



ORSAM WATER BULLETIN

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Issue 92

ORSAM WATER BULLETIN

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❖ Turkish aid foundations working to resolve water problem in Africa

Carrying out frequent aid campaigns in African countries in need, Turkish aid organizations are addressing the water problem on the continent and have dug over 1,500 water wells in Africa to

provide clean water.

Turkish humanitarian aid organization Kimse Yok Mu (Is Anybody There) has constructed about 200

wells in Somalia, a country struggling to cope with a worsening humanitarian crisis caused by

drought. The number of people who die from diseases caused by contaminated drinking water and

unsanitary living conditions is very high in Somalia.

A coordinator for Kimse Yok Mu, Yusuf Yıldırım, told Today's Zaman that they are trying to find a

permanent solution to the water problem in Africa by sinking wells, adding that they are also trying

to create more livable conditions for the people of Somalia.

"Before the construction of the wells, the Somali people used to carry water from areas that were a

long way away from the places in which they were residing. Now they have this water without

making as much effort, and also this water is clean compared to the water they used to collect. By

doing this, our aid organization provides them with clean water and prevents deaths stemming from

dirty water to some degree," Yıldırım noted.

"Turkish aid foundations working to resolve water problem in Africa", 04/09/2012, online at:

http://www.turkishpress.com/news.asp?id=382815#.UEzQ2qAb6sh

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Iraq to build six new dams

Iraq is to build six new irrigation dams at a cost of \$56.4m.

The country's minister for Water resources, Muhannad al-Saadi, told Al Shorfa that each of the dams will cost around 11bn Iraqi Dinars, or \$9.4m.

"The new dams are located in Kirkuk, Anbar, Diyala, Wasit and Maysan, which will feature two dams," he said.

"Ministry engineers and private companies that specialise in building dams are currently supervising the work."

The minister said that the aim of the project would be to "benefit from storing rain and flood water, regulate ideal water distribution according to each province's needs for agriculture and human consumption, develop animal wealth and tourist investment, improve the environment and feed groundwater levels".

"Iraq to build six new dams", 03/09/2012, online at: http://www.constructionweekonline.com/article-18332-iraq-to-build-six-new-dams/



❖ Diyala confirms contamination of water coming from Iran

DIYALA, Sept. 2 (AKnews) - The administration of Mandali area in Diyala province said its water sources coming from Iran through the Harran bordering valley are contaminated and contain medical remnants from one of the hospitals from Somar district, causing an extensive crisis in drinking water.

The chairman of the local council Azad Hamid Shafi said the water coming from Harran (Kinkar) enters and accumulates in Mandali Dam and reaches the drinking water, dam which is the only source of drinking water in the area.

The deputy chairman of Mandali Council Raed Mandalawi said the water of the dam is completely contaminated and it is not suitable for various uses as the Water Directorate of Diyala confirmed.

Mandalawi added that the water of Mandali dam includes remnants and has a bad smell.

"The Iranian side refused Mandali's request to rehabilitate and clean bordering water in Kinkar valley because of the presence of mines and security risks (according to the Iranian side) pointing out that the water sources are neglected,

Diyala depends on 75 percent of the water of Diyala River, while the areas of the province depend on the Aser project of Tigris River in the Khalis town and other water resources in the valleys of Gazzaniah and Wand River in addition to the spring water in the Sheikh Bab valley in Jalawla.

"Diyala confirms contamination of water coming from Iran", 02/09/2012, online at: http://www.aknews.com/en/aknews/3/324350/



❖ Iraqi Trade Minister: I Would Rather Resign than Sign Trade Agreements with Iran

In this interview with Rudaw, Iraq's Minister of Trade Khairallah Hassan Babaker says he refused to

sign a number of trade agreements with Iran during his last visit to the country. Babaker insists he

will not sign anything until the Iranian side agrees to release the Iraqi share of water -- referring to

the blocked Alward River, affecting regions such as Khanaqin. Babaker also said that, even though

Turkey is cooperating with Iraq on the water issue, his ministry is still looking for an alternative

source for trade, particularly for importing food items.

Rudaw: The Iraqi Ministry of Trade was one of the most corrupt ministries in the country. Is

corruption still an issue in the ministry?

Khairallah Babaker: We have managed to control the issue of corruption in the ministry. There is

no corruption in the ministry any longer.

The corruption was more to do with imported food ration items, which are in fact irrelevant to the

Ministry of Trade. Ration food imports are not part of the ministry's laws, nor are they the

responsibility of the ministry, but they were imposed on the ministry.

"There is a large population in Iraq that lives under the poverty line."

There is a large population in Iraq that lives under the poverty line. In the south, middle and some

areas of northern Iraq there has been no economic development. This has led to poverty in these

areas. Even provinces like Musana have dropped below the poverty line; in some provinces, poverty

has reached 48 percent. But in the Kurdistan Region, poverty is 12 to 13 percent.

These statistics show how the Iraqi economy has been ruined by the multiple wars and needs to be

reconstructed. Until an economic infrastructure is built, the government has to support people in their

daily lives.

Rudaw: During the mandate of Falah Sudani, the former trade minister, it was claimed that US\$5

billion went missing. Is this true?

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Khairallah Babaker: There has been corruption, but it was not \$5 billion. The corruption was in the

contracts. The exact statistics related to the corruption have been recorded by the Iraqi committee for

financial supervision. It is not \$5 billion, but regardless of the amount, even if it is one dollar,

corruption is corruption.

Rudaw: It is said that the Iraqi government is planning to end food ration distribution. Is there any

such plan?

Khairallah Babaker: On an annual basis, US\$4 trillion is allocated for food rations. But this amount

of money is not sufficient to provide food for 34.5 million people. In some southern Iraqi provinces,

if people were not provided with sugar, rice and flour every month, they would be in very bad shape.

The people in these provinces are not like the people of Kurdistan; their economy is very bad.

Therefore, ending the food ration program would be disastrous to Iraq.

Rudaw: But people complain about the low quality of all the food ration items.

Khairallah Babaker: No, that is not true. The food items we distribute are of the best quality. We

buy 500 million kilos of food on a monthly basis and distribute it to people. All these food items go

through quality control before they are distributed.

As for wheat, we buy 3 million tons of wheat from Australia, America, Canada and Russia. For the

current year, we have also bought Romanian wheat. We send the wheat to the mills for processing,

and then we distribute it in the form of flour to the people.

"Ending the food ration program would be disastrous to Iraq."

We never distribute old wheat. The problem is between the mills and the distribution agents. They

change the flour, and another issue is that ration recipients do not pick their share up in time. The

agents sell the flour back to the mills, and because it remains in the mills and in the agents' stores, the

flour gets old. This problem exists all over Iraq, including the Kurdistan Region. We buy good

quality flour to distribute to people, but it ends up being fed to the fish.

مركز الشرق الأوسط للدراسات الاستراتيم

WATER RESEARCH PROGRAMME -Weekly Bulletin-

Rudaw: Before the Eid of Ramadan, a delegation from the economy and commerce committee,

headed by Dr. Roj Nuri Shaways, visited Iran to sign a trade agreement. You were supposed to sign

the agreement as the Iraqi minister of trade, but you did not. Why?

Khairallah Babaker: Yes, the delegation was on an official visit to strengthen trade and economic

ties with Iran. Iran is currently going through an economic crisis due to the embargoes on the

country. Therefore, Iran has to open a new trade door, and Iraq is its only option. The Iran-Iraq

border stretches 1,480 kilometers, and we are a good neighbor to Iran.

However, there are 49 water sources coming into Iraq from Iran. Iran has dried all these rivers. It has

redirected the water in Iran and on some rivers it has built dams. I told the Iranian trade minister that

if Iran didn't solve the water problem, I would not sign the agreement. He said that it was a different

package, and that the problem was for the Iraqi and Iranian resources ministries to solve, not us. But I

said no, and that if the problem was not solved, I would not sign the agreement.

Alward River is now completely dry and the water at the Dukan Dam has significantly lowered. If

Iran does not solve the water issue, we will use other ways to pressure them. We will restrict imports

of Iranian goods.

This subject now lies in the hands of the Iraqi Trade Ministry. We should take advantage of the

Iranian embargo, and get Iran to solve the water problem. I told Dr. Shaways that I would not sign

the agreement because we cannot offer Iran flowers and in return have them ignore the water

problem.

Iraqi Parliament would not tolerate the signing of such an agreement either. However, Dr. Shaways

had a different opinion. During the visit, we told Iran that that was it. We also told them that not

signing the agreement was not the end of the matter, it was just a start.

Rudaw: Did you face any trouble after your return from Iran?

"I will not sign the agreement and I will not accept any pressure."



Khairallah Babaker: No, to the contrary. I am planning to frankly address this issue at the Iraqi

Council of Ministers meeting. I will ask for the government's support, and the government has to

support me with this step. However, when we returned, there were some individuals who asked me to

take it easy on the issue and sign the agreement.

Rudaw: Who were they?

Khairallah Babaker: I will leave that to history. I do not want to further deepen political conflicts.

Rudaw: Will you sign the agreement under pressure?

Khairallah Babaker: I will not sign the agreement and I will not accept any pressure.

Rudaw: Are you willing to resign over this issue?

Khairallah Babaker: Yes, I would resign before signing the agreement.

Rudaw: You have also threatened to cancel economic and trade contracts with Turkey. Was this

threat to create a balance between Iran and Turkey?

Khairallah Babaker: With Turkey, we have a number of memorandums of understandings and a

free market. However, if Turkey also does not release Iraq's share of water, I will annul all

agreements.

I have started researching an alternative to Turkey for providing Iraqi needs. For example, we have a

\$670 million annual contract with Turkey for cooking oil. But the Turkish response to the water issue

has been much better than that of Iran.

"Iraqi Trade Minister: I Would Rather Resign than Sign Trade Agreements with Iran", 07/09/2012, online at:

http://www.rudaw.net/english/news/iraq/5172.html

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❖ Iran inaugurates key interbasin water transfer project

TEHRAN - The largest water transfer tunnel in Iran, carrying water from Dez River in the southwest to Qomroud River in the center, was officially inaugurated on Saturday.

The tunnel is considered to be the biggest of its kind in the Middle East, according to the ISNA news agency.

The project, which is estimated to cost 11 trillion rials (some \$900 million), is aimed to transfer 181 million cubic meters of water per year with the goal of supplying potable water to central parts of the country.

Interbasin transfer is referred to man-made conveyance schemes which move water from one river basin where it is available, to another basin where water is less available or could be utilized better for human development. The purpose of such designed schemes can be to alleviate water shortages in the receiving basin, to generate electricity, or both.

"Iran inaugurates key interbasin water transfer project", 08/09/2012, online at: http://www.tehrantimes.com/economy-and-business/101319-iran-inaugurates-key-interbasin-water-transfer-project



Official: 70 percent of Urmia Lake drought op

The head of the Iranian West Azerbaijan Province's Environment Organization said 70 percent of the Urmia (Orumiyeh) Lake has been drought up.

According to ISNA, Hassan Abbasnejad said Iran government started some measures to revive Urmia Lake by cloud seeding, commissioning the new irrigation methods, etc. in last solar year (ended on 18 March 2011) but the process is being carried out slowly.

"The main problem is lack of finance, then now, 300, 000 hectares of lake became salt land," he added.

Abbaszadeh said that Urmia Lake needs 3.1 billion cubic meters of water per year to survive.

Illegal use of water flowing into the lake for watering by rural population, construction of dams and illegal objects on its banks, is also among the problems of the Lake Urmia.

Each litre of water in Lake Urmia contains 330 grams of salt. Previously, the figure stood at 160-170 grams per litre.

Iranian government approved \$900 million finance bill to rescue lake from drought, but the process is being carried out slowly.

"Official: 70 percent of Urmia Lake drought op", 07/09/2012, online at: http://en.trend.az/regions/iran/2063005.html



❖ 3 million Syrians at risk of water shortage

Main pipeline supplying potable water in Aleppo gets damaged, 3 million Syrians may be affected

The main pipeline supplying potable water in the northern Syrian city of Aleppo was damaged in clashes between the Free Syrian Army and the forces of the Assad regime, said the London based Syrian Human Rights Organization on Saturday.

Activists in Aleppo said that 3 million Aleppo residents may have to live waterless for sometime due to the damaged potable water pipeline.

While some sources said that the water pipeline was damaged due to an air attack by the Syrian army, a Syrian official argued that armed groups staged a sabotage against the water pipeline.

Aleppo has been the site of fierce clashes between the Free Syrian Army and the Syrian forces loyal to Assad since July.

"3 million Syrians at risk of water shortage", 08/09/2012, online at: http://www.worldbulletin.net/?aType=haber&ArticleID=95188



Ministry offers NIS 70M boost for green power

Environmental Protection Ministry offers new government grants meant to encourage eco-friendlily power production

The Environmental Protection Ministry announced it will award NIS 70 million (roughly \$18 million) in grants to entrepreneurs who will pursue the eco-friendly production of electricity from organic waste.

The ministry has set a three-year deadline for the facilities to become operational, adding they would greatly encourage the separation of household waste among the public.

Show

Tel Aviv puts power consumption on display / Ynet

New Energy and Water Ministry project places visual graph on Reading Power Station chimneys; demonstrates real-time electricity consumption using energy-efficient lighting display Full story

The facilities are meant to be based on anaerobic waste digestion methods, which sees bacteria break down organic waste. The method produces gas, which in turn is used to produce electricity.

Such energy production considerably reduces the pollution caused by power plants, and turns organic waste into a valuable resource.

The ministry has also put in place a plan to help cities that wish to boost their household waste recycling activities.

Environmental Protection Minister Gilad Erdan said in a statement that, "This is a significant move towards the production of clean power and for expanding the use of organic waste, instead of putting it in landfills.

"This move will save the State considerable resources and will reduce the pollution to both the land and the air."

"Ministry offers NIS 70M boost for green power", 03/09/2012, online at: http://mideastenvironment.apps01.yorku.ca/?p=5828



❖ Rights Group Calls on Israel to Stop Pillaging Natural Resources

RAMALLAH, September 3, 2012 (WAFA) – The Palestinian human rights group, Al-Haq, in a press release Monday, called on the Israeli authorities to immediately stop the pillaging of the Palestinian natural resources and halt the concession of substantial financial incentives to settlers living in the area.

Al-Haq announced the publication of "Pillage of the Dead Sea: Israel's Unlawful Exploitation of Natural Resources in the Occupied Palestinian Territory." The report examines Israel's responsibilities with respect to the treatment of the occupied Territories natural resources in the Dead Sea area.

Israel must also revoke the mud mining permission granted to Ahava Dead Sea Laboratories Ltd. in 2004, said the report.

It reiterated that, under international humanitarian law, Israel is obliged to administer the natural resources belonging to the Occupied Palestinian Territory (OPT) without damaging or diminishing them. Accordingly, it is prohibited from exploiting them in a way that undermines their capital and results in economic benefits for Israeli citizens, including settlers, or for its national economy.

By granting substantial financial benefits to the settlers, as well as by licensing Ahava Dead Sea Laboratories Ltd., 44.5% of whose shares are owned by the settlements of 'Mitzpe Shalem' and 'Kalia,' to mine and manufacture products that utilize the mud extracted from the occupied Dead Sea area, Israel is openly in violation of its obligations as an Occupying Power in the OPT. It is encouraging and facilitating the exploitation of Palestinian natural resources and actively assisting their pillaging by private actors, said the release.

It said, third-party States are called on to abide by their international legal obligations and must take concrete measures to pressure Israel to bring to an end its violations of international humanitarian law. In addition, they must refrain from providing any form of assistance to such violations, including by maintaining business relationships with economic actors allegedly involved in pillage in the occupied Dead Sea area.



The European Union (EU) must ensure that only Israeli entities registered and established in Israel and conducting activities in Israel proper, are able to participate in European programmes, and adopt restrictive measures on the import of Israeli products originating from settlements, because of the serious violations of peremptory norms of international law that settlements and their related infrastructure entail, Al-Haq concluded.

T.R./F.R.

http://english.wafa.ps/index.php?action=detail&id=20588

Rights group: Israel must end illegal exploitation of Dead Sea = Ma'an news service

BETHLEHEM (Ma'an) — Israeli authorities must end the exploitation of Palestinian natural resources in the Dead Sea, including granting financial concessions to Israeli settlers and companies in the area, a human rights group said Monday.

The Al-Haq report says Israel gives its own citizens the sole opportunity to benefit from the resourcerich area of the occupied West Bank, at the expense of Palestinians, which "could amount to the war crime of pillage."

The salty desert lake, some 422 meters below sea level, and its environs were designated as Area C, under full Israeli control, under the 1993 Oslo Accords.

Al-Haq says the settler population has since bloomed, while Palestinian communities are decreasing.

Giving financial benefits to settlers, as well as the sole mud-mining license to an Israeli company, Ahava, of which 44.5 percent of shares are owned by settlements, facilitates the exploitation of Palestinian resources, the report says.

Meanwhile, the group warns that unsustainable water extraction and mining techniques have caused the major decrease in water levels at the lake.

Al-Haq director Shawan Jabarin said the exploitation of the Dead Sea "clearly demonstrates how Israel is benefiting economically from the occupation."



The group also calls on the European Union to stop Ahava from taking part in projects it funds, which earned the minerals and cosmetics operation 1.13 million euros in 2011.

Further, it argues that "worldwide cosmetic retailers should provide their customers with clear information about the origin of the products that are sold in their stores."

"Rights Group Calls on Israel to Stop Pillaging Natural Resources", WAFA / Maan, 03/09/2012, online at: http://mideastenvironment.apps01.yorku.ca/?p=5816



❖ Work on Kufranjah Dam progressing on Schedule

AMMAN — Construction work on the Kufranjah Dam in Ajloun Governorate, located 70km

northwest of Amman, is progressing according to schedule, according to a government official.

"Construction of the dam is progressing well with 35 per cent of the reservoir completed... the

Kufranjah Dam is expected to be completed in 2014," Jordan Valley Authority (JVA) Secretary

General Saad Abu Hammour, said.

Work on the dam, implemented by an Italian contractor, started late last year, Abu Hammour added.

The project, which is funded by the state Treasury, is estimated to cost JD20 million, in addition to

JD2.2 million for supervising the implementation, according to the JVA secretary general.

"The dam seeks to provide Ajloun with water for drinking and irrigation purposes," he noted.

Meanwhile, the JVA plans to raise the walls of the Waleh Dam in Madaba Governorate to store more

rainwater.

"Raising the walls of the 8.18 million cubic metre (mcm) Waleh Dam is scheduled to start late next

year... The dam flooded more than three times in 2010 and around 30mcm went into the Dead Sea,"

Abu Hammour said.

Dams, though expensive to build, are vital for the Kingdom to secure its water needs, according to

officials at the Ministry of Water and Irrigation.

The Kingdom's 10 major dams are the King Talal, Wadi Al Arab, Sharhabil, Kafrein, Wadi Shuaib,

Karameh, Tannour, Waleh, Mujib and Wihdeh.

They currently hold 64 per cent of their total capacity of 215.44mcm, excluding the 110mcm Wihdeh

Dam, where water storage is currently experimental. The dam now holds 15.5mcm of its total

capacity.

Jordan, which is considered the world's fourth water poorest country, suffers an annual water deficit

of 500mcm and the per capita share of water does not exceed 150 cubic metres per year, well below

the water poverty line of 500 cubic metres per year.



According to official figures, 91 per cent of Jordan's total area of 97,000 square kilometres is arid land with an annual rainfall average of 50-200 millimetres (mm), while 2.9 per cent is categorised as semi-arid with an annual rainfall average of 400-580mm

"Work on Kufranjah Dam progressing on Schedule", 05/09/2012, online at: http://jordantimes.com/work-on-kufranjah-dam-progressing-on-schedule



***** Water source for Gaza is threatened

TEL AVIV, ISRAEL - The aquifer that provides water to the Gaza Strip may become unusable within four years and irreversibly damaged by 2020 unless pumping stops and major infrastructure upgrades are made, the United Nations said.

"Today, 90 percent of the water from the aquifer isn't safe for drinking without treatment," the U.N. report said about the seaside enclave between Egypt and Israel, where 1.6 million people live amid a blockade restricting the movement of goods.

Available clean water is "limited for most Gazans," and if desalination and wastewater treatment investments aren't stepped up, Gaza's power, living and sanitation conditions will erode, the United Nations report said.

While Gaza water has shown high saline levels for decades, it's grown more contaminated the past five years due to overpumping of part of the coastal aquifer that runs beneath Gaza. Three times more water is extracted from the aquifer each year than it recharges, the Palestinian Water Authority said.

Sharing scarce water resources has been one of the knottiest issues between Israelis and Palestinians.

At the Shati refugee camp in Gaza, the water from Khalil Awad's kitchen sink is contaminated with encroaching seawater and traces of sewage that leak into the aquifer.

"There's no healthy water in all of Shati, and I can't afford to buy bottled water for all my children," Awad, 55, said last month, pointing to his rusty faucet. "Everyone knows drinking this water makes you sick."

Israel sells the Palestinian Authority 5 million cubic meters of water a year for Gaza, ruled by the Islamic group Hamas since 2007. Negotiations to double that have bogged down amid the Israeli-Palestinian conflict.

Efforts to build desalination plants that create potable water from the sea are slowed by Israeli and Egyptian blockades, imposed after Hamas ousted forces loyal to the Palestinian Authority.

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One plant is proposed, and a smaller desalination plant in Gaza has been built. Blocking agreements are arguments over "price, quality and quantity," said Monther Shublaq, director of Gaza's water utility.

"Water source for Gaza is threatened", 03/09/2012, online at: http://www.startribune.com/world/168409336.html



Palestine Is Drying Up Before Our Eyes

Thirsting for justice under water apartheid

The water crisis in Palestine is 100% human-made, not a climate change catastrophe, not an issue of deforestation or drought. Don't let the geography fool you, as Ziyad Lunat from the Thirsting For Justice campaign pointed out, Jerusalem gets nearly the same amount of rainfall as London.

We say Palestine, mind you, not the West Bank and/or Gaza and/or the Occupied Territories. When we say Palestine, we mean all of it. The Palestine that is Gaza, the West Bank, the 64+ year flood of refugees in Jordan and Syria and Turkey and Chicago—the largest flood of refugees in modern history that spans across the globe.

This water catastrophe—this other type of nakba—is the definitive result of Israel's continued conduct and apartheid policies, evident in the waterborne disease spreading throughout Palestinian refugee camps that are perhaps not an accident, but an inconvenient oversight. Perhaps they are part of the continuing collateral damage of a so-called unsolvable crisis that in person, feels much more like the combination of a big lie and a large land grab. And, as many others are learning across the globe, behind every land grab is a water grab.

Israeli policies and practices limit Palestinians' access to the water they are entitled to under international law. Israel controls all sources of freshwater in the West Bank. In Gaza, 90 to 95 percent of the coastal aquifer, on which Gaza inhabitants are dependent for water, is contaminated due to over-extraction and sewage contamination, making it unfit for human consumption. For most Palestinians, this ongoing and catastrophic water crisis is what they face daily, when they wash clothing, need a glass of water, or try to water their crops.

Thirsting for Justice

During my most recent trip to Palestine while traveling with Barbara Lubin, Executive Director of the Middle East Children's Alliance (MECA), I was directly asked by one of MECA's partners to

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take part in the Thirsting for Justice Summer Challenge and only consume 6.3 gallons of water for one 24-hour period in solidarity with Palestinians. In the moment, I promised to participate and now I ask you to consider joining this campaign as well.

In Palestine, MECA was working to further our partnership with UNRWA to sustain and support MECA's ongoing Maia project, which provides clean drinking water for children throughout kindergartens and UN schools in Gaza. As a natural extension of MECA's humanitarian efforts, they are a member of the Emergency Water Sanitation and Hygiene group (EWASH), a coalition of 30 leading humanitarian organizations that launched this Thirsting for Justice Campaign. These groups have realized that demand for clean water will only increase unless there is some component where they do not just respond to the overwhelming need for clean water, but they advocate for a change in Israel's water policy—a policy that amounts to liquid apartheid.

Taking the Challenge

I am not going to lie to you for a moment. This challenge is an impossible and completely symbolic task. How does one in the places we live respond to such a challenge? I, for one, procrastinated and delayed, as such is my privilege, since this is a symbolic nothingness, a gesture, a shoulder shrug. Solidarity? Perhaps. But solidarity means nothing when the 6.3 gallons I consumed during my allotted and chosen 24 hours were highly purified, compared to the water in Gaza, where I know from experience that if you take a hot shower the salt in the water burns your skin, that friends invite you to brush your teeth with their own bottled water so that your teeth won't begin to erode for use of tap water. Water in Palestine is often so heavily salinated or in short supply that blue baby syndrome, liver afflictions, and kidney problems are all too commonly spoken on the lips of mothers when talking about their children.

Yet still I delayed. A 6.3 gallon challenge? Are you kidding me? I flush the toilet twice in the same day and I fail. If I do a load of laundry, or turn on the dishwasher, I fail. One shower, failure. I am American, therefore entitled to unlimited resources, am I not? Isn't the American way of life not up for negotiation?



I finally acquiesced and undertook the Thirsting For Justice Challenge. Yesterday, instead of showering, I swam in the ocean. I pissed outdoors—no flushing required. I did not use dishes, except for one glass. I attempted the challenge and in the process spent countless gallons of oil and even more kilowatts of electricity—especially if you are reading this—in order to communicate to you the importance of the Thirsting for Justice campaign, all in an attempt to wash off the guilt and the default complicity we share in this occupation, all to complete a promise.

Taking part in the Thirsting for Justice Summer Challenge did make me think more about what it means to consume. Consume. Consume. The American mantra. We consume and destroy, and we do not question policies like the ongoing occupation and division of Palestine that we fund every day with US tax dollars. And this complicity, of course, is completely absent from debates, from dialogue, from the ongoing election cycle that makes one nauseous enough it makes it difficult to swallow. Even this symbolic feeling of being deprived of water, if just for one day, gives one pause to think about such things.

This symbolic challenge is a challenge nonetheless, one I invite you to consider, to embrace. Perhaps it will make you pause, despite all the noise, and join in the walk with the peoples of Palestine. The more who join the walk will be haunted as am I by Martin Luther King's words: "In the End, we will remember not the words of our enemies, but the silence of our friends."

What now?

When I left Palestine weeks ago and returned home (as is my privilege, I have freedom to travel, I am not Palestinian) things seemed more silent than ever. I began to think about how much harder it is to speak when you are thirsty. I wished there was an easy way to be heard by the Israeli government. Because they—and those who support or remain silent of their policies—are choking Palestine. There literally is no Jordan River anymore. Israel dam(n)s the water from the underground aquifers that provide water to Palestinians, poisons their wells, build walls to encompass the high ground, and re-directs the streams to fill the swimming pools of settlers (many of them surprisingly well armed with unsurprising US weaponry). The settlers, born of other lands and granted other privileges, splash in the water of Palestine.



6.3 gallons. Per person. Per diem. I grab at the easy words in easy reach, carpe diem, to louden the call to join this Thirsting for Justice campaign today, but I cringe now at this phrase. Being in Palestine makes you realize seizure means something different when you are on the receiving end of of being seized.

Lessons learned?

What is 6.3 gallons? It is Israeli water torture. It is part of the occupation. It is part of maintaining the stalemate, the status quo, the divide and conquer, the non-solution is a solution. In the meantime, in the never ending interim, if you are Palestinian, just keep your water consumption under 6.3 gallons a day or there will be hell to pay.

I now know more deeply that expecting one to live on 6.3 gallons of water in a day is an insult. It's collective punishment. It's fucking horrible. An allotment of 6.3 gallons of water a day makes you want to flee.

This is not about me or you joining the Thirsting for Justice Summer campaign. This is about Israel using allotment of water resources as one of the many weapons in their arsenal to maintain their ongoing occupation. This is about making Palestine unlivable. This is about creating a different kind of Exodus. This is about a new Trail of Tears. But this is a controlled amount of tears, and it is controlled at the water spigots, controlled at the borders, controlled in the halls in Washington and the Knesset and in the lack of news you hear about the unwillingness of many Palestinians to be truly part of their two paltry puppets, the PA and Hamas.

This other Trail of Tears is drier and longer and older than you think. Listen. Do you hear the footsteps? More feet down the trail every day, with our silence. More tears. All happening in real time, all with the blind allegiance and support of the US government.

By no means, do I know what it is to walk any Trail of Tears. All I can think is to try to strive to accompany in some small way those who have been forced on this path by no choice of their own.



That many of those walking are children. That there are choices before all of us, that we can, in fact, ourselves thirst for justice in our own way and shrink the gap between those on the receiving end, those whose lives know only war and occupation and those of us who, by default, by waking up in America, are the ones who are partly responsible.

This article was originally published by Common Dreams.

"Palestine Is Drying Up Before Our Eyes", 05/09/2012, online at: http://indypendent.org/2012/09/05/palestine-drying-our-eyes



Royal Haskoning to Work on Rehabilitation of Lower Jordan River

Friends of the Earth Middle East hired a Dutch company to put together a plan to help rehabilitate the Lower Jordan River after receiving a 3 million- euro (\$3.8 million) grant from the European Union, The river's ecosystem is threatened by excessive water diversion for agriculture and other industries, development by Israel, Syria and Jordan as well as pollution, the environmental group said in a report. Royal Haskoning, which won a tender for about 839,000 euros, this week started work with a group including Jordanians, Israelis and Palestinians that will present the rehabilitation plan for the Lower Jordan by 2014, FOEME said on its website.

"They will prepare a computerized model of all water extraction from the river and all of the springs," said Gidon Bromberg, head of FOEME <u>Israel</u>.

"Royal Haskoning to Work on Rehabilitation of Lower Jordan River", 05/09/2012, online at: http://www.bloomberg.com/news/2012-09-05/royal-haskoning-to-work-on-rehabilitation-of-lower-jordan-river.html



Turkish agency opens water treatment plant in Gaza

ANSAmed) The Turkish International Cooperation and Coordination Agency (TIKA) put a water treatment plant into service in Gaza on Tuesday as Anatolia news agency reports.

United Nations Relief and Work Agency for Palestine Refugees, Turkish Red Crescent officials and TIKA's Palestine Coordinator Kursat Mahmat attended the inauguration ceremony in Gaza. Speaking at the ceremony, Mamat said that water and waste water projects were so pivotal for Gaza. "We will continue to help Palestinian people in every field. In Gaza, water and waste water projects are very important, and in this context, we are conducting our projects in cooperation with municipalities near the coast. We are trying to seek solutions to people's needs in Gaza," said Mahmat. Mahmat also said that blockade of the Gaza Strip by Israel restrains the development of water supply and sewage services in Gaza.

"Turkish agency opens water treatment plant in Gaza", 04/09/2012, online at: http://www.waterworld.com/news/2012/09/04/turkish-agency-opens-water-treatment-plant-in-gaza.html



❖ Gaza's Contaminated Water Worsens Health for Palestinians

The aquifer that provides water to the Gaza Strip may become unusable within four years and

irreversibly damaged by 2020 unless pumping stops and major infrastructure upgrades are made, the

United Nations said.

"Today, 90 percent of the water from the aquifer isn't safe for drinking without treatment," the UN

report said about the seaside enclave between Egypt and Israel where 1.6 million people live amid a

blockade restricting the movement of goods.

Availability of clean water is "limited for most Gazans" and if desalination and wastewater treatment

investments aren't stepped up, the UN expects Gaza's power, living and sanitation conditions to

worsen, it said in an Aug. 27 report.

While Gaza water has shown high saline levels for decades, it's grown more contaminated the past

five years due to overpumping of part of the coastal aquifer that runs beneath Gaza. Three times more

water is extracted from the aquifer each year than it recharges, the Palestinian Water Authority said.

Sharing scarce water resources has been one of the knottiest issues between Israelis and Palestinians

over 19 years of peace talks.

At the Shati refugee camp in Gaza, the water from Khalil Awad's kitchen sink is contaminated with

encroaching seawater and traces of sewage that leak into the aquifer.

"There's no healthy water in all of Shati and I can't afford to buy bottled water for all my children,"

Awad, 55, said last month, pointing to his rusty faucet. "Everyone knows drinking this water makes

vou sick."

Trucks circulate daily in Gaza offering desalinated water for one-fifth the 4 shekels (\$1) a cubic

meter that it costs when bought from state-owned Mekorot Water Authority, which supplies 80

percent of Israel's drinking water.

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WATER RESEARCH PROGRAMME
-Weekly Bulletin-

Water Contamination

"Microbiological water contamination, mainly from sewage seeping into the aquifer, is pervasive and

responsible for high incidents of diarrhea and other water-associated diseases in Gaza's children

under five in particular," the charity group Oxfam said in a July report.

Israel sells the Palestinian Authority 5 million cubic meters of water a year for Gaza, ruled by the

Islamic group Hamas since 2007. Negotiations to double that have bogged down amid the Israeli-

Palestinian conflict.

Efforts to build desalination plants that create potable water from the sea are slowed by Israeli and

Egyptian blockades, imposed after Hamas ousted forces loyal to the Palestinian Authority. Hamas is

considered a terrorist organization by the U.S., European Union and Israel.

One plant is proposed, and a smaller desalination plant in Gaza has been built. Blocking agreements

are arguments over "price, quality and quantity," said Monther Shublaq, director of Gaza's water

utility.

'Numerous Obstacles'

While the blockade makes exceptions for projects run by UN and aid groups, Oxfam said it

encountered "numerous obstacles" getting raw material and equipment through Israeli crossings

while building a newly opened water treatment plant for brackish water in the Gaza town of Rafah.

Israel says it restricts construction material imports because they can be used to build rockets or

bombs.

Gaza's Hamas-run health ministry blames Israel for blocking equipment from being brought in to

repair water and sewage networks, pushing the Gaza deeper into poverty.

"Israel is responsible because it keeps a siege imposed on Gaza and controls most of our water

resources," said Zeyad Nonat, director of the health ministry's water and sewage department.



Guy Inbar, a spokesman for Israel's military coordination office for Gaza, said equipment to fix water works was allowed into Gaza though he acknowledged delays. Those were largely due to difficulties dealing with the Palestinian Authority in Gaza, he said. "We're trying to help."

"Gaza's Contaminated Water Worsens Health for Palestinians", 05/09/2012, online at: http://www.businessweek.com/news/2012-09-03/gaza-s-contaminated-water-worsens-health-for-palestinians



* Action to Stop Arab Sewage Flow to Kidron

Will government treatment facility for the sewage waters resolve the issue?

Nachal Kidron is a main river which begins in the old city of Jerusalem and ends in the Dead Sea area. It is one of the most contaminated rivers in Israel, the main reason being the sewage which comes from the eastern Jerusalem neighborhoods and which is discharged to the river without purification or after partial purification.

Because Nachal Kidron runs through areas which are under Israeli control, and also through areas which are under PA administration, one of the many problems that have arisen is the question who is responsible for purifying the water and who will participate in the expenses. Another problem is that the Arab residents are unwilling to cooperate.

The Legal Forum and its environmental arm, Green Now, explained that while Israel cannot take any one-sided action, the PA is doing nothing in order to make sure the water being discharged is purified, and is in fact continuing to contaminate the waters, and by doing so damaging the environment. Most of the sewage comes from Jerusalem; the main point of contention is who will receive the sewage water after it has been purified for the purpose of watering fields.

"Green Now" has commissioned an independent opinion regarding this matter which clearly states that it is necessary to construct a treatment facility for the sewage waters in order to resolve the issue.

Seeing as there is no way to separate the waters coming from west Jerusalem and those coming from the east, the state of Israel and the PA will have to reach an agreement as to the equitable utilization of the purified waters.

"Green Now" has been working tirelessly to advance the issue of sewage problems. The Ministry of Environment proclaims from every stage that Nachal Kidron is Israel's largest sewage hazard, but on the other hand will not commit to any treatmentschedules or to ensure that the Jerusalem Municipality act to resolve the problem.



"Green Now" said it intends to pursue this matter until a solution is found and an end is put to the sewage hazard, even if this requires appealing the courts.

Another important issue with regard to the Kidron is the matter of illegal building by Arabs in the Kidron Valley area of Jersualem. The Jerusalem Municipality is workingtowards legalizing the buildings there, and the Legal Forum says this is disturbing as "this will cause further contamination of the Kidron and more importantly, the area is designated as a "green area" meaning there should be no building there whatsoever.

"Action to Stop Arab Sewage Flow to Kidron", 07/09/2012, online at: http://www.israelnationalnews.com/News/News.aspx/159741#.UEn3VLIdDb4



❖ Are Israel's eco regulations forcing industries out?

Big businesses claim environmental regulations too strict; Environment Protection Ministry insists law on par with other nations worldwide; public health must come first

Are Israel's industry environmental regulations driving local industries out of the country? Many businesses would say yes.

Israel adheres to the same environmental regulations practiced by the European Union, as well as some practiced in the United States; but unlike them, it has yet to fully form a regulatory mechanism to fully assess their effects and effectiveness.

The State has been trying to enhance regulation, via various legislation and the creation of the Polluting Industries Database, but the mechanism if still fledgling, and the government seems to be zigzagging on major issues, like the enforcement of the Clean Air Act, recycling laws and the responsibility for rehabilitating land contaminated by industrial operations.

Industry insiders say that the laws and regulation put in place by the government have a direct link to a recent, disconcerting trend that sees some industries moving out of Israel.

Industries seem to be having the most difficulty meeting Environment Protection Ministry's air pollution regulations, considered much stricter than the EU's.

Europe follows regulation stating that industries are to follow "BAT" (Best Available Technology) when selecting emission filtration mechanisms, but while EU regulations set pollution standards at 5-20mg of pollution for cubic meter. Israel set its regulation to 5mg only.

Many peg the demand as "nearly impossible," and it appears that Israeli industries are relocating their factories to Europe, where regulations are more lenient.

The governments of many European countries have realized the potential, and countries like Germany and France are trying to capitalize on that, offering industries attracting foreign-investor terms.



In Israel, however, plants that are unable to make the move suffer financial losses, and the smaller factories are simply forces to close down.

Israeli media quoted leading attorney Arie Neiger as saying that the local regulations foster "a scorched-earth policy," and that that the only reason big industries have to remain in Israel is Zionism.

The Environmental Protection Ministry, however, maintains that its measure are meant to protect public health, which it holds in the heights priority.

A ministry statement said that its policy is to "Prevent pollution ahead of time and to treat hazards created over years."

The ministry also stressed that it had no knowledge of any direct link between any factory closing down over environmental regulations, underscoring that Israel's environmental regulations, especially those implemented in recent years, "Have been in place in other Western nations for years. The ministry adopted international standards and regulations customary in the most advanced countries.

"The ministry sees industry as an essential cornerstone in Israeli society and it aspires to allow industry to develop while minimizing its impact on the environment and public health, and maintaining the best standards of international practiced today," the statement said.

"Are Israel's eco regulations forcing industries out?", YNET, 06/09/2012, online at: http://mideastenvironment.apps01.yorku.ca/?p=5837



Public water reservoir exposed near Western Wall

Large rock-hewn reservoir dating to First Temple period discovered in archaeological excavations conducted in Jerusalem Archaeological Garden

A large rock-hewn water reservoir dating to the First Temple period was discovered in archaeological excavations being conducted in the Jerusalem Archaeological Garden at the foot of Robinson's Arch.

The excavations at the site are being carried out by the Israel Antiquities Authority, underwritten by the Ir David Foundation and in cooperation with the Nature and Parks Authority.

The impressive reservoir was presented Thursday together with other finds from this past year at the 13th annual conference on the "City of David Studies of Ancient Jerusalem" held in Jerusalem.

The excavation, during the course of which the reservoir was discovered, is part of an archaeological project whereby the entire drainage channel of Jerusalem dating to the Second Temple period is being exposed.

The channel runs north along the City of David spur, from the Siloam Pool to a point beneath Robinson's Arch. The route of the channel was fixed in the center of the main valley that extends from north to south the length of the ancient city, parallel to the Temple Mount.

In his description of Jerusalem in the Second Temple period, Josephus refers to the valley by its Greek name "Tyropoeon", which scholars believe means "Valley of the Cheese-makers". Another interpretation identifies the valley with the "Valley of the Decision", mentioned in the Book of Joel. It became apparent while excavating the channel that during the construction of this enormous engineering enterprise its builders had to remove earlier structures that were situated along the route of the channel and "pass through" existing rock-hewn installations that were located along it. An extraordinary installation that was exposed in recent weeks is a large water reservoir treated with several layers of plaster, which probably dates to the First Temple period.



The reservoir has an approximate capacity of 250 cubic meters and is therefore one of the largest water reservoirs from the First Temple period to be discovered so far in Jerusalem, and this was presumably a reservoir that was used by the general public.

According to Eli Shukron, the excavation director on behalf of the Israel Antiquities Authority, "While excavating beneath the floor of the drainage channel a small breach in the bedrock was revealed that led us to the large water reservoir. To the best of our knowledge this is the first time that a water reservoir of this kind has been exposed in an archaeological excavation.

The exposure of the current reservoir, as well as smaller cisterns that were revealed along the Tyropoeon Valley, unequivocally indicates that Jerusalem's water consumption in the First Temple period was not solely based on the output of the Gihon Spring water works, but also on more available water resources such as the one we have just discovered.

Series of finds

According to Dr. Tvika Tsuk, chief archaeologist of the Nature and Parks Authority and an expert on ancient water systems, "The large water reservoir that was exposed, with two other cisterns nearby, is similar in its general shape and in the kind of plaster to the light yellow plaster that characterized the First Temple period and resembles the ancient water system that was previously exposed at Beit Shemesh.

"In addition, we can see the hand prints of the plasters left behind when they were adding the finishing touches to the plaster walls, just like in the water reservoirs of Tel Beersheba, Tel Arad and Tel Beit Shemesh, which also date to the First Temple period". Dr. Tsuk says,

"Presumably the large water reservoir, which is situated near the Temple Mount, was used for the everyday activities of the Temple Mount itself and also by the pilgrims who went up to the Temple and required water for bathing and drinking".

The exposure of the impressive water reservoir that lies below Robinson's Arch joins a series of finds that were uncovered during recent excavations in this region of the city, indicating the existence of a densely built-up quarter that extended across the area west of the Temple Mount and predating the expansion of the Temple Mount.



It seems that with the expansion of the Temple Mount compound to the west and the construction of the public buildings and the streets around the Temple Mount at the end of the Second Temple period, the buildings from the First Temple period and early Second Temple period were dismantled in this region and all that remains of them is a series of rock-cut installations, among them the hewn water reservoir.

According to Dr. Yuval Baruch, archaeologist in charge of the Jerusalem Region of the Israel Antiquities Authority, "Upon completion of the excavations along the route of the drainage channel, the IAA will examine possibilities of incorporating the impressive water reservoir in the planned visitors' path".

"Public water reservoir exposed near Western Wall", 07/09/2012, online at: http://www.ynetnews.com/articles/0,7340,L-4278061,00.html



❖ Water won't cause Mideast war: Israeli prof

A leading Israeli expert on water believes a war over the precious liquid is improbable.

Water "might be a trigger for conflict. It might cause tension. Western experts see the potential for conflict. But none of the wars in the [region] were caused by water," says Prof. Eilon Adar.

"Based on the Middle East experience, I can say [war over water] is very unlikely."

Besides, if water is scarce in the region – and it is – Israel simply makes more of it, said Adar, director of the Zuckerberg Institute for Water Research at Ben-Gurion University of the Negev.

"In Israel, we already consume, by far, more water than God provides us with," Adar told The CJN in an interview prior to his talk last week at the Lodzer Centre Congregation. "So we create more water."

Using innovative technologies, Israel does this by recycling water through sewage treatment and by desalinating both seawater and saline ground water.

In 2012, Adar said, Israel will desalinate about 400 million cubic metres of water at a cost of some \$200 million. Sewage treatment, he said, costs roughly the same.

Having coped with decades of water shortages, Israel has gained tremendous experience in developing unique solutions for water issues, Adar said.

The nation recycles 82 per cent of the sewage produced by Tel Aviv and its suburbs. That water is treated and used in the agricultural sector, including irrigation.

Seventy per cent of Israel's drinking water comes from groundwater reservoirs and 30 per cent from the Mediterranean.

And the message of conservation seems to have gotten through in Israel, he said. Total per capita water consumption is about 500 cubic metres per year (by contrast, Canadians use 1,600 cubic metres of water per person per year).



"Nobody in the world gets close to us regarding water-use efficiency," Adar noted.

That's especially true in the agricultural sector, he added. In Israeli greenhouses, which account for most of the country's intensive agriculture, "irrigation efficiency" sits at between 85 and 92 per cent.

"That means that 85 to 92 per cent of water is consumed by the plant," Adar pointed out.

About two-thirds of water used in farming is reclaimed sewage water, 25 per cent is fresh and about seven per cent is brackish, or salty. Certain crops – tomatoes, melons and asparagus – thrive on saline water.

"Our farmers managed to show everyone that you can do more with less," Adar said.

A hydrologist who's headed BGU's Zuckerberg Institute for Water Research since 2002, Adar tries to steer clear of politics. He calls water "a commodity," but knows how explosively political it can be.

He scoffs at Palestinian claims that Israel is stealing water from the West Bank.

"What does that mean, to steal? Every major water resource in the Middle East is cross-border," Adar pointed out. Besides, he added, water naturally flows from the West Bank across Israel toward the Mediterranean.

According to the Zuckerberg Institute, all groundwater reservoirs in the Middle East are shared by at least two countries: Israel and Jordan (Arava aquifers); Syria, Israel and Lebanon (Jordan River resources), and Israel and the West Bank (Judean and coastal aquifers).

Such is the significance of water in the Middle East that it's prominent in all existing peace treaties, the facility stresses.

Adar pointed out that the only still-functioning committee of the otherwise failed Oslo peace accords with the Palestinians is the one dealing with water.



"By all practical means, Israel and Palestine agree on water issues. But the difference is, the Palestinians say, let's sign the agreement on water. Israel says no, the water will be part of a comprehensive peace treaty. We agreed on water issues with Jordan years ago."

Adar said Palestinians have called on Israel to supply them with an additional 300 million cubic metres a year, at roughly \$175 million annually. He thinks it's worth it. "Do I have to tell you how much one day of a war costs?"

He doesn't blame Palestinians for failing to expand their own water resources.

"Their hands are tied. Israel still says that unless a peace treaty is signed to include water issues, we control the West Bank." Even in areas controlled by the Palestinian Authority, its water authority can develop resources only with Israel's consent.

As for improving the quality of water they have, Adar said Palestinians "do almost nothing."

"It's a very delicate issue, and we have to reach an agreement on how to co-operate and manage and develop this cross-border common water issue."

"Water won't cause Mideast war: Israeli prof', 08/09/2012, online at: http://www.cjnews.com/index.php?q=node/93753



Water politics rising to top of global agenda

WORLD VIEW: THE POLITICS of water will loom large in international affairs this century.

This is emerging under the influence of climate change, unequal access to water between richer and poorer peoples, intensifying agricultural and industrial use and transboundary conflicts.

Looking at world politics through the lens of water provides many insights on these issues.

According to statistics provided for the annual World Water Week conference in Stockholm last month, 97 per cent of the Earth's supply is salt water and, of the remaining 3 per cent, some 70 per cent is frozen in the polar icecaps.

The other 30 per cent is mostly present as soil moisture or stored in underground aquifers, so less than 1 per cent of the world's fresh water is readily accessible for direct human use. This is clearly a precious resource, essential to life and capable of being wasted or used creatively to improve the human condition.

At present 70 per cent is used in agriculture, 20 per cent in industry and 10 per cent domestically.

The impact of human-induced climate change and global warming is evident from statistics showing that the number of great inland flood catastrophes was twice as large per decade between 1996 and 2005 as between 1950 and 1980, and economic losses were five times as great.

Almost two billion people were affected by natural disasters in the last decade of the 20th century, 86 per cent of them by floods and droughts. By 2030, 47 per cent of the world's population will be living in areas of water stress. The number of climate refugees could reach 330 million this century if current warming trends are not reversed.

That these would be overwhelmingly poorer people emphasises the effects of inequality and power relations on access to the world's water. A child born in the developed world consumes 30 to 50 times more water than one in the developing world.



Other figures show one billion of the world's seven billion people suffer from hunger, another one billion are underfed, while in the richer world 1.5 billion are overweight and up to one-third of the food and water is wasted.

Poorer people are far less responsible for climate change than those in the richer world, yet have to bear most of the consequences.

This inequality gives rise to the demand for climate justice articulated by the Mary Robinson Foundation based in Dublin and devoted to that cause.

One of its basic calls is that the "benefits and burdens associated with climate change and its resolution must be fairly allocated. This involves acceptance of common but differentiated responsibilities and respective capabilities in relation to reduction of greenhouse gas emissions.

Those who have most responsibility for greenhouse gas emissions and most capacity to act must cut emissions first."

Intensifying agricultural and industrial use of water is also a serious issue. In key parts of India, China, north Africa and the US, groundwater is being pumped out of the aquifers to produce crops faster than it can be replenished. Deeper extraction only delays the end of those resources.

This also affects the global hydrologic cycle, in that so much water is being drawn from below ground that it is estimated to be adding about 25 per cent of the world's annual sea level rise through evaporation and precipitation. The eventual exhaustion of this water source will affect billions of people, most of them poor, unless current trends are reversed.

It is also worth noting that 10 times more water is used to produce meat than cereals. So the aspiration to generalise the rich world's diet to everyone and feed an additional three billion people by 2050 would require an extraordinary three times as much of the present global water use in irrigation. That seems unattainable – and unsustainable.

A US national intelligence estimate on global water security, released last March, teases out some of the geopolitical issues for US foreign policy in five major findings highly relevant for the rest of the world as well.



Over the next 10 years, water problems will contribute to instability in states important to US security, it finds. Water shortages, poor water quality and floods, by themselves, are unlikely to result in state failure, but when combined with poverty, the results could be social tensions, environmental degradation, ineffectual leadership and weak political institutions.

Water-related state-on-state conflict is unlikely during the next 10 years, but the depletion of groundwater in some agricultural areas will pose a risk to national and global food markets.

Water shortages and pollution probably will harm the economic performance of important trading partners, especially those relying on hydrolic energy.

India-Pakistan-Bangladesh, Israel-Palestine, Egypt-Ethiopia and China-Indochina are but some of the regions most prone to water-based transboundary conflict.

The report is nevertheless confident that improved water management (pricing, allocations and "virtual water" trade) and investments in agriculture, power, and water treatment will afford the best solutions for water problems.

Technology can certainly supply alternatives, but can it overcome the many obstacles thrown up by short-term profitability in time to avoid ecological disaster?

"Water politics rising to top of global agenda", 08/09/2012, online at: http://www.irishtimes.com/newspaper/opinion/2012/0908/1224323739308.html



❖ No food without water

The FINANCIAL -- Agriculture consumes the most water worldwide: the theme of this year's World Water Week in Stockholm was "Water and Food Security".

Discussions centered on the question of how agricultural production can be increased by 40 to 50 per cent over the next 30 years in order to provide food security for a growing global population - even though there is not more water available. As KfW reported, at the conference some 1,500 experts from development policy organisations and from the policy, scientific and civic communities sat together to work on this issue.

The laureate of the Stockholm Water Prize, the International Water Management Institute IWMI, put it succinctly by saying "agriculture is thirsty". Colin Chartres from IWMI underscored that the water requirements in agriculture will double if developments continue at their current pace. Therefore use of the scarce resource water must be optimised and generating additional need should be avoided as far as possible.

KfW Entwicklungbank offered some practical examples to illustrate that this is indeed possible at a much acclaimed event organised jointly with the German agency in charge of technical cooperation Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) and the Swedish development organisation SIDA. In Bolivia and Ecuador, for instance, it was possible to reduce water consumption in agriculture by applying modern technology. Yields could be increased by a factor of 0.4 with the same amount of water.

Using water effectively -- In Bolivia, for example, water is so scarce that a local smallholder often has to wait two weeks before he can water his field for half an hour. He irrigates his parcel of land and hopes that it will suffice for the next two weeks. Thanks to modern technology, development cooperation is helping to make effective use of water: small service reservoirs are set up to generate the necessary water pressure. Then simple pipes for sprinklers and drip irrigation ensure that less water seeps away or evaporates unproductively. In this way the plants can be sprinkled every other

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day and receive water when they really need it. As a result, the available water is put to optimal use and at the same time the people can earn more. Experts taking part in the discussions emphasised that in practice, many smallholders are willing to invest in modern irrigation technology as long as the results are satisfactory.

Preventing erosion -- In other parts of the world, too, innovative techniques are applied to increase agricultural yields in times of climate change and growing population pressure. For over 20 years German Development Cooperation has been helping countries in the Sahel Zone to make terraces and to collect and retain water in order to contain losses. Efforts involve building stone walls ranging in height between 20 and 40 centimeters. They help rainwater to percolate into the ground, causing the groundwater table to rise. Soil becomes more fertile. Often minimal investments of only EUR 80 - 150 per hectare are needed to increase yields by 40 per cent. In Stockholm the experts agreed on the positive effects of so-called 'water harvesting'. This method helps to minimise the risk of erosion and flooding, two problems affecting the region that are becoming increasingly serious due to climate change.

Yet the main challenge of feeding the world's steadily growing population while at the same time conserving the vital resource water cannot be solved in agriculture alone. In the interest of integrated management the water requirements for environmental protection, energy, water supply and sanitation and water for agriculture need to be based on integrated planning. In this connection the Stockholm Water Week brought the Nexus process for water, energy and food security back into discussion. This nexus, which was initiated in Bonn, Germany, explains how innovative technology and integrated planning can make a vital contribution to food security. Modern irrigation methods help ensure that the precious resource water is used sparingly.

"No food without water", 07/09/2012, online at:

http://finchannel.com/Main News/Banks/115566 No food without water/

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EU needs to help stem regional water conflicts

(Reuters) - European governments must wield their influence and engineering skills more effectively to prevent conflicts over water supply that could threaten global security, the European Union's policy chief Catherine Ashton said.

The EU has a strategic interest in ensuring stability in regions with some of the world's biggest water problems, including North Africa after the Arab Spring revolts and Central Asia which holds crucial energy reserves.

Ashton said the Nile basin was a particular concern.

"If managed well, the Nile holds the potential to catalyze regional integration and to help bring prosperity and stability to a vast area," she said in written responses received late on Friday to Reuters' questions.

"If handled poorly, each of the Nile countries could feel the negative consequences in their economic and social development."

Along the Nile, growing demand for water due to population growth, foreign investment and climate change pits Egypt's new government against upstream states such as South Sudan, Ethiopia and Rwanda, who are frustrated by what they see as Cairo's disproportionately large share of the river's water.

In central Asia, one of the world's driest places, poor Soviet-era planning has left countries heavily dependent on thirsty crops such as cotton and grain, leading to tensions over water use and dam construction.

Uzbek President Islam Karimov said on Friday a dispute over water resources risks provoking military conflict in the former Soviet region.

Ashton, who was hosting a meeting of EU foreign ministers in Cyprus where water security was discussed, said the bloc would offer its know-how in order to help calm tensions in the region.

"Central Asia's ... increasing demand on a limited, shared resource carries risks but also opportunities for cooperation in the entire region and we will continue our efforts to help the region in this direction," she said.

With the world population predicted to grow to more than 9 billion in 2050, from 7 billion, demand for food is expected to increase by 70 percent in the next four decades, United Nations forecasts show, putting unprecedented strain on water resources.



"Water shortages, poor water quality, droughts and floods are likely to affect many places ... over the next few years and this can lead to instability and insecurity, which could have a direct bearing on Europe," Ashton said.

Experts say the European Union could help water-starved countries in North Africa better manage their water usage, helping address criticism that Europe has not reacted effectively to challenges stemming from the Arab Spring.

"Where the EU may have a role to play is in the area of water sustainability, reuse of water waste," said William Lawrence, North Africa Project Director at the International Crisis Group.

"If downstream countries are using less water and using it better, then this can address upstream politics, which can be cantankerous."

"EU needs to help stem regional water conflicts", 08/09/2012, online at: http://www.reuters.com/article/2012/09/08/useu-water-ashton-idUSBRE8870FH20120908



❖ Egypt Made Military Contingency Plans to Attack Ethiopia Dam: Wikileaks

CAIRO, Egypt — The Egyptian government's contingency plan for how to handle Ethiopian dam construction along the Blue Nile included military action, according to newly released Wikileaks data from the Global Intelligence Files of Texas-based private intelligence firm Stratfor.

Wikileaks first began releasing data from the more than 5 million emails that make up the Global Intelligence Files on February 27, 2012, but this information regarding Egyptian concerns over upper riparian nations Nile River management plans was not released until August 29.

The leaked data include emails, dated 2010, alleged sources including the Egyptian Ambassador to Lebanon and high-level Egyptian diplomatic and security officials.

The sources say that Egypt's first priority is to resolve water-sharing issues with Ethiopia through diplomatic efforts.

Asked how Egypt plans to deal with Ethiopian dam construction, the ambassador said on May 24, 2010 that "Egypt is responding diplomatically. There is no other way except to seek the cooperation of the countries along the Nile Basin."

Just two days later, on May 26 the ambassador acknowledged that Sudanese President Umar al-Bashir had agreed to allow Egypt to construct a small airbase in Kusti that could be used as a launching point for Egyptian commandos to destroy Ethiopian water facilities on the Blue Nile.

On June 1, the security official said: "The only country that is not cooperating (with water talks) is Ethiopia. We are continuing to talk to them, using the diplomatic approach."

However, the source continued, "we are discussing military cooperation with Sudan. We have a strategic pact with the Sudanese since in any crisis over the Nile, Sudan gets hit first, then us. We can't afford that. The military cooperation we are discussing is for emergency planning, but I don't think it will come to that yet. There will not be a war.

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"If it comes to a crisis, we will send a jet to bomb the dam and come back in one day, simple as that. Or we can send our special forces in to block/sabotage the dam. But we aren't going for the military option now. This is just contingency planning," the security source added.

The Egyptian ambassador to Lebanon also spoke about Egypt's lack of desire to see a separated Sudan, saying on March 15, 2010 that the country would do its "utmost to prevent southern Sudan from declaring independence."

He said this was because southern Sudan was not ready for all the necessary actions required of statehood. However, by the end of July, the ambassador said that the Egyptian government would "prefer" a united Sudan but they were "beginning to realize" that the independence referendum would succeed.

He also said that South Sudan would need a good relationship with Egypt just as much as Egypt needed a good relationship with South Sudan, primarily because Egypt could help the new nation build its water infrastructure. And although Egypt had been slow to answer calls for help from South Sudan, the nation would make up for it.

"Egypt Made Military Contingency Plans to Attack Ethiopia Dam: Wikileaks", 05/09/2012, online at: http://www.ooskanews.com/daily-water-briefing/egypt-made-military-contingency-plans-attack-ethiopia-dam-wikileaks_24177



Egypt and Ethiopia change course on Nile Basin treaties

Amid continuing political drama in both Egypt and Ethiopia, the management of Africa's longest river might not seem an urgent priority. But every year that passes without meaningful cooperation between the Nile Basin's two most populous states narrows the room to find compromise over that most precious of finite and depleting resources: fresh water.

With the appointment of a new government in Egypt and the death of Ethiopia's long-serving prime minister, Meles Zenawi, the emergence of new leadership in both countries presents opportunity for renewed dialogue and cooperation on Nile waters.

In 2005, the former UN secretary general and Egyptian foreign minister Boutros Boutros Ghali famously predicted that a future military confrontation over water rights was nearly inevitable. In 2005, Egypt's population was 75 million people. There are some 83 million Egyptians today. Ethiopia's population has similarly increased - from 78 million to 85 million in the same period.

No war over water is imminently probable. Yet even the colonial legacy that gives Egypt the bulk of the Nile's flow, and in the absence of a new consensus determines the share of Nile waters - treaties signed in 1929 and 1959 are still in effect, even though the signatories did not even consult Ethiopia or other upstream states - is not enough to meet Egyptian demand.

One of the stated objectives of Egypt's ministry of water resources and irrigation is to "increase Egypt's share of Nile water", admittedly not unilaterally, but "through cooperation and coordination with the Nile Basin countries". In this respect, at least so far, water policy in the new Egypt appears little different from that of the Mubarak era.

But Egypt has to reckon with upstream nations with ambitions of their own. Chief among these is Ethiopia, a country today transformed from that which Zenawi inherited in 1991. Notwithstanding his domestic policies, Zenawi's most far-reaching legacy for the region may be the aggressive development of Ethiopia's hydroelectric resources.

In southern Ethiopia, construction of the \$2 billion (Dh7.3 billion) Gibe III dam on the Omo River is advancing. The dam is due to be completed next year, despite widespread concern over environmental effects that may jeopardise the livelihoods of half a million people and radically reduce the water levels in arid northern Kenya's most important lake, Turkana.

On the Blue Nile, which provides more than three quarters of the water that reaches Egypt, work has started on a project that dwarfs Gibe III. The Grand Ethiopian Renaissance Dam, about 40 kilometres from the border with Sudan, will create a reservoir of 65 billion cubic metres, about half the water volume of Lake Nasser, the reservoir of the Aswan High Dam in upper Egypt.

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And as far as Cairo is concerned, the complications extend beyond Ethiopia. In the same week that Mohammed Morsi became president of Egypt, newly independent South Sudan was formally admitted as the 10th member of the Nile Basin Initiative, a multilateral organisation comprising all upstream and downstream countries in the Nile Basin: Burundi, Democratic Republic of Congo, Egypt, Ethiopia, Kenya, Rwanda, Sudan, Tanzania and Uganda.

Historically, Sudan and Egypt have opposed moves by the other Nile Basin countries to amend the colonial treaties governing Nile water. Evidently, the 1959 treaty did not foresee an independent South Sudan, and the implications for Juba's share of Nile waters.

Like most post-secession issues between Sudan and South Sudan, the South's allocation of Nile waters is not agreed. Nor is Khartoum, like Cairo before it, likely to easily give ground to a state upstream. The acrimonious relationship between Juba and Khartoum is unlikely to help.

Whether Egypt likes it or not, Ethiopia will build its dams. And the united front once shared with Khartoum against the other upstream states is unavoidably changing, with South Sudan now pursuing its own interests and policies, and perhaps one day its own mega-hydroelectric projects.

Now is the time for pragmatism, and recognition that decades-old agreements are no longer fit for purpose. Egypt's new prime minister, Hisham Kandil, is familiar with the challenges. A career water engineer who briefly served as minister of irrigation and water resources from 2011-2012 and as technical delegate to Nile Basin Initiative consultations, Mr Kandil has spent years thinking about these issues. Among the competing priorities in post-Mubarak Egypt, tackling Nile politics can't indefinitely be postponed. The Nile is not just a river in Egypt.

"Egypt and Ethiopia change course on Nile Basin treaties", 05/09/2012, online at: http://www.thenational.ae/thenationalconversation/comment/egypt-and-ethiopia-change-course-on-nile-basin-treaties



❖ EU to Provide \$565 Million USD in Infrastructure Loans to Egypt Next Year

CAIRO, Egypt — Egypt will receive up to \$565 million USD in soft loans through the Egyptian European Partnership Program during 2013. The investments will focus on water, power and road infrastructure projects.

"The funding is distributed over several vital sectors essential for the rehabilitating of Egyptian infrastructure," Zawya quoted Ambassador Gamal Bayoumi, secretary general of the Egyptian European Partnership at the Ministry of International Cooperation, as saying on September 3.

It will involve restructuring the water and sewerage sector, building new roads, particularly the Cairo-Alexandria desert connection, and implementing new renewable energy projects in solar and wind power near the Red Sea, he added.

Egypt has also requested financial assistance from Gulf nations and the International Monetary Fund to help with reconstruction of the country, which has been in political turmoil for more than a year.

The Egyptian and European Partnership began in the mid-1970s when the cooperation agreement that defined bilateral relations between Egypt and the EU was concluded, according to Egypt State Information Services.

Meanwhile, Egypt and the United States are close to reaching an agreement that will eliminate close to \$1 billion USD of Egypt's \$3.2 billion USD debt, according to US officials, who have been in Cairo for the past week hammering out the details.

The exact amount, along with the final agreement, is expected to be reached before the end of September, according to a report in The Washington Post.

"The United States is working to help relieve Egypt of part of its immediate fiscal and balance-of-payments pressure in support of the Egyptian government's own, home-grown reform plan," Undersecretary of State Robert D. Hormats said in a speech at the American Chamber of Commerce in Egypt last week after he met with Egyptian officials.



The US government has also offered Egypt two loans -- one for \$250 million USD to support small and medium-sized businesses, and the other for \$219 million USD for additional small business investments, according to Hormats.

These funds will come from previously allocated aid for Egypt and Afghanistan that have not yet be spent.

"EU to Provide \$565 Million USD in Infrastructure Loans to Egypt Next Year", 04/09/2012, online at: http://www.ooskanews.com/daily-water-briefing/eu-provide-565-million-usd-infrastructure-loans-egypt-next-year_24170



❖ Egyptian Contracting Company Wins \$37.7 Million USD Pipeline Contract in Abu Dhabi

CAIRO, Egypt — The Egyptian Contracting Company (Mokhtar Ibrahim) won a \$37.7 million USD water pipeline project in Abu Dhabi, company officials announced last week.

The contract is for construction of a 900-millimeter-diameter water pipeline to connect water from al Falah region to the Bani Yas region.

"By winning this contract the company has managed to overcome the difficult economic circumstances in the domestic market," Egyptian Contracting Company said in a statement.

It beat out 13 companies from India, China, Spain, and Austria for the project.

With the market in Egypt uncertain due to political instability, the company is looking to Arab markets outside the country to make up for the decline in its revenues.

Egyptian government allocations for infrastructure projects have declined by 50 percent in the past financial year.

The Egyptian Contracting Company is focused particularly on the Gulf region.

To facilitate this, the company recently opened branches in Qatar, Kuwait and Iraq.

Officials entered into negotiations with government agencies and investors in Kuwait to implement major infrastructure projects there in the near future.

The company has landed a number of contracts in the United Arab Emirates in the past few years, mostly in the desalination and wastewater sectors.

It also has \$1.2 billion USD worth of investments in Oman, Qatar and Saudi Arabia.

The company won a \$52 million USD contract last October to extend the main water lines and build additional water tanker filling stations in Oman's Eastern Province.

"Egyptian Contracting Company Wins \$37.7 Million USD Pipeline Contract in Abu Dhabi", 04/09/2012, online at: https://mail.google.com/mail/#inbox/1399723d75d3eb50



❖ Nile Basin at a Turning Point as Political Changes Roil Balance of Power and Competing Demands Proliferate

In 1979, Egyptian President Anwar Sadat <u>famously said</u> that "the only matter that could take Egypt to war again is water." Sadat's message was clear: the Nile is a matter of national security for Egypt.

Indeed, Egypt relies on the Nile for <u>95 percent of its water</u>. But it is not the only state with an interest in the world's longest river. There are 11 states in the Nile River basin, which stretches from Africa's Great Lakes region – Tanzania, Uganda, Kenya, Rwanda, Burundi, and the Democratic Republic of the Congo – to the Ethiopian and Eritrean highlands through South Sudan, Sudan, and Egypt to the Mediterranean Sea.

Each of these 11 countries has a different plan for the river, from Ethiopia's hydropower aspirations to Egypt's cotton farming. And competition for Nile water is not limited to the countries of the basin, as states like <u>India</u> and <u>Saudi Arabia</u> have recently turned to large-scale land and agricultural investments in Ethiopia, South Sudan, and other East African countries to help feed their growing populations. Agriculture requires irrigation, and they will be vying for water rights too.

The situation is further complicated by recent political instability. Two long-time giants in the basin are no longer in power: Egyptian President <u>Hosni Mubarak resigned</u> after 30 years in power following protests in 2011, and Ethiopian Prime Minister <u>Meles Zenawi died</u> August 20, after 17 years in office.

The Arab Spring has made it unclear if Egypt is willing or able to enforce its long-held dominance of the region. Further downstream, the Great Lakes region is notoriously prone to conflict; Sudan and South Sudan are still clashing over a number of issues not settled by the 2005 Comprehensive Peace Agreement or the South's subsequent secession; Ethiopia and Eritrea remain on edge since the formal end of their war in 2000; and Kenya, Burundi, the DRC, and Rwanda have had recent questionable elections and remain volatile.

Despite their differences, the Nile River basin countries have one thing in common: rapid growth, both economically and demographically, which is increasing demand for water across the board and lends urgency to negotiations for a common sharing agreement.

New Challenges to Historic Dominance



At the root of the current dynamic are agreements signed by Egypt with former colonial power Great Britain in 1929, and Sudan in 1959, which gave Egypt the lion's share of the Nile as well as the power to veto any upstream projects which might threaten its access to water. Egypt claims these treaties give them the legal right to halt construction on projects like the Grand Renaissance Dam, a massive project recently begun in Ethiopia that would provide electricity to Ethiopia and surrounding states but also reduce downstream flow significantly.

However, as is the case elsewhere in Africa, the fact that many of the basin countries were governed by colonial powers during that period complicates things.

Many upstream countries did not gain their independence until the 1960s and were therefore excluded from initial allocation discussions. They claim the treaties are colonial relics and are no longer binding to newly independent countries. Ethiopia has been <u>especially vocalin</u> its opposition; although it was independent at the signing of the 1959 treaty and the Blue Nile, which originates in Ethiopia, provides 85 percent of the Nile's water, they were not invited to negotiations.

The first modern attempt to come to a collective water sharing agreement was the <u>Nile Basin</u> <u>Initiative</u> (NBI), established in 1999. Although representatives of the then-nine member countries of the NBI met on a regular basis over the course of the next decade, negotiations <u>failed to progress</u>. Upstream countries had hoped to forge a new agreement which would give them more rights to Nile water than the 1959 agreement, but it soon became clear that Egypt had no intentions of yielding water to other riparian states, regardless of political situations when the first agreements were signed.

Relationships between NBI states deteriorated further in 2010 when Ethiopia, Rwanda, Uganda, Kenya, and Tanzania set off on their own and <u>signed a new water distribution agreement</u> to replace the 1959 treaty. The <u>Nile Cooperative Framework Agreement</u>, also known as the Entebbe Agreement, prevents countries from using the flow of the Nile in ways which would harm downstream states, a principle which aligns <u>with other trans-boundary river treaties</u>. But importantly, the new treaty removes Egypt's absolute veto power over upstream projects.

Unsurprisingly, the Entebbe Agreement has proven controversial, and Egypt, Sudan, and South Sudan – the downstream countries which benefit most from the colonial-era treaties – remain opposed to the new agreement.



The situation has been further complicated by the Arab Spring and Egyptian revolution. Burundi at first pledged not to sign the agreement at the urging of Hosni Mubarak, then-president of Egypt. But Burundi reneged on its promise just weeks after Mubarak was deposed in February of last year, gambling that Egypt's domestic problems would keep it from retaliating. Burundi was the sixth country to sign the agreement, and the latest so far. The DRC has remained neutral, and Eritrea, as a country in the watershed but not situated along the Nile or one of its tributaries, has only observer status in the NBI and is thus not eligible to sign.

The NBI continues to meet and carry out standard functions – for example during a meeting in July, South Sudan was admitted as a new state, Ethiopian engineer <u>Teferra Beyene Asfaw</u> was appointed executive director, and a <u>new five year plan</u> was approved – but little progress has been made towards a comprehensive agreement acceptable to all basin states.

Growing Demand, On the Continent and Abroad

The importance of the Nile's waters – and Egypt's potential loss of hydrological veto power – is heightened by increased demand in the region.

Many of the Nile basin countries are experiencing rapid population growth; every country except Egypt has a <u>total fertility rate</u> (TFR) above 4.5 children per women. Ethiopia's TFR of 4.6 is at the low end, while the Democratic Republic of the Congo tops the list at 6.1. Egypt is not growing as <u>quickly</u> as other riparian states, with a total fertility rate of 2.9, but scarcity is already a problem. In 2009, Egyptians had access to<u>only 860 cubic meters</u> per capita, well below the <u>UN threshold for</u> water scarcity of 1,000 cubic meters, and protests over chronic water shortages have been reported.

Overall, the population of Nile Basin Initiative countries is projected to more than double over the next 40 years, from 429 million in 2012 to 945 million people. In other words, over the course of the next four decades more people will be born into the region than currently live there now.

<u>Growing</u> populations require more water, but so does growing affluence. While there is huge potential for development in the basin, lack of access to water and energy limit growth for upstream countries. For example, <u>the World Bank reports</u> that Ethiopia has experienced remarkable economic development over the past decade, with annual GDP growth rates reaching 11 percent, but last year, <u>high food and fuel prices</u> contributed to a decreased growth rate of around seven percent,



leading to <u>public protests</u> over inflationary prices. Similarly, neighboring Uganda has recently experienced overall GDP growth rates of around seven percent, but <u>rapid population growth</u> means that this has translated to only around a four percent growth in GDP per capita.

Energy production is an essential component of continued development, and another point of contention between upstream and downstream states. Egypt has <u>natural gas</u> resources and Sudan and South Sudan have oil (although <u>disputes over the ownership of key fields</u> and <u>transportation out of the country</u> make it difficult to access at the moment), but upstream countries have far fewer energy options.

Uganda has sought to remedy this by building a hydropower station that only temporarily diverts the river and allows all water to continue downstream. The <u>Bujagali Hydropower Project</u>, located on the White Nile near Lake Victoria, generates 250 megawatts of power. After full energy production began in June, William Groth of Bujagali Energy Limited noted the improvement over previous diesel-powered generators: "The energy we produce here with water is three times cheaper than what came from those generators, and it is cleaner, too," he <u>told</u> *AllAfrica*.

Ethiopia, on the other hand, is building more aggressively. It began construction of the <u>Grand Renaissance Dam</u>, formerly known as the Grand Millennium Dam, on the Blue Nile in 2011. The massive project will produce 5,250 megawatts of energy – 21 times the production of Bujagali. It will also have a greater impact on the Nile. While the magnitude of the reduction of flow will depend on how quickly Ethiopia fills the dam, Egyptian officials are certain there will be severe consequences for their country. (Although Nile flow will be constant once the dam is filled, downstream countries will receive less water while the reservoir is filling.) A <u>United Arab Emirates-based paper</u> cites a former Egyptian water minister as saying that "the problems could range from bad to devastating."

Upstream, past Aswan High Dam, whose completion was a crucial moment in it's own industrialization, Egypt also faces self-imposed water management issues. The government is encouraging <u>increased cotton production</u>, even though the crop demands a great deal of water for successful cultivation. While some areas have become adept at implementing new irrigation techniques to make the most of their allocation, others are less judicious in their use. As a result, much of Egypt's water is <u>lost to evaporation</u> and runoff. A key point of evaporation is Lake Nasser, formed after the completion of the Aswan High Dam in 1971. Various estimates put water loss from



the reservoir at <u>16 percent of Egypt's annual allocation</u>, <u>10 to 16 cubic kilometers per year</u>, or enough water to irrigate an <u>additional two million kilometers of farmland</u>

Agricultural demand is not limited to the countries in the Nile River basin. According to a report from the Worldwatch Institute, 16.8 million hectares in East Africa have been sold or leased to foreign companies since 2000 – and most was sold recently, after the 2008 food crisis. Some of the largest buyers in the region are corporations from Saudi Arabia, India, the United States, and the United Arab Emirates. Opponents to these large-scale acquisitions point to the toll they will take on the region's water resources. Water-intensive crops like rice mean that locals – many of whom face food security issues of their own (famine is perennially a challenge in Ethiopia and Sudan) – lose not only the yields from those fields, but also the water used to grow them.

Although there are mounting concerns about the <u>ethics and fairness</u> of these deals, <u>fears of another food crisis</u>, stoked by record drought in the United States this summer and lower yields elsewhere around the world, make it unlikely that arable land will become any less valuable on the global market. Soon, the Nile may help support much more than just the region's population.

Prospects for a Future Agreement

Despite political upheaval and the proliferation of competing interests along the basin, water is a powerful force for cooperation – there has, after all, never been a violent conflict over water on the Nile, and water as a sole source of conflict is exceedingly rare in general, according to research by Aaron Wolf.

And there has been recent progress. Mohamed Morsi, newly-elected president of Egypt, <u>traveled to Addis Ababa</u> on July 16 for an African Union Commission meeting where he discussed a future African common market. While Morsi <u>only briefly mentioned the Nile</u>, his very presence in Ethiopia was a positive sign for reconciliation between the key basin countries. The trip reverses former President Hosni Mubarak's policy of refraining from traveling to meeting with African states which he enacted following an <u>assassination attempt</u> in 1995.

Morsi also appointed Water Minister Hisham Qandil to be the new prime minister. While there has been some concern over Qandil's relative youth and lack of political experience, he has worked on



Nile issues extensively both with the NBI and the <u>African Development Bank</u>. This appointment <u>may</u> further signalMorsi's dedication to finding a mutually acceptable agreement to share Nile waters.

Meles Zenawi gave an interview following the signing of the Entebbe Agreement in 2010 <u>in which</u> <u>he said</u>, "some people in Egypt have old-fashioned ideas based on the assumption that the Nile water belongs to Egypt." But, "the circumstances have changed and changed forever."

Zenawi likely did not foresee the events of the Arab Spring or the overwhelming vote for South Sudanese independence within the next year, but his words ring even truer today. Indeed, Zenawi's death in August may be a catalyst for change in the region. During the long, speculative period of his illness, an anonymous Egyptian water official said that a regime change in Ethiopia might make it easier to come to an agreement over water-sharing. "While this can in no way be official policy at this point, I believe that there would be more maneuvering with a new leadership in Ethiopia because there would be the ability to communicate and not be seen as antagonistic," he told Egyptian newspaper Bikya Masr.

The region has been irrevocably altered by political and demographic change as well as accelerating development. These changes present new challenges, but perhaps they will also breathe new life into negotiations.

Photo Credit: "Cairo sunset," courtesy of flickr user wili_hybrid (Ville Miettinen). Nile satellite image captured from Flash Earth. Grand Millennium Dam render, courtesy of GrandMillenniumDam.net.

Sources: African Sociological Review, Afro News, Ahram Online, Al Jazeera, AllAfrica, BBC, American University in Cairo, Bikya Masr, Bloomberg, Bujagali Hydropower Project, Egypt Independent, Food and Agriculture Organization, Edward Goldsmith, GRAIN, Grand Millennium Dam, International Food Policy Research Institute, International Institute for Justice and Development, International Rivers, International Water Law Project, Nile Basin Initiative, Reuters, The Guardian, The National, UN Population Projections, UN Economic Commission for Europe, UN Department of Economic and Social Affairs, USAID, Voice of America, World Bank, World Watch Institute, Yale Environment 360

"Nile Basin at a Turning Point as Political Changes Roil Balance of Power and Competing Demands Proliferate", 04/09/2012, online at: http://www.newsecuritybeat.org/2012/09/nile-basin-turning-point-egyptian-revolution-roils-balance-power-competing-demands-proliferate/

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❖ USD1.3 billion for water and sanitation projects in Egypt until 2013

The newly formed Egyptian ministry of utilities, drinking water and sewerage will spend USD 1.35 billion on drinking water and sewerage projects up to June of 2013, a senior official told Zawya. Mohey el-Sairafi, the spokesman for the new ministry, said that according to the ministry's budget for the current financial year ending June 2013, USD 900 million has been allocated to the National Authority for Drinking Water, which will take over implementation of water and sewerage projects and complete existing projects.

The allocation for the Holding Company for Water and Waste Water, responsible for financial and administrative supervision over more than 20 companies, is USD 125 million in the new budget, he said.

"USD1.3 billion for water and sanitation projects in Egypt until 2013", 05/09/2012, online at:

http://www.zawya.com/story/USD13 billion for water and sanitation projects in Egypt until 2013
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Lifeblood of the world is running dry

Wars of the future are likely to be fought over water as climate change, the needs of growing populations, and the greed of politicians collide, writes Dan Buckley

HERE'S the scenario: Terrorists have hatched a devious plan to extort money from a South American government by cutting off the country's access to fresh water.

Sounds familiar? It should do, at least if you are a James Bond fan. That is the main plot of the 2008 film Quantum of Solace, starring Daniel Craig.

Fiction or fact? It may be both.

According to extensive research by US intelligence agencies, the next bout of regional wars is more likely to be about water than about oil. Drought, floods, and a lack of fresh water are set to cause significant global instability and conflict in the coming decades, as developing countries with growing populations struggle to meet demand while dealing with the effects of climate change.

A joint assessment by US federal intelligence agencies says that while the risk of water wars in the next 10 years is minimal, tensions within and between states threaten to disrupt national and global food markets.

Beyond 2022, the use of water as a weapon of war or a tool of terrorism will become more likely, particularly in the Middle East, North Africa, and southern Asia.

The report is based on a national intelligence estimate on water security, ordered by US secretary of state Hillary Clinton. It says floods and scarce or poor quality water, combined with poverty, social tension, and weak governments, will contribute to global instability.

As nations respond to growing populations with an increased focus on water-related projects, vulnerable dams, irrigation projects, and reservoirs could become targets for terrorists or military strikes.



"We judge that, as water shortages become more acute beyond the next 10 years, water in shared basins will increasingly be used as leverage; the use of water as a weapon or to further terrorist objectives also will become more likely beyond 10 years," says the report.

"These threats are real and they do raise serious national security concerns," said Clinton of the findings.

The UN estimates that almost 800m people worldwide already lack access to safe drinking water. UN studies project that 30 nations will be water-scarce by 2025, up from 20 in 1990. Eighteen of them are in the Middle East and North Africa, including Egypt, Israel, Somalia, Libya, and Yemen.

By 2030, 47% of the world's population will be living in areas with scarce water resources, according to the Organisation for Economic Co-operation and Development's Environmental Outlook to 2030 report.

Traditional wisdom has it that the only documented "water war" happened 4,500 years ago, when the city states of Lagash and Umma went to war in the Tigris-Euphrates basin.

But Adel Darwish, a journalist and co-author of Water Wars: Coming Conflicts in the Middle East, says modern history has already seen at least two water wars.

Senegal and Mauritania fought a war starting in 1989 over grazing rights on the River Senegal, while Syria and Iraq have fought over the Euphrates River.

The Middle East is particularly vulnerable. According to Alexander Bell, author of Peak Water, the water factor is sometimes ignored in considering the source of the ongoing dispute between Israel and its Arab neighbours.

"There are familiar reasons why Tel Aviv took the Golan Heights in 1967 and occupied Gaza and the West Bank," he says, "but the water factor is often overlooked. The promise of citrus groves and

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running water in Tel Aviv taps was explicit from the beginning of the Zionist state."

Writing in the New Statesman, Bell says: "To provide enough water so that Israelis could enjoy a comfortable modern lifestyle was beyond the capacity of the aquifers and rainfall within its original borders. The underground aquifer in the West Bank and the headwaters of the River Jordan in the Golan ensured that life in Jerusalem could be sufficiently resourced. Now the Israeli leadership can never give up this access to, and control of, water — which means it will never give up the land."

In other words, it's not about oil; it's not even about land. It's about water.

Darwish agrees with that view. "I have [former Israeli prime minister] Ariel Sharon speaking on record saying the reason for going to war [against Arab armies] in 1967 was for water," he told the Arab news organisation Al-Jazeera.

Both men's reflections are suppo-rted, at least in part, by studies conducted by Tony Allan, finance professor at the School of Oriental and African Studies at the University of London and a leading expert on global water politics. He estimates that there are 17m people living in the Jordan Basin — which has sustainable water supplies for barely 1m.

The UN thinks that Yemen will become the first nation to run out of water, possibly as soon as 2015. Annual global water requirement will be 40% more than current sustainable supplies by 2030, according to a 2009 report by the 2030 Water Resources Group, a government and commercial collaboration sponsored by the World Bank. In northern India, overuse of groundwater may limit access to food and water for millions, while China will also face strains because of its rapid development, population growth, and over-reliance on the Himalayas for fresh water.

SUPPLYING and controlling water has been central to civilisation since its beginnings in southern Iraq in the fourth millennium BC, say Bell.

"Irrigation transformed farming into a less risky, more productive pursuit which, in turn, fed a population boom and the growth of cities. The very first legal codes, including those of the early



Hindu tradition, were based on the assumption that a king would protect water supplies and, in return, the people would obey him. This promise is also set out in Roman law. From the pharaohs and the Nile to Joseph Stalin and the Aral Sea, nations and their leaders have been entranced by the notion that water could deliver some kind of paradise."

That makes the pithy comment attributed to Mark Twain all the more prophetic. "Whiskey is for drinking; water is for fighting over" attested to the fact that the future of the American West lay not in California's gold but in so-called blue gold — water.

"Lifeblood of the world is running dry", 05/09/2012, online at: http://www.irishexaminer.com/world/lifeblood-of-the-world-is-running-dry-206418.html



Tanzania: Lake Dispute Amicably Resolved

PRESIDENT Jakaya Kikwete has made it abundantly clear that Tanzania will not go into war with Malawi over the disputed Lake Nyasa border that apportions water rights to both nations.

The president told the nation at the weekend that continual negotiations between Tanzania and Malawi, which have all along been cordial and progressive, should be given ample chance to produce an amicable solution to the dispute. He cautioned against inflammatory statements that he said could ruin the ongoing negotiations, ignite an explosive situation and raise a stink that could prove difficult to reverse.

While Tanzania maintains that its border with Malawi traverses Lake Nyasa in the middle giving both countries territorial water, Malawi, which refers to the lake as Malawi, maintains that its border with Tanzania runs along the shoreline on the Tanzanian side. The exchange of verbal accusations and demands between Tanzanian and Malawian politicians in recent months has thrown citizens in both Tanzania and Malawi into a pandemonium, fearing that military combat could be on the horizon.

But the truth is that both countries never prepared for war. When Mr Kikwete met Malawian President Joyce Banda at a meeting in Maputo, Mozambique, recently, the two had amicable talks on the matter. In his address, President Kikwete ruled out the spectre of war with Malawi and called on everyone to concentrate on development projects.

He instead said that government leaders should now seize the lull in the skirmishes to sit down with their Malawian counterparts and look for an amicable solution to the problem -- which took root on July 1, 1890. It should be known that the problem was not caused by Malawi or Tanzania. It was caused by colonial masters (Britain and Germany) who drew the disputed border unilaterally and engaged in a bogus agreement known as The Treaty of Heligoland.

This highly controversial agreement, which was also known as the Anglo-Germany Heligoland Treaty, gave the entire lake to Malawi. But this unholy agreement, which the colonialists signed with glee, has been overtaken by time. It is completely obsolete. So, there is no logic in respecting decisions made by ruthless colonial masters whose hearts have never been close to Africa. Current



International Law stipulates that where there is a body of water between two countries the border should be located in the middle. "Tanzania: Lake Dispute Amicably Resolved", 03/09/2012, online at: http://allafrica.com/stories/201209031233.html?utm_source=Circle+of+Blue+WaterNews+%26+Alerts&utm_campaign= 58d955eecf-RSS_EMAIL_CAMPAIGN&utm_medium=email



❖ Germany, UK Could Be Drawn Into Tanzania-Malawi Border Dispute

Malawi, LILONGWE — The border dispute between Malawi and Tanzania over Lake Malawi may have to involve former colonial powers Great Britain and Germany, since these countries developed

the 1890 agreement on the national boundaries in the region, according to Malawian experts.

Officials from Tanzania and Malawi were unable to reach an agreement on ownership of the lake's

water during the latest round of negotiations, held in Mzuzu, Malawi in late August.

In an interview last week, Michael Lewis, a surveyor based in Lilongwe, said that if both parties

agree to take the case to the International Court of Justice the two European countries would be

drawn into the matter.

Lewis said there is a need for an independent arbitrator to look at the issue.

"Nigeria and Cameroon had the same problem," he said. "It was the International Court of Justice

that made the final decision that was eventually respected."

Great Britain ruled Malawi (then Nyasaland) and Germany was the colonial power in Tanzania (part

of then German East Africa) when the agreement was signed that designated the edge of Lake

Malawi on the Tanzanian side as the boundary between the two countries.

Last week, President of the Malawi Institute of Engineers Downs Theka was quoted by local press as

saying technical experts should be involved in the border talks.

He said surveyors from both countries should be able to study the 1890 map, which would help them

determine where the boundary is.

However, Minister of Foreign Affairs and International Cooperation Ephraim Mganda Chiume said

the surveyors general of both countries are already involved in the discussions, and the issue now is a

legal, not a technical one.

He said the matter will eventually be referred to the International Court of Justice, and Malawi will

respect the court's decision.



The next meeting between Malawi and Tanzania on the issue will take place in Dar Salaam, Tanzania this month.

The border dispute dates back to the 1960s, but analysts say the conflict has been heightened by oil exploration activities in the lake, which is also known as Lake Nyasa. Tanzanians who live along the lake use it for drinking water supply, as well as a source of livelihood.

"Germany, UK Could Be Drawn Into Tanzania-Malawi Border Dispute", 05/09/2012, online at: http://www.ooskanews.com/daily-water-briefing/germany-uk-could-be-drawn-tanzania-malawi-border-dispute 24172



❖ Kazakh President Calls for Water Saving Due to "Fearful Deficit"

ASTANA, Kazakhstan — Kazakh President Nursultan Nazarbayev on September 3 urged the country to focus on water saving because "there is a fearful deficit of drinking water in Kazakhstan." He also called for increasing water rates to curb consumption.

"Energy and water saving is simmering on the back burner. We talk a lot about it, we give examples. It is impossible to consume water in such a way," the president warned in a speech to Kazakhstan's Parliament.

"The entire world is faced with this problem and we will be faced by this problem very soon. We will witness very strange events regarding this issue throughout the world."

He said it was necessary to improve water storage, as the country is not doing a good job of saving water now.

"There is a fearful deficit of drinking water in Kazakhstan. It is necessary to revise tariffs and explain that a rise in tariffs will not be a burden in the case of a frugal water use," he added.

Nazarbayev told the Kazakhgovernment to intensify work in this direction.

Parliament member Andrei Begeneyev of the National Democratic Party Nur Otan commented following Nazarbayev's speech: "We need to preserve our water and treat it as our national property. The most important thing is that we really need to move forward."

Kazakhstan is a downstream country, nearly half of whose water resources come from other countries, including China, Kyrgyzstan, Russia, Tajikistan and Uzbekistan.

The country's renewable water resources are at 6,000 cubic meters per capita per year, according to US Central Intelligence Agency statistics. Freshwater withdrawal in Kazakhstan is 2,360 cubic meters per capita per year.



Earlier this year, Environmental Protection Minister Nurlan Kapparov told the Kazakh Parliament that Kazakhstan already had a water deficit of more than 20 percent, which puts at risk water supply for the population, industry and agriculture.

These shortages are due in part to the fact that the country's climate is warming faster than the global average, and glaciers feeding the rivers that run through the country's territory are melting rapidly.

In March, Nazarbayev called water security a "burning issue" for Kazakhstan, particularly considering its water allocation from trans-boundary rivers it shares with China and Russia.

"Kazakh President Calls for Water Saving Due to "Fearful Deficit""05/09/2012, online at: http://www.ooskanews.com/daily-water-briefing/kazakh-president-calls-water-saving-due-fearful-deficit_24181



South Korea Lends Uzbekistan \$80 Million USD for Drinking Water Supply

TASHKENT, Uzbekistan — South Korea will provide Uzbekistan with an \$80 million USD loan before the end of the year to improve drinking water supply in three provinces of the country, according to the communal services agency Uzkommunhizmat.

South Korean Finance Minister Bahk Jae-wan and his Uzbek counterpart, Rustam Azimov signed a preliminary agreement in Tashkent on August 31, under which South Korea will provide Uzbekistan with the funding for 10 water supply improvement projects in the Central Asian country.

The money will come from the South Korean Economic Development Cooperation Fund (EDCF), a state-run fund used to assist developing countries by providing low-interest, long-term (10-30 years) loans.

The total cost of the projects is about \$100 million USD; the Uzbek government will provide the remaining \$20 million USD.

The drinking water project covers construction and modernization of 516.4 kilometers of water supply networks in six villages in Namangan province in the east of the country, three inhabited localities in the southeastern Surkhandarya province and in Samarkand province in the central part of the country.

Uzbekistan plans to build water intake facilities with a total capacity of 2,550 cubic meters per day and 4,435 kilometers of water pipelines between now and 2015, Uzkommunhizmat said earlier this year.

The government expects to spend \$2.76 billion USD from the national budget and international financial institutions on water supply and wastewater projects by 2020, with \$1.98 billion USD going toward water supply projects and \$780 million USD to be used for modernization and development of wastewater networks.



The goal is to provide 98 percent of the urban population and 85 percent of the rural population with access to centralized water supply systems by 2020. Currently, one-third of the country's water supply pipelines need to be rehabilitated or replaced.

Uzbekistan's renewable water resources total 72.2 billion cubic meters every year, and total freshwater withdrawal is at 58.3 billion cubic meters per year. Only 5 percent of the water consumed in the country is used for domestic consumption, according to U.S. Central Intelligence Agency statistics.

"South Korea Lends Uzbekistan \$80 Million USD for Drinking Water Supply", 04/09/2012, online at: http://www.ooskanews.com/daily-water-briefing/south-korea-lends-uzbekistan-80-million-usd-drinking-water-supply 24154



Chinese City Plans Construction of 28 Lakes

XI'AN (China Daily) — An ambitious project to build 28 lakes and a supporting system of waterways will be implemented by the government of Xi'an, capital of Shaanxi province, in an effort to better the city's environment and living conditions. According to the Xi'an water bureau, the project aims to protect, renovate, upgrade and build five water-diversion projects, seven wetlands and 10 river systems which will support the establishment of 28 man-made lakes. "To provide a lush and fresh environment for the city, the project, with an investment of more than 10 billion yuan (\$1.58) billion), will be completed in the following 10 years," said Yang Li, director of the water bureau. Construction on 13 of the 28 lakes, covering a total area of 30 square kilometers, has been completed, while the remaining 15 lakes will be built in the coming five to 10 years. The city of Xi'an suffers from a severe water shortage. The per capita share of water resources is only one-third that of the province and one-sixth that of China. The city used to have rich water resources, with eight nearby rivers and a number of lakes, when it was the capital of the Tang Dynasty (AD 618-907). About 2.1 to 2.4 billion cubic meters of water flows from Qinling Mountains, a large mountain range located south of the city every year, while the city's total water demand is less than 600 million cu m, said Wang Gushi, director of the planning and technology section of the Xi'an water bureau. "The city's water shortage is not due to lack of water resources but improper water use," Wang said. The city will fill the 28 lakes using three different methods including water saving, recycled water, and rain water collection, according to Wang.

Chinese City Plans Construction of 28 Lakes", 05/09/2012, online at: http://www.ooskanews.com/daily-water-briefing/chinese-city-plans-construction-28-lakes_24184



Morgan Stanley Invests in China Hydropower

HONG KONG (Bloomberg Businessweek) — Morgan Stanley (MS) and a pair of private equity funds boosted their investment in Zhaoheng Hydropower Holdings Ltd., buying a \$150 million USD stake as China pushes utilities to adopt non-fossil fuel sources of energy. The Morgan Stanley Infrastructure Fund, FountainVest Partners Co. and Olympus Capital Holdings Asia, made the investment last month, according to a press release issued today. Zhaoheng Hydropower plans to use the funds to acquire hydropower plants and boost its operating capacity to more than one gigawatt over the next two years, from more than 650 megawatts now, according to the statement. China, the world's biggest energy consumer, is pushing utilities to increase generation from alternative sources as it seeks to curb reliance on coal and oil. The country aims to get 15 percent of its energy from nonfossil fuels by 2020, and has a target to cut carbon emissions per unit of gross domestic product by as much as 45 percent by the end of the decade. The three firms also invested \$150 million USD in Zhaoheng Hydropower in December 2010, according to the statement. Zhaoheng Hydropower was the first investment in China by the Morgan Stanley Infrastructure Fund, James Chern, a Hong Kongbased executive director at the fund, said in a phone interview. The fund manages \$4 billion USD which it raised in 2007, he said. China's dams produced 21 percent of the nation's total electricity last month, compared with 16 percent a year earlier, data from the China Electricity Council show.

"Morgan Stanley Invests in China Hydropower", 05/09/2012, online at: http://www.ooskanews.com/daily-water-briefing/morgan-stanley-invests-china-hydropower 24193



China Scientist Calls Mega Water Transfers "Essential"

BEIJING, China — Water transfers like the giant North-South Water Transfer project are essential for China to cope with the uneven distribution of water resources in the country and to deal with droughts, according to Xia Jun, president of the International Water Resources Association and head of the Chinese Academy of Sciences' Water Resources Center.

"Unlike many European countries, China's rainfall is not equally distributed," Xia told China Dialogue in an interview last week. "China needs to figure out how to save the excess water of the flood season and use it in the dry season. In the recent droughts in the southwest, we saw just how lacking drinking water infrastructure is in some places. And even if the infrastructure catches up, there's still a need to be able to transfer water during a drought. So the ability to move water around is essential, to distribute the water more evenly. Of course you need to work in coordination, to balance the ecological impact."

Water cannot be stored or transferred without dams and reservoirs, he added.

He noted that although China ranks high globally in terms of overall water resources, it ranks much lower on a per capita basis.

"China lies in the monsoon zone, and most of its precipitation comes during flood season -- it is very unevenly distributed both geographically and over time. This leads to differences across regions, and you often have floods in the south while the north suffers drought," he explained.

The north and northeast of China produce two-thirds of its grain, but lack water. And climate change is worsening these problems, he said.

Currently, thousands of people in central and southwest China are facing drinking water shortages because of insufficient rainfall and high temperatures. Crops are withering in the fields in central China, and government officials have been urged to store water from the rains expected during the current flood season; the water will be channeled to drought-hit areas or reservoirs.



Xia also touched on the issue of hydropower development, which he said was complicated by disorganization.

"China's potential for hydropower development is among the highest in the world," Xia said, "and current exploitation rates are not high -- much less than in the US, Russia or Brazil. But China has a problem with disorderly development. The power authorities are developing hydropower, while the water authorities are managing the river basins -- there's a lack of coordination, a lack of a system to harmonize and link the two."

What is needed is a system "that would allow hydropower development but prevent rivers drying up," he said.

"That means a comprehensive management system, covering water usage as well as compensation mechanisms at the system level and overall management strategies."

Chinese Officials announced back in June that the central route of the South-to-North Water Diversion project was "going into high gear" and would be finished next year, two years ahead of its original deadline.

The middle route will divert water from the Danjiangkou Dam in Hubei to Beijing.

"China Scientist Calls Mega Water Transfers "Essential"", 04/09/2012, online at: http://www.ooskanews.com/daily-water-briefing/china-scientist-calls-mega-water-transfers-essential 24153



China, Laos to strengthen security cooperation on Mekong River

BEIJING, Sept. 5 (Xinhua) -- Chinese and Lao security officials on Wednesday agreed to strengthen security cooperation on the Mekong River to combat transnational crime, according to China's Ministry of Public Security.

Chinese State Councilor and Minister of Public Security Meng Jianzhu held talks with visiting Lao Minister of Public Security Thongbanh Sengaphone on promoting bilateral security cooperation.

Meng thanked Laos for assisting China in recent cases, saying the two sides have established a comprehensive and cooperative security relationship.

The two countries should continue to enhance law enforcement and security cooperation on the Mekong, promote exchanges between law enforcement personnel and deepen pragmatic cooperation in various areas in order to create a stable and peaceful environment for the region's economic development and people's livelihood, Meng said.

Bilateral cooperation can be implemented in conducting border management, curbing illegal immigration, combating drug trafficking, fighting human trafficking, investigating cases and repatriating criminal suspects, among others, according to Meng.

Thongbanh Sengaphone said Laos is willing to continue to provide firm support for China in security cooperation and combating transnational crime.

The two sides signed relevant cooperation documents after their talks, according to China's Ministry of Public Security.

"China, Laos to strengthen security cooperation on Mekong River", 05/09/2012, online at: http://news.xinhuanet.com/english/china/2012-09/05/c_131830208.htm



Largest hydropower station on Mekong River starts operation

PU'ER, Yunnan, Sept. 6 (Xinhua) -- The largest hydropower station on Lancang River in southwest China's Yunnan Province -- known as the Mekong River in southeast Asia -- went into operation Thursday with its first power generating unit up and running.

The Nuozhadu hydroelectric station, located in the city of Pu'er, is China's 4th largest of its kind. It will be installed with nine same-size generating units with a total capacity of 5.85 gigawatts.

All the units will be put into operation by 2014, thus enabling the station to generate 23.9 billion kwh of electricity on average each year.

By churning out clean energy, the station will help save 9.6 million tonnes of standard coal and reduce carbon dioxide emissions by 18.8 million tonnes each year.

The dam of the Nuozhadu station is 261.5 meters high, the highest in Asia and the world's third highest.

As one of the seven planned hydropower projects on Lancang River inside China, the station will increase the electricity supply and optimize the energy mix and also help flood control and water use downstream, said Yunnan governor Li Jiheng.

The Lancang River, or Mekong River, rises on the Qinghai-Tibet Plateau and flows through China, Myanmar, Laos, Thailand, Cambodia and Vietnam before spilling into the <u>South China Sea</u>.

The river's China section has an estimated 32 gigawatts of exploitable water power resources as it flows through high mountains and valleys, with a huge drop in height at some points.

During the hydropower development, China has paid great attention to the protection of the river valley ecosystem and environment as well as water allocation along the river valley.

In recent years, many contractors and research institutes have conducted investigations with overseas counterparts on the impacts of hydropower development on downstream regions.



The research results showed that the water flow in the river's China section accounted for only 13.5 percent of the river's total, making the country's hydropower development have little impact downstream.

"First, the water flow inside China has a small share of the whole river valley; Secondly, hydropower generation doesn't consume water," said Ma Hongqi, an academician of the Chinese Academy of Engineering. "So the hydropower development on the upper reaches has very limited impact on the water flow downstream."

Meanwhile, the dam stores water during the flood season and releases it during the dry season, which could help ease both flooding and drought in the countries downstream, Ma said.

Huaneng Lancang River Hydropower Co., Ltd., which runs the hydropower station, has also made efforts to protect the ecosystem and the fish in the river.

Wang Yongxiang, chairman of Huaneng Lancang River Hydropower, said the company has set up botanical gardens of rare plants and animal saving stations and also has taken measures to ensure zero emissions at the hydropower project.

"Largest hydropower station on Mekong River starts operation", 06/09/2012, online at: http://news.xinhuanet.com/english/china/2012-

09/06/c_131832819.htm?utm_source=Circle+of+Blue+WaterNews+%26+Alerts&utm_campaign=0568c43064-RSS_EMAIL_CAMPAIGN&utm_medium=email



❖ President stresses water resources at APEC event

VLADIVOSTOK — President Truong Tan Sang has called for businesses to demonstrate greater social responsibility and technical innovation towards water, which has become a "scarce strategic resource."

Speaking at the 2012 APEC business summit in Russian city Vladivostok yesterday, the President stressed the need for a comprehensive approach to the sustainable exploitation, use and management of water resources around the world.

Sang mooted an APEC dialogue mechanism on water resources, warning that they can impact not only on economic development, but also on the security environment of a country.

As co-chair for the discussion on water, the President hailed the contributions by businesses who have been investing in research and development to conserve water resources.

He urged the businesses to promote their social responsibility, help raise public awareness and invest in transferable technology to effectively manage water resources.

On the same day, President Sang visited the National Nevexki Maritime University, delivering a speech at the Viet Nam-Russia business talks.

In front of more than 200 firms at the Viet Nam-Russia business forum, Sang highlighted the two countries' great potential for co-operation, saying that Viet Nam is interested in the implementation of Russia's Far East development strategy by 2025.

"Viet Nam is considering Russia's proposal to establish joint ventures in the production and processing of agriculture, seafood, furniture and apparel. The country always pays special attention and gives priority to the development of full co-operation with Russia," Sang added.

Later, the president hosted a banquet for leaders of major regional groups and reaffirmed Viet Nam's determination to strongly implement its economic structuring and growth model.

Participants highly valued Viet Nam's efforts in maintaining macro-economic stability, curbing inflation and implementing international integration.

China sideline meeting

President Sang and Chinese Party General Secretary and State President Hu Jintao met yesterday on the sidelines of the 20th APEC forum.

At the meeting, the two leaders said the Viet Nam-China friendship has been a valuable treasure for both peoples, and that the two sides should be responsible for inheriting, maintaining and promoting the ties.



Sang said that strengthening and consolidating the Viet Nam-China friendship has been a consistent, long-term and strategic policy of the Vietnamese Party and State.

For his part, Hu said the Party, State and people of China attach great importance to the friendship with their Vietnamese counterparts.

Both leaders agreed on major plans to promote the two countries' future relations, including regular meetings between the two countries' high-ranking leaders, economic cooperation, strengthening of the people-to-people exchange and close co-ordination at regional and international forums.

Regarding issues at sea, the two sides should be persistent in solving the East Sea issue satisfactorily through negotiations and dialogues, while not letting the issue negatively impact the stable development of their bilateral relations.

Sang highlighted that while solving the East Sea issue, both sides needed to implement an agreement on fundamental principles to solve all disputes and arising issues through peaceful negotiations. The settlement must be based on international law, especially the 1982 United Nations Convention on the Law of the Sea and the Declaration on the Conduct of Parties in the East Sea (DOC), working towards the Code of Conduct in the East Sea (COC). —VNS

"President stresses water resources at APEC event", 08/09/2012, online at: http://vietnamnews.vnagency.com.vn/politics-laws/229835/president-stresses-water-resources-at-apec-event.html



China to spend massively on farmland improvement

BEIJING, Sept. 6 (Xinhua) -- The government will spend 37.36 billion yuan(about 5.93 billion U.S. dollars) to improve the quality of farmland this year, the Ministry of Finance said Thursday.

The fund, which is a part of the country's comprehensive agricultural development plan, includes 21.92 billion yuan from the central budget and 12.05 billion yuan from local budgets, the ministry said.

The government plans to improve the quality of 15.47 million mu (1.03 million hectares) of mediumand low-yield land and build 13.31 million mu of high-quality farmland by the end of 2012, said the ministry.

The government will also support improvements for 45 water-saving projects in medium-sized irrigation districts, said the ministry.

The projects will add or improve irrigation on 25.82 million mu of land, aiming to increase agricultural production capacity, it said.

"China to spend massively on farmland improvement", 6/09/2012, online at: <a href="http://news.xinhuanet.com/english/china/2012-09/06/c_131832501.htm?utm_source=Circle+of+Blue+WaterNews+%26+Alerts&utm_campaign=0568c43064-RSS_EMAIL_CAMPAIGN&utm_medium=email



Action needed to prevent food price catastrophe-UN

ROME, Sept 4 (Reuters) - World leaders must take swift, coordinated action to ensure that food price shocks do not turn into a catastrophe that could hurt tens of millions of people in coming months, the United Nations' food agencies said in a statement on Tuesday.

Global alarm over the potential for a food crisis of the kind seen in 2007/08 has escalated as drought in the U.S. Midwest has sent grain prices to record highs, fuelling a 6 percent surge in the U.N. Food and Agriculture Organisation's (FAO) July food price index.

FAO said in a joint statement with the World Food Programme (WFP) and the International Fund for Agricultural Development (IFAD) that swift international action could prevent a renewed food crisis.

It said leaders must tackle both the immediate issue of high food prices, as well as the long-term issue of how food is produced and consumed at a time of rising population, demand and climate change.

Senior G20 officials held a conference call last week on rising food prices, but leaders will wait for September's crop report from the U.S. Department of Agriculture before deciding whether to take join action on the issue, France's farm minister said on Aug. 28.

"Action needed to prevent food price catastrophe-UN", 04/09/2012, online at: <a href="http://www.trust.org/alertnet/news/action-needed-to-prevent-food-price-catastrophe-un/?utm_source=Circle+of+Blue+WaterNews+%26+Alerts&utm_campaign=d2e39e57ee-RSS_EMAIL_CAMPAIGN&utm_medium=email



Network of small dams is the answer

AS hurdles being created by vested interests who exploit almost every irrigation and hydel generation project for the sake of political considerations, Punjab is focusing more on construction of small dams that offer solution to the growing water shortage. According to Provincial Minister for Agriculture Malik Ahmad Ali Aulakh, 52 small dams have been completed in Potohar alone making irrigation water available for thousands of acres of land.

In Potohar area, two third of the total annual rain precipitates during July, August and September, while the remaining nine months are nearly dry and get only one-third of rainfall. Average yearly run-off in the area is 1.88 MAF, out of which only a fraction has so far been tapped through construction of small dams. Same is true of other rain-fed areas of the country where either no dams have been initiated or those built have not the capacity to store the available water. There is, therefore, need for other provinces to follow the footsteps of Punjab to fully store and utilize the rain water for irrigation and other purposes. We are sure that by doing so we can significantly increase the agriculture production. In fact, we believe, small dams are the answer to the water scarcity being faced by the country as we have politicized major dams. Unfortunately, Kalabagh dam has been abandoned unilaterally and whimsically by the present government while no worthwhile progress has been made towards construction of Diamer-Bhasha and other dams on which so-called consensus is there. This is criminal negligence and we are allowing substantial quantities of water to drain out to sea whereas different parts of the country face drought-like conditions. This myopic approach needs to be shunned and concrete planning and execution put in place to utilize every drop of available water.

"Network of small dams is the answer", 09/09/2012, online at: http://pakobserver.net/detailnews.asp?id=172655



❖ Report Forecasts Cambodian Hydro Dams Havoc

PHNOM PENH, Cambodia — A new report casts doubt on the sustainability of some planned Cambodian hydropower dams. The report -- produced by the 3S Rivers Protection Network and International Rivers and released last week -- assesses "actors" with a stake in hydropower development working in the Sesan, Srepok, and Sekong (3S) River Basin.

It gauges the threat that the rush to exploit the area's water resources poses to the environment and local people.

"For too long, hydropower developers and their proponents have remained unaccountable to the region's environment and people in the 3S River Basin. Feasibility studies are inadequate; information about the dams and energy plans is lacking, and affected communities are often completely absent from the planning processes or decisions being made," said Meach Mean, coordinator of the 3S Rivers Protection Network.

"It's time to learn the valuable lessons from past mistakes before it's too late," Mean said.

Over 20 hydropower dams have already been built on the 3S rivers, and 26 more are planned. The report documents some of the thorniest projects, such as the Lower Sesan 2 Dam, planned on one of the last free-flowing stretches of the 3S rivers in Cambodia.

The Lower Sesan 2 Dam -- at the convergence of the Sesan and Srepok rivers -- "threatens to unleash large-scale environmental damage and set back development efforts in the region," a statement issued by the two river watchdogs said.

Experts warn that the dam will mean the disappearance of 9.3 percent of the Mekong River Basin's fish biomass, it said.

Between 6 and 8 percent of the basin's sediment flows will be blocked. All this "havoc" will mean lost income and disrupted food security for local fisheries and farmers.

"The Lower Sesan 2 Dam is a perfect example of a project that should not be built, as it's potentially as environmentally and socially destructive as many of the proposed mainstream dams on the Mekong River," said Ame Trandem, Southeast Asia Program Director for International Rivers.

The 3S River Basin is a key tributary of the Mekong River. Straddling Vietnam, Cambodia and Laos, the basin supports some 3.5 million people. Many come from ethnic minorities and depend on the rivers' natural resources for survival.

The area is recognized for its biological importance, and over 20 percent of the basin is designated protected.



The report's full title is 3S Rivers Under Threat: Understanding New Threats and Challenges from Hydropower Development to Biodiversity and Community Rights in the 3S River Basin.

"Report Forecasts Cambodian Hydro Dams Havoc", 05/09/2012, online at: http://www.ooskanews.com/daily-water-briefing/report-forecasts-cambodian-hydro-dams-havoc_24173



❖ Coca-Cola to Sign Up to Water Futures Initiative

united states, WARRENTON, Virginia — The Coca-Cola Company is "keen" to become part of water-stewardship initiative Water Futures Initiative (WFI), according to reports.

Last week WFI was announced as a successor body to the Water Futures Partnership (WFP), a collaboration between brewing and beverage giant SABMiller, international environmental organization WWF and Germany's agency for international cooperation GIZ.

Greg Koch, director of global water stewardship for the Coca-Cola Company, was described by BusinessGreen and Ventures Africa as being "keen" to join the new initiative and was reported to be finalizing plans for four separate projects in Tanzania, South Africa, Kenya and Uganda based on WFP's collaborative model.

Koch was quoted as saying that the company was attracted to the so-called "golden triangle" concept, in which businesses, NGOs and governments collaborate to improve environmental conditions.

WFP's methodology is to recognize "shared" local water security risks -- to business operations, communities and the environment -- and bring stakeholders together at the local level. So far, it has projects in countries including South Africa, India, Peru, Tanzania and more recently in Zambia.

At World Water week in Stockholm, the WFP issued a new charter outlining expansion of its activities.

WFI will be supported by a secretariat and a new steering committee. The successor body aims to move into new watersheds and scale up activities in existing watersheds. The initiative is seeking to increase the number of corporate, civil society and donor partners, and aims to develop new funding mechanisms to support local implementation.

SABMiller, one of the founding WFP partners, is one of the biggest franchise bottlers and distributors of Coca-Cola outside of the United States, including in South Africa and Tanzania.

A decision on Coca-Cola's membership of WFI is said to be likely in early 2013.



Meantime Robin Farrington, senior policy adviser for international water policy and infrastructure at GIZ, has said that the German agency was looking to provide funding for the initiative to continue running for the next six years.

Farrington says the group is talking to six or seven companies about joining the partnership, up to four of which are on the verge of signing up.

The Stockholm seminar where WFP's evolution into WFI was announced included panel speakers from international mining giants Anglo-American and South African petrochemical group Sasol, as well as the Coca-Cola Company.

In May 2012, the Water Futures Partnership was recognized at the Guardian Sustainable Business Awards, winning in the best collaboration category.

"Coca-Cola to Sign Up to Water Futures Initiative", 04/09/2012, online at: http://www.ooskanews.com/daily-water-briefing/coca-cola-sign-water-futures-initiative_24169



❖ Nirosoft to set up \$100M desalination plant in Colombia

Ron Lauder's RWL Water subsidiary to set up graywater facility to aid country's oil industry

Ron Lauder's RWL Water subsidiary Nirosoft has been awarded a \$100 million contract to build a water desalination plant in Colombia.

The contract was signed between Nirosoft and Colombia's Pacific Rubiales Energy – the country's biggest oil exploration company.

Nirosoft will set up a greywater desalination facility especially suited to deal with the recycling of water used in crude production.

The company will also be in charge of the facility's maintenance for the next 10 years.

The facility will be set up at Puerto Gaitan and in expected to produce about 2,825 cubic feet of water every day, which will be used for agriculture.

Nirosoft CEO Avi Bonibay said that the facility will save Pacific Rubiales Energy considerable funds and will upgrade its environmental standards compliance.

Bonibay said that the project was preceded by a six-month pilot program, which reviewed various technologies in the field.

"Winning this contact vis-à-vis great overseas competition proves our company's determination in developing innovative solutions in the field," Bonibay noted.

RWL was founded by Lauder in 2010. It offers integrated waste management and conversion solutions.

"Nirosoft to set up \$100M desalination plant in Colombia – YNET", 03/09/2012, online at: http://mideastenvironment.apps01.yorku.ca/?p=5824



RSS, USAID conclude water initiative

Amman, Sept. 5 (Petra) -- The Royal Scientific Society (RSS) in cooperation with the Public Action for Water, Energy & Environment Project (PAP) – a USAID Project on Wednesday celebrated the closing ceremony of the "Increase Youth Public Discourse in Key Water Issues" Initiative.

The Initiative was launched in February 2012 and included a number of training workshops targeting youth aged 15-25 years from Jerash Governorate and led to forming the "Jerash Youth Commission for Water". The Commission has held several workshops and brainstorming sessions with Jerash housewives to build awareness regarding water scarcity in Jordan.

The Commission, in cooperation with the RSS' dedicated task force, Jerash Water Authority and the private sector represented by Yarmouk Water Company, managed to conduct water audits for 150 houses in Jerash, Sakeb, and Souf. The commission managed to successfully install 600 water saving devices, as the city has the lowest per capita share of water in the Kingdom.

Chief of Party for PAP, Robert Cardinalli said "the results of the program demonstrated that with limited financial resources, youth can play a significant role with regards to changing behavior to more efficient use of water resources. In particular, the establishment under the project of Jerash Youth Committee for Water signals the sustainability of similar efforts in the future." RSS Vice President for Testing, Quality and Technology Nabeel Al Fayoumi said the initiative is one of many RSS initiatives working to build sustainable development models. He also stressed that the society is planning to replicate this initiative in different governorates with the support of PAP-USAID and the Higher Council for Youth.

"RSS, USAID conclude water initiative", 05/09/2012, online at: ype=1">http://www.petra.gov.jo/Public News/Nws NewsDetails.aspx?Site Id=1&lang=2&NewsID=83007&CatID=13&Type=Home>ype=1



❖ Pesticides could cost sub-Saharan Africa \$90bn in illness bill, UN warns

Use of hazardous chemicals also on the rise in Asia, causing severe damage to both environment and health of people

The potential cost of pesticide-related illnesses in sub-Saharan African between 2005 and 2020 could reach \$90bn (£56bn), according to a UN report released on Wednesday highlighting the growing health and environmental hazards from chemicals.

It said the estimated cost of pesticide poisoning exceeds the total amount of international <u>aid</u> for basic health services for the region, excluding HIV/Aids.

The report by the UN environment programme (Unep) warned that the increasing production of chemicals, especially in emerging economies where there are weaker safeguards, is damaging the environment and increasing health costs. It urged governments to step up action and industry to meet a target set by the world's nations in 2002 to produce and use chemicals by 2020 in ways that minimise adverse effects on human health and the environment.

Rachel Massey of the Massachusetts Toxics Use Reduction Institute at the University of Massachusetts Lowell, one of the report's authors, told a news conference launching the report that chemical production is growing worldwide, but the growth is most rapid in emerging economies.

From 2012-2020, she said, chemical production in North America and Europe is expected to grow by about 25% compared with growth of about 50% in the Asia-Pacific region, about 40% in Africa and the Middle East, and about 33% in Latin America.

"Studies, projecting trends to 2050, forecast that global chemical sales will grow about 3% per year to 2050," the report said.

Unep said chemical output has grown to \$4.12tn (£2.5tn), compared with \$171bn (£107bn)in 1970. But of the more than 140,000 chemicals estimated to be on the market today, Unep said only a fraction have been thoroughly evaluated to determine their effects on health and the environment.

Massey said the report looked at benzene, a well-known carcinogen associated with leukemia and other diseases, whose use in Asia over the past two decades has multiplied manifold. It found that consumption of benzene grew 800% in China from 1990-2008 compared with 13% in North America, she said.

In richer countries, UNEP said, the data indicated that inorganic chemicals including amonia, hydrogen sulphide, sulphuric acid and hydrochloric acid are routinely among the air pollutants released in the highest quantities.

The <u>Global Chemicals Outlook</u> reported that poisonings from industrial and agricultural chemicals are among the top five leading causes of death worldwide, contributing to over 1 million deaths annually.



The report collected scientific, technical and socio-economic data for the first time on the global production, trade, use and disposal of chemicals, their health effects, and the economic implications.

UNEP's executive director Achim Steiner said the world is increasingly dependent on chemical products, from fertilisers and petrochemicals to electronics and plastics, for economic development but the gains that chemicals can provide must not come at the expense of human health and the environment.

"Pollution and disease related to the unsustainable use, production and disposal of chemicals can, in fact, hinder progress towards key development targets by affecting water supplies, food security, well-being or worker productivity," Steiner said.

"Pesticides could cost sub-Saharan Africa \$90bn in illness bill, UN warns", 06/09/2012, online at: <a href="http://www.guardian.co.uk/environment/2012/sep/06/pesticides-hazardous-chemicals-un?CMP=twt-fd&utm-source=Circle+of+Blue+WaterNews+%26+Alerts&utm-campaign=0568c43064-RSS_EMAIL_CAMPAIGN&utm_medium=email



❖ Destitute North Korea's grain harvest seen falling sharply

SEOUL, Sept 4 (Reuters) - Chronically hungry North Korea could lose as much as 13 percent of its grain harvest this year as a result of drought followed by widespread flooding, a South Korean official said on Tuesday.

The grim forecast follows a warning last week by an aide worker just back from a visit to the destitute North that it could be facing a return to famine which cost the lives of an estimated 1 million North Koreans in the 1990s.

"North Korea's food situation next year could be difficult," the South Korean official, who spoke on the condition of anonymity, told Reuters.

He estimated the crop loss at 600,000 tonnes in a country which even when in years of good harvest has to turn to the outside world for help to feed its population of 24 million.

The expected grain shortage coincides with the isolated North Korean government's promises to reform its broken economy and attempts to increase its contacts with the outside world, especially ally China which helps prop up its neighbour.

The United Nations estimates that the North needs around 5.3 million tonnes of grain a year and can normally produce 4.5 million tonnes. The predicted shortfall this year is equivalent to a 13 percent drop.

The head of Danish aid group Mission East told Reuters last week after a visit to affected areas the North could be heading back into famine.

Kim Hartzner said that after the heavy flooding, including from a typhoon in August, the North had little capacity to deal with any more damage

Seoul's bleak prediction comes after years of playing down North Korea's the condition of North Korea's food security by the conservative government of President Lee Myung-bak, which had at one point said Pyongyang may be exaggerating its aid needs.

The World Food Programme said it will conduct a full scale assessment of the North's food needs this month.

The typhoon sweeping across North Korea late August killed 48 and ravaged tens of thousands hectares of crops in the already flood-hit country suffering chronic food shortages, after heavy rains had swept through the impoverished state in late June and July.



State-run KCNA reported on Monday the powerful typhoon destroyed some 45,000 hectares of crops. That is equivalent to about 1.7 percent of North's arable land, according to World Bank data as of 2009.

A recent U.N. report classified 7.2 million of the 24 million population as "chronic poor" and said one in three children were stunted due to poor nutrition.

"Destitute North Korea's grain harvest seen falling sharply", 04/09/2012, online at: <a href="http://www.trust.org/alertnet/news/destitute-north-koreas-grain-harvest-seen-falling-sharply/?utm_source=Circle+of+Blue+WaterNews+%26+Alerts&utm_campaign=d2e39e57ee-RSS_EMAIL_CAMPAIGN&utm_medium=email



❖ First EU Citizens Initiative to Make Human Right to Water a Reality

BRUSSELS (New Europe Online) — An online petition has been launched to make the Human Right to water a European Citizens initiative call. As of 3 September following some hurdles the online petition is now effective and can be used following a slight delay due to formal procedures of the European Commission. Social media networks are being use to promote signing and the request on behalf of these citizens and also several organisations including Aqua Publica Europea, The European Anti Poverty Network, the European Environmental Bureau, the European Public Health Alliance, the European Federation of Public Service Unions, the European Trade Union Confederation, Public services International, and Women in Europe for a Common Future. "Europe does not have universal standards on water, absolutely not" says Chantal van den Bossche a spokesperson for Women in Europe for a Common Future speaking to New Europe, a partner organisation which supports this European Citizens Initiative for water sanitation as a human right. "In the European region, reaching out to the countries in the former Soviet Union and as defined by the World Health Organisation for example 20 million people still do not have access to clean water," Van den Bossche says. Within the European Union itself "In Romania and Bulgaria there are still pit latrines widely used," is one example Women in Europe for a Common Future used. The citizens' initiative right is set out in Article 11(4) of the Treaty on European Union and as yet the first successfully submitted procedure remains elusive.

"First EU Citizens Initiative to Make Human Right to Water a Reality", 04/09/2012, online at: http://www.ooskanews.com/daily-water-briefing/first-eu-citizens-initiative-make-human-right-water-reality_24166



Germany Urged to Ban Shale Gas Fracking Near Water Reservoirs

Germany is considering tighter regulation of a technique to unlock natural gas from impermeable rocks because of concerns it's harmful to the environment.

Chancellor <u>Angela Merkel</u>'s government should ban hydraulic fracturing, or fracking, near drinking water reservoirs and mineral springs and require developers to conduct environmental impact studies, according to a <u>report</u> commissioned by the German Environment Ministry.

"The study's results and recommendations are a major step forward in the discussion about fracking," Environment Minister Peter Altmaier said today in an e-mailed statement. "All concerns must be alleviated before fracking is used."

Companies including Exxon Mobil Corp. (XOM) have in the past drilled test wells into unconventional gas reservoirs in Germany in an attempt to emulate the U.S. shale gas boom. While a successful drilling campaign would redraw the energy map across Europe, a continent reliant on Russia for about a quarter of its gas, little headway has been made in Germany mainly because of public opposition on environmental grounds.

Fracking involves drilling hundreds of wells and cracking shale rocks with a high-pressure missile of water mixed with sand and chemicals, to unlock natural gas from the impermeable stone. The method has been used in Germany since the 1960s, with at least 275 fracks linked to conventional gas and oil wells in Lower Saxony, according to the study. Fracking was outlawed in France last year and the practice is also banned in Bulgaria.

No Moratorium

"It's good that no moratorium was proposed," said Ingo Kapp, a physicist at the GFZ German Research Center for Geosciences in Potsdam. "While Germany won't match <u>Poland</u>'s shale gas ambitions, a limited exploration that takes environmental concerns seriously will be possible."

Environmental assessment studies have already been carried out in some cases, and drilling near mineral springs was never an option anyway, he said.



Germany sits atop an estimated 8 trillion cubic feet of technically recoverable shale gas resources, according to the U.S. Energy Information Administration. While that's a low number compared with the 83 trillion cubic feet for Norway and 187 trillion cubic feet for Poland, the EIA said in a 2011 study that Germany has a large "additional, still undefined shale potential."

"Germany Urged to Ban Shale Gas Fracking Near Water Reservoirs", 06/09/2012, online at: <a href="http://www.bloomberg.com/news/2012-09-06/germany-urged-to-ban-shale-gas-fracking-near-water-reservoirs.html?utm_source=Circle+of+Blue+WaterNews+%26+Alerts&utm_campaign=0568c43064-RSS_EMAIL_CAMPAIGN&utm_medium=email