic meters (35,314 cubic feet).

Egypt is already water scarce, and the combination of local climate change impacts, water mismanagement and regional geopolitics could choke off the country's water supplies by 2025, when it will need 20 percent more water than it currently has. But around this time, its thirsty neighbors like Ethiopia and Burundi may well have loosened Egypt's current grip on the Nile River, which supplies 95 percent of Egypt's freshwater, for their own use.

Egypt's resource crisis is more than the primary driver of its own collapse: It could potentially destabilize the entire region, if not the world.

The protracted collapse of the Egyptian state poses a major strategic disaster for U.S. interests. Since the Nixon Doctrine, regional U.S. policy looked to local "surrogate" regimes--Israel, Iran (under the Shah), and Saudi Arabia--as the region's three main "pillars" on which U.S. influence rested. In 1973, U.S. senator and oil expert Henry Jackson noted that Israel and the Shah's Iran were "reliable friends of the United States" who, along with Saudi Arabia, "have served to inhibit and contain those irresponsible and radical elements in certain Arab states...who, were they free to do so, would pose a grave threat indeed to our principal source of petroleum in the Persian Gulf."

The inauguration of Mubarak's rule in 1981 was a major factor in absorbing Egypt into this orbit of power, the strategic contours of which were aptly described in a secret 2009 U.S. State Department

cable on the $1.3 billion in U.S. military aid for his regime: "The tangible benefits to our mil-mil relationship are clear: Egypt remains at peace with Israel, and the U.S. military enjoys priority access to the Suez canal and Egyptian airspace."

With Iran and Syria now members of the "Axis of Evil," the potential loss of a friendly regime in Egypt would strike a major blow to U.S. regional interests and international stability. It would potentially endanger Israel, but also challenge access to the Suez, a strategic choke point shipping 4.5 million bpd of oil and carrying 7.5 percent of world trade.

A shutdown of the Suez due to civil unrest would have a massive impact on oil prices and supplies that would undermine Western interests generally and even generate a global economic shock (pdf). This could explain President Obama's insistence on maintaining military aid to the Egyptian army--anything, it seems, to "inhibit and contain" those "irresponsible and radical" Arabs bringing down regime after regime across a region the West cannot afford to lose influence over. Obama is hardly alone, though - Britain, the EU, Saudi Arabia, Qatar among are still maintaining aid relations.

But these short-sighted decisions fail to appreciate that the Egyptian Army has already lost this war of its own starting. Not simply because the cycle of violence now initiated cannot but escalate as neither side will capitulate, radicalizing a new generation and inviting al-Qaeda affiliated extremists to make up for recent losses by exploiting Egypt's suffering. But also because the deeper systemic causes of Egyptian rage remain neglected.

And those systemic issues are hardly unique to Egypt. A similar confluence of climate, energy and economic factors are amplifying political polarization, in turn fueling conflict, in Syria and Yemen. While each must of course be understood in their own unique local contexts, their common drivers must be recognized.

The case of Egypt and others illustrate the extent to which the MENA region is vulnerable to the destabilizing impact of these crises. The region contains 12 of the 15 most water-scarce nations in the world--with an average of less than 1,000 cubic meters (35,314 cubic feet) of fresh water per person, per year--including Algeria, Libya, Tunisia, Jordan, Qatar, Saudi Arabia, Yemen, Oman, UAE,

Kuwait, Bahrain, Israel and Palestine. In eight of these countries, available fresh water is less than 250 cubic meters (8,828 cubic feet).

Although birth rates are falling, a third of the region's overall population is below 15 years old, and large numbers of young women either are or soon will be reaching reproductive age. According to the U.K. Ministry of Defence, the Middle East's population will increase by 132 percent, and that of sub-Saharan Africa by 81 percent by 2035.

Such demographic pressures will likely halve freshwater availability, exacerbating the danger of regional water wars. Indeed, as early as 2015, the average Arab will be forced to survive on less than 500 cubic meters (17,657 cubic feet) of water a year, a level defined as severe scarcity. This will have a devastating effect on already flailing regional agriculture.

But another major worry is oil production. New evidence suggests that the Gulf powers face the prospect of imminent production peaks. Leaked State Department cables show that the US government privately believes that Saudi Arabia's oil reserves may have been overstated by as much as 300 billion barrels--nearly 40 percent. By around 2020, Saudi Arabia will be unable to increase production , confronting instead a future of decline--indeed, its oil exports have already begun falling as it increasingly uses up production for domestic needs.

That in turn would mean a catastrophic loss of state revenues, not just for Saudi Arabia, but for the other Gulf powers which have much smaller reserves. The post-peak Gulf would not only usher in a world of extreme energy volatility--oil prices remain closely tied to production from the region--it would render these kingdoms highly vulnerable to the converging crises already at play in countries like Egypt, Syria and Yemen.

The implication is stark. If business-as-usual continues, Egypt today is very much a window into a near-future that would make dystopian science fiction look like high fantasy.

"How Resource Shortages Sparked Egypt's Months-Long Crisis", 19/08/2013, online at: http://www.theatlantic.com/international/archive/2013/08/how-resource-shortages-sparked-egypts-months-long-crisis/278802/?utm_source=Circle+of+Blue+WaterNews+%26+Alerts&&utm_term=0_c1265b6ed7-a1a0576d80-250657169

BACK TO TOP

❖ PFF voices against Bhasha Dam

KARACHI: Pakistan Fisherfolk Forum (PFF) has expressed concern over the recent move by PML-N-led government to reinitiate the schemes like Diamer-Bhasha Dam, which were abandoned for decades after getting widely resistance by the masses in Sindh.

PFF chairperson Mohammed Ali Shah, in a statement issued on Friday, said the government is looking induced by the world's two biggest multilateral lenders to arrange funds for the 12-billion-dollar Diamer-Bhasha Dam project.

He reiterated his resolve that the government and political parties should understand the impacts of dam project on ecology, natural resources and communities, which depend on the river water for their livelihoods.

PFF chairperson said the government and politicians are inclined to get funds from the world lenders to put the main economic sources at risk, because there are reports of mass suicide by the farmers, who are being deprived of their water share to continue cultivation. In result, these communities are facing troubles.

Shah said the consent of tail end communities, who derive their source of living from Indus Delta and downstream river areas should be taken into consideration while designing such mega projects. He said there is no any justification that the dam project, which was put aside for decades after the resistance showed by people, is now being launched again.

Finance Minister Ishaq Dar had earlier told the media that significant progress has been made in arranging funds for the dam project, estimated to cost over $12 billion.

PFF had launched a campaign against the mega water projects, dams, barrages and diversions to the river under its 'Keep Rivers Free Movement' on March 2010 with 14-day long march (from March 1 to 14) from Kharochan in Indus Delta to Jamshoro, the famous picnic resort located at the bank of river Indus.

Following this anti-dam campaign, hundreds of people, including womenfolk, hailing from different marine and inland waters, forests and catchments of the river participated in the huge gathering to inaugurate the other 14-day Water Caravan from Jamshoro to Islamabad, the capital city of Pakistan, where the PFF marked the International Day of Rivers, where the participants presented memorandum to the parliament.

PFF demands to restore the natural flow of all the rivers, including River Indus, which is major source of water to feed the Indus Delta, agriculture land and more than 1,200 fresh water lakes to save the ecology, lives and livelihoods of hundreds of thousands families living there.

PFF's manager programmes Jamil Junejo also opposed the move for construction of project by World Bank and Asian Development Bank (ADB). He said that neither these project documents were made with participatory dialogue nor were the versions made accessible to general public. Notably, both these documents are mandatory for the construction of such mega structures under National Environmental Policy (2005) and National Resettlement Policy of Pakistan.

It is more discouraging that the website of Environmental Protection Agency of Pakistan, the approving body of EIA reports, doesn't host the assessment reports including the report of Bhasha Dam. Therefore, construction of the dam without genuine participatory assessment and subsequent preparation of the plan may prove disastrous for human settlements, climate and the environment.

Moreover, one may wonder how World Bank and ADB will fund this project, when the accountability mechanism and safeguard policies strictly require participatory assessment.

Secondly, the impact of the dam will be catastrophic for low stream Indus Delta which is already in environmental, social and ecological crises due to a lack of fresh water flow in downstream Kotri. The delta requires environmental flow of 35 million acre feet (MAF) annually as recommended by IUCN. But ironically, the delta has not even experienced flow of 10 MAF averagely as agreed in 1990 water accord.

Therefore, Junejo said, the construction of Bhasha Dam having a storage capacity of 6.4 MAF will prove disastrous for the Indus Delta in the wake of water scarcity, especially in view of climate change. Proposed construction of dams on head waters by India and designed construction of hundreds of dams to generate 250,000 mega watt electricity planned by all SAARC countries except Afghanistan and Bangladesh in the Himalayas will bring unprecedented disasters for the farmers dependent on rivers.

Pakistan will construct Bhasha Dam in Gilgit-Baltistan aimed at generating 4,500 megawatts of electricity and storing water for irrigation. Both former military rulers General Pervez Musharraf and former prime minister Yousaf Raza Gilani laid the foundation stone for the dam, without arranging funds.

It is also pertinent to mention here that Director General Geological Survey of Pakistan (GSP) Dr Imran Ahmed Khan, while briefing the senate standing committee on petroleum and natural resources in March 2013, had reportedly opposed the construction of upstream mega projects like Bhasha Dam that is located in zone-4 that is vulnerable to severe earthquakes.

"PFF voices against Bhasha Dam", 24/08/2013, online at:
http://www.dailytimes.com.pk/default.asp?page=2013%5C08%5C24%5Cstory_24-8-2013_pg12_6

BACK TO TOP

Mithat Paşa Caddesi 46/4 Kızılay-Ankara TURKEY
Tel: +90(312)4302609 Fax: +90(312)4303948 orsam@orsam.org.tr

❖ China less than enthusiastic to Indian proposal on water issue

NEW DELHI: India today elicited "less than enthusiastic" response from China on its proposal to have a separate mechanism to deal with water issues amid its continued concerns over Chinese damming activities on Brahmaputra.

During the 5th round of India-China Strategic Dialogue, the Indian side led by Foreign Secretary Sujatha Singh raised the issue of its proposal pending with China to have either a water commission or an inter-governmental dialogue to deal with water issues.

To this, India received "less than enthusiastic" response from China, which has been maintaining that the existing Expert Level Mechanism (ELM) under which the two countries only share hydrological information (water level, discharge and rainfall) on Yaluzangbu/ Brahmaputra river in flood season was enough, according to sources.

As per the official release from the Ministry of External Affairs, the two sides discussed several issues including enhancing understanding on the utilisation of trans-border river waters.

Concerned over Chinese damming activities, including proposal for construction of three more dams, India has been pressing China to have either a treaty or a water commission or an inter-governmental dialogue to deal with water issues.

India has been protesting Chinese dam constructions on River Brahmaputra (known as Tsangpo in China) and the issue has figured in the bilateral talks between India and China at various levels, including at a meeting between Prime Minister Manmohan Singh and Chinese President Xi Jinping on the sidelines of BRICS (Brazil, Russia, India, China and South Africa) Summit in Durban in March.

"China less than enthusiastic to Indian proposal on water issue", 20/08/2013, online at:
http://articles.economictimes.indiatimes.com/2013-08-20/news/41429416_1_three-more-dams-india-and-china-hydrological-information

BACK TO TOP

Mithat Paşa Caddesi 46/4 Kızılay-Ankara TURKEY
Tel: +90(312)4302609 Fax: +90(312)4303948 orsam@orsam.org.tr

❖ China will build and finance two dams in Patagonia equivalent to 10% of Argentine power demand

Argentina's government this week awarded a 4 billion dollars contract for the construction of two hydroelectric dams to a consortium led by China Gezhouba (Group) Co. and which includes Argentine firms Electroingenieria SA and Hidrocuyo SA.

The hydroelectric project is expected to generate 1,740 megawatts of electricity in the sparsely populated Patagonia province of Santa Cruz, which also happens to be the political turf of President Cristina Fernandez and her late husband Nestor Kirchner.

Hydroelectric dams currently account for about 30% of the power generated in Argentina

The government says the dams will help curb Argentina's need to import diesel and liquefied natural gas and save some 1.1bn dollars a year. Argentina's rising energy deficit has become so significant that trouble paying for energy imports has led the government to implement a host of unpopular economic policies, including a ban on the purchase of foreign currencies, principally US dollars.

The government of President Cristina Fernandez needs those dollars itself to pay for energy imports and to make payments on its foreign debt.

The project's critics, however, argue the river doesn't have enough water flow to generate the full 1,740MW of power. The project's isolated location will make it expensive to transport the electricity from there to other parts of Argentina, critics say.

“This project will be a huge headache for Argentina,” said Gerardo Rabinovich, an energy industry consultant. “It doesn't make any sense from a technical standpoint or in terms of an investment. The country doesn't have the money to pay for this, especially when there are simpler, less expensive options available.”

Rabinovich said it would make much more sense to build smaller hydroelectric projects along the borders of Brazil and Paraguay where the infrastructure already exists.

However Argentine President Cristina Fernandez praised the project saying it would lead to greater economic development. She also said the winning consortium initially would finance the entire project.

Argentina's government first announced plans to build the dams about five years ago but repeatedly delayed the project among questions about financing. More recently, opposition politicians and critics of the government have raised questions about the transparency of the bidding process, and some have announced plans to challenge the construction contract in court.

More than 20 companies, including other firms from Brazil, China, France, Korea and Spain, had participated in bidding for the hydropower projects.

The dams, which will be named after two former Santa Cruz governors, including Argentine President Cristina Kirchner's late husband and predecessor in office, Nestor Kirchner, will provide power to residents and companies in Santa Cruz.

Provincial officials say they hope the availability of more electricity will help attract industry to the region, though they aim to export any unused electricity to other provinces and potentially even to neighboring countries.

Infrastructure Minister Julio De Vido, who has overseen the planning of the dams, said earlier this year that it will take more than five years to build them. De Vido said the dams will generate about 10% of total national demand for electricity.

The energy situation is Argentine is so delicate, almost desperate, that a group of former energy secretaries has estimated that the government will have to pay around 13 billion dollars in energy imports this year to ensure the domestic market is adequately supplied.

Despite recent efforts to increase oil and gas production, production of both goods has declined sharply over the past decade. At the same time, demand for energy surged during the country's economic boom, raising the need for imported energy. But new investment in energy production has been relatively scarce. Industry executives say price caps and unpredictable government policies have discouraged investment in the sector.

Last year, President Kirchner said the energy import bill was so onerous she decided to seize a majority stake in oil and gas company YPF from Spain's Repsol SA in hopes of increasing energy output. The seizure has reached international courts.

"China will build and finance two dams in Patagonia equivalent to 10% of Argentine power demand", 22/08/2013, online at: http://en.mercopress.com/2013/08/22/china-will-build-and-finance-two-dams-in-patagonia-equivalent-to-10-of-argentine-power-demand

BACK TO TOP

Mithat Paşa Caddesi 46/4 Kızılay-Ankara TURKEY
Tel: +90(312)4302609 Fax: +90(312)4303948 orsam@orsam.org.tr

❖ Fish Ecosystem on Yangtze River on Verge of Collapse

CHINA - Human activity along the upper reaches of the Yangtze River — such as building hydropower stations and excessive fishing — has pushed its aquatic ecosystem to the verge of collapse, a new report warns.

Researchers suggested starting a fishing ban along the entire river and enacting a national law to protect the "mother river" of China, as its fishery resources are experiencing a severe recession.

The number of fish in four major species has shrunk from more than 30 billion in the 1950s to less than 100 million, and the number of breeds has been reduced from 143 to 17, according to the report released by the Yangtze River Fishery Resources Committee under the Ministry of Agriculture and the World Wide Fund for Nature.

The report is based on a 12-day scientific expedition in five provincial-level regions in June, in which 32 researchers from government agencies and NGOs participated.

It was the first expedition of its kind to study the upper reaches of the Yangtze River regarding wetlands, aquatic diversity and water environment, according to the WWF.

Besides the sharp decrease in the number of fish, some species, such as the finless porpoise, have already become extinct, said Zhao Yimin, head of the Yangtze River Fishery Resources Committee.

The plight along the river is not catching much public attention "as people can buy fresh fish from a wet market every day. They don't realize how serious the situation is", Zhao said.

"The source species are reducing, leading to unsustainable development of aquaculture and an increasingly fragile ecosystem."

Zhao said China's fishery resources will be drained soon if no immediate action is taken.

The report cited over-exploitation of hydropower and lax law enforcement as major reasons behind the dire situation.

On the Jinsha River, 25 hydropower plants are being, or will be built 100 km apart along the 2,308 km tributary of the Yangtze, according to the country's energy development plan.

Once completed, the plants will have power-generating capacity equivalent to four Three Gorges Dam projects.

"It will cut the river into sections, and completely change the aquatic environment, bringing a devastating impact to species and water quality," Zhao said.

According to environmental laws, a power plant has to pass an environmental impact assessment before construction starts. However, a majority of the projects go ahead without any assessment, Zhao said.

The environmental impact assessment for the Shuangjiangkou hydropower project, for instance, was passed two years after construction started in 2011.

Chen Jiakuan, a professor at Fudan University in Shanghai who participated in the research expedition, said that 450 million metric tons of sand flowed downstream in the Yangtze in the 1950s, compared to 150 million tons at present.

"The sand is silting up at reservoirs, leading to the degradation of water quality. It also changed the environment for fish," Chen said.

Hydroelectric power plants also change water temperatures and a river's flow, which damages native plants and animals in the river and on land, he said.

As for overfishing, experts said 100,000 tons of fish caught in the Yangtze is an amount beyond what its ecosystem could take.

An annual three-month moratorium during the fish spawning period on the Yangtze River is far from enough for fish reproduction, Zhao said.

"The best way is a total ban on fishing," he said.

But he said the policy is hard to implement as it involves a lot of issues such as compensating those who live on fishing.

He suggests establishing a department coordinating different interest groups to solve the problem.

"The department should be responsible for drafting compensation plans to ensure the fishing ban is effective."

As the Yangtze River basin covers 19 provinces and cities, accounting for 18.8 percent of the land area in China, saving the river and its fish resources is not an easy task.

New legislation is needed to raise public awareness, the report said.

Ren Wenwei, head of the Shanghai conservation program of WWF, said the current regulations are not enough.

"The Yangtze River Fishery Resources Committee is a vice-ministry level department, which has limited power to coordinate different interest groups," he said.

He and other scientists propose drafting a Yangtze River Basin Management Act and establishing a coordinating department directly under the State Council.

"Fish Ecosystem on Yangtze River on Verge of Collapse", 19/08/2013, online at: http://www.thefishsite.com/fishnews/21046/fish-ecosystem-on-yangtze-river-on-verge-of-collapse?utm_source=Circle+of+Blue+WaterNews+%26+Alerts&utm_campaign=ab1553f362-RSS_EMAIL_CAMPAIGN&utm_medium=email&utm_term=0_c1265b6ed7-ab1553f362-250657169

BACK TO TOP

Mithat Paşa Caddesi 46/4 Kızılay-Ankara TURKEY
Tel: +90(312)4302609 Fax: +90(312)4303948 orsam@orsam.org.tr

❖ It's a mistake for NGOs not to engage with hydropower companies

Hydropower may be controversial, but NGOs must engage with the hydropower community to ensure the impact is positive

We are entering a new hydro-dam era. As John Vidal has reported, construction of hydropower in the Himalayas will be one of the great forces for change in Asia and a hot spot of regional tension between China, India, and Pakistan.

In Africa, the growth aspirations of many countries are pinned at least in part on the development of its extraordinary hydropower endowment. Only about 5% of the continent's hydropower potential has been developed thus far. But things are changing. Ethiopia's construction of the Renaissance Dam in the upper Blue Nile – which, when completed will be one of the largest dams on the continent – has sparked conflict with downstream Egypt and made headlines about water wars on the Nile. Recently, the World Bank has announced its return to financing hydropower as part of its core strategy, after almost two decades during which it has been virtually inactive in the sector.

Hydropower development has a troubled history. Relocation of people to make room for reservoirs, downstream environmental impacts from the fragmenting of rivers, and the profound modification of aquatic ecosystem – all drive legitimate concerns about the development of this type of infrastructure. But hydropower also brings essential base-load supply, a renewable source of energy, and in some cases much-needed storage capacity and flood control. Managing these competing objectives requires facing difficult trade-offs, which are not susceptible to broad-brush strokes positions.

Not yes or no, but where and how

While some dams' impacts clearly outweigh their benefits, in many places the most important question may not be whether to build a dam but rather about where and how hydropower is built. On 1 July I stood along the Penobscot River in Maine with colleagues and onlookers from partner organisations, government, local businesses and the community to watch the historic removal of the Veazie Dam.

This was the second of two major dam removals as part of the Penobscot River Restoration project – one of the largest such projects in the world. The project will greatly improve access to nearly 1,000 miles of habitat for endangered Atlantic salmon and a number of other species of native sea-run fish – many of which had dwindled from annual populations in the millions in the 1800s to only a few thousand by 2011.

In the late 1990s, after decades of conflict around re-licensing of individual dams on the river and proposals to add new dams, a single power company bought all the dams in the lower river basin. This changed the debate. Instead of taking a dam-by-dam approach, the Penobscot Indian Nation, a number of environmental groups and the Penobscot River Restoration Trust were able to work with the hydropower company and federal and state regulators to look across the river basin and find a solution that meets multiple needs. Ultimately, an agreement was reached to remove the dams while increasing fish passage and electricity generation at other less harmful sites – reestablishing river health, recreation and culture while increasing electricity generation.

Scale, risk and outcomes, looking over the horizon

This example demonstrates something important. Limiting the impacts of hydropower while harnessing its benefits is first and foremost an optimisation problem. By taking a river-basin wide perspective, the siting and construction of dams can be directed toward the least damaging places within a basin – ensuring as much of the natural flow of water, sediments, nutrients and fish are sustained as possible for the benefit of people and nature. This does not avoid the difficult trade-offs but can improve outcomes.

This is the conversation that needs to happen, and the only route to global impact. Organisations like mine have the science, some solutions and emerging ideas, but businesses and governments will be making the large-scale infrastructure investments and have the delivery capacity that will dictate our reality. This is why the Nature Conservancy and China Three Gorges Corporation have just signed an agreement to work together for the next five years. This agreement builds on our conservation work on the Yangtze River and attempts to begin exporting our lessons and practices to other international locations where Three Gorges works.

It will not be easy and we should not be under any illusion that we will always land on the same side of the debate. But if we fail to engage with the hydropower community, we will miss an enormous opportunity for positive impact. While we may at times still be at odds, working with business – and with governments where major development is occurring – is the only way to bring sustainable solutions to a scale that can alter the path we're travelling on.

"It's a mistake for NGOs not to engage with hydropower companies", 19/08/2013, online at: http://www.theguardian.com/sustainable-business/hydro-power-dams-ngos-enagagement

BACK TO TOP

Mithat Paşa Caddesi 46/4 Kızılay-Ankara TURKEY
Tel: +90(312)4302609 Fax: +90(312)4303948 orsam@orsam.org.tr

❖ Southern Africa Shows the Way With Water

JOHANNESBURG, Aug 20 2013 (IPS) - Water remains a key component in development policy. And, as the Southern African Development Community discusses how best to develop the region, the effective management of watercourses will be key, says Professor Anthony Turton, one of the foremost experts on water policy in southern Africa and a trustee of the Water Stewardship Council of Southern Africa.

The Southern African Development Community (SADC) has an ambitious 500-billion dollar regional development plan that aims to develop the region's roads, rails, and ports. The generation of power, and establishment of communication lines and meteorological systems have also been outlined as important to the region's development.

Turton told IPS in an interview that the SADC Water Protocol, which outlines the practical implementation of management, protection and use of the shared watercourses in the region, is regarded globally as a model example of regional water integration. Currently, about 70 percent of the region's water is shared between two or more countries.

"Energy is a national developmental constraint for many countries, but if the hydro potential of SADC is fully realised then regional energy security will replace national deficiencies," Turton said.

"To do this we need regional [cooperation] over water, which is why the SADC Water Protocol was the first signed after South Africa joined the grouping. The private sector is now starting to come to the party, most notably in the mining and agribusiness sectors, where water and energy constraints are being recognised."

Excerpts of the interview follow:

Q: What is the track record of past cooperation, in terms of success on the plus side or inefficiency and corruption on the other?

A: The SADC region is often cited in the global water sector as being the best example of water cooperation in transboundary resource management. The SADC Water Protocol is the foundation document for SADC regional integration, and serves the same purpose as the original coal, iron and steel agreements played in the creation of the European Economic Community and later the European Union. Cooperation over shared water in SADC is thus high.

Regarding corruption, the best case was that of Masupha Sole who was a senior executive in Lesotho Highlands water scheme who was indicted and imprisoned for corrupt dealings involving major construction companies in the 1980s and 1990s, some of which were South African. That case became one of the world's first in getting a conviction, so I guess it is actually a good news story.

Q: In practical terms, do any worthwhile future or potential regional water projects come to mind?

A: On a grand scale there are major inter-basin transfer projects such as the Lesotho Highlands between Lesotho and South Africa; the North-South Carrier in Botswana; the Eastern National Water Carrier in Namibia and the Cunene-Cuvelai project between Angola and Namibia. Another interesting project is the first major desalination plant at Trekopje in Namibia. I believe this will be the first of many in the SADC region.

Q: Do you believe that climate change is a real threat to the region, and if so how might it have an impact?

A: In short yes. Greenhouse gas concentration is likely to raise ambient air temperatures by as much as four and maybe even six degrees Celcius in some parts of southern Africa – assuming a global rise of two degrees Celcius is "acceptable". This will fundamentally alter the conversion ratio of rainfall to runoff, but it will also increase evaporative losses off dams.

An appropriate mitigation strategy is Aquifer Storage and Recovery (ASR) (also known as Managed Aquifer Recharge – MAR), now a mainstream technology in places like California, Texas and Australia, but not yet in widespread use in the SADC region. I am currently working with an Australian technology provider to introduce this into Botswana. This stores water underground rather than in dams, preventing the losses to evaporation and thus greatly improving the sustainable yield of a given system.

Q: Why is there a need for SADC countries to cooperate over water issues?

A: The four most economically diverse countries in southern Africa are highly water constrained (South Africa, Botswana, Namibia and Zimbabwe), whereas some of the neighbouring states are water abundant (Angola, Democratic Republic of Congo and Zambia). Water is to SADC as coal, iron ore and energy was to the creation of the European Economic Community (which later became

the EU). Water cooperation in the SADC region will enable regional integration to mitigate these risks by allowing regional water, food and energy security to be guaranteed at regional rather than at national level.

"Southern Africa Shows the Way With Water", 20/08/2013, online at: http://www.ipsnews.net/2013/08/southern-africa-shows-the-way-with-water/?utm_source=Circle+of+Blue+WaterNews+%26+Alerts&utm_campaign=b8d0e45beb-RSS_EMAIL_CAMPAIGN&utm_medium=email&utm_term=0_c1265b6ed7-b8d0e45beb-250657169

BACK TO TOP

Mithat Paşa Caddesi 46/4 Kızılay-Ankara TURKEY
Tel: +90(312)4302609 Fax: +90(312)4303948 orsam@orsam.org.tr