



ORSAM WATER BULLETIN

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





Issue 104

ORSAM WATER BULLETIN

26 November – 02 December 2012

- **❖** MP calls to invest rainwater
- * Rains rise water levels of Tigris River in Maysan
- Maysan recovers from water scarcity
- ❖ Baghdad Mayorship forms committee to address rainwater
- **Syrian rebels seize key dam on Euphrates**
- **❖** Rainbow trout aquaculture growing in Bekaa Valley
- **❖** World Bank Invests in Expanded Water and Sewage Services for Gaza
- **❖** Water-energy nexus to be focus of Israel's CLEANTECH 2013
- **❖** Israel to help Azerbaijan reconstruct plumbing
- Protecting environment takes care of the future'
- **❖** Water, land reclaiming project underway at IMI complex
- Zarqa Wastewater Network project launched
- **❖** Israel Strengthens Environmental Ties to Africa: Part 2
- **A Parched Jordan Places Hopes in Reservoir**
- ❖ Gaza Given Grant by World Bank to Improve Water, Sewage Services
- Ministers and International Organizations Participating in AFED Annual Conference on 29 November in Beirut
- ***** We are drinking our sewage
- **❖** "Women in Water" in Pakistan Shows the Way
- * Kalabagh dam be constructed with consensus of all provinces: Shahbaz
- Shamsul Mulk says Kalabagh Dam to benefit Sindh & KPK; says folds in KPK come due to Swat & Kabul rivers
- Delhi must check its greed for land and water
- **CM** justifies big dam construction
- **❖** Water board to fund rainwater project in city



- **❖** Laos has not violated Mekong pact: official
- ❖ Study reveals extent of Mekong dam food security threat
- **❖** Will China run out of water by 2030?
- **❖** Massive nomad settlement to protect "mother river"
- ❖ Haiti seeks \$2bn to fight cholera outbreak blamed on UN soldiers
- War over Nile River water between Egypt and Ethiopia?
- **❖** National Coalition on Climate Change for Egypt is born
- **❖** Mena water supply forecast to halve by 2050
- ❖ Saudi National Water to Spend \$38 Billion on Water: MEED
- **❖** MIDDLE EAST: Talking about climate change
- ❖ GHANA: \$125 million seawater desalination plant breaks ground
- **❖** Zimbabwe: Harare's Underground Water Under Threat
- **USAID Helps Rehabilitate Sana'a Schools**
- ***** Water security has improved when...
- **U.N.** climate talks start in Doha
- ❖ UN climate change talks begin in Doha with call to build on existing agreements
- ***** The Doha Climate Debate
- **❖** Why we should fear the Amazonian tipping point



MP calls to invest rainwater

Baghdad, 25 Nov. 2012 - The Agricultural and Water Parliamentary Committee demanded governmental authorities to make use of rainwater to compensate the shortage in water.

MP Jamal Bathekh member of the Parliamentary Committee stated to AIN on Sunday "The problem of water scarcity and being locked by neighbour countries has worsened since 2003."

MP Bathekh suggested two solutions for this crisis, the first solution is represented by "adopting the best investment methods for all kind of water, particularly rainwater, and to use the modern techniques for irrigation."

"The second is to activate the water supreme council to be in charge of communicating with neighbor countries in order to set the right solutions to address water scarcity," he added.

Rain fallings took place in Baghdad and many provinces and meteorological experts predicted that this winter season will witness increase in rain percentage in comparison with previous years.

"MP calls to invest rainwater", 25/11/2012, online at: http://www.iraqinews.com/features/mp-calls-to-invest-rainwater/



* Rains rise water levels of Tigris River in Maysan

Baghdad (IraqiNews.com) -Maysan Governor, Ali Lazim Dawai, reveled that "The recent rains in the province contributed in rising the water levels in Tigris River up to (75 CM)."

The media office of the governor quoted him as saying in statement received by IraqiNews.com "The water levels have raised till one meter according to the report of the water resources and this rise contributed in reducing water scarcity problem in Maysan province, especially in Ahmed Rufai area which suffers of major water scarcity problem."

"The water level of Tigris River reached an unexpected rate since many years and it came at acritical time sice it coincided with the first irrigation batch for farmers which is very necessary," he added. \

"Rains rise water levels of Tigris River in Maysan", 27/11/2012, online at: http://www.iraqinews.com/features/rains-rise-water-levels-of-tigris-river-in-maysan/



Maysan recovers from water scarcity

Baghdad (IraqiNews.com) -Maysan Governorate announced rising the water level of Tigris River from being 75 cm to one meter according to the reports of the Water Resources Department within the province.

Maysan Governor, Ali Dawai Lazim, mentioned "The recent rains witnessed by the province lead to raise the level of Tigris River's waters that contributed in ending the water scarcity in Maysan."

"Maysan recovers from water scarcity", 26/11/2012, online at: http://www.iraqinews.com/features/maysan-recovers-from-water-scarcity/



❖ Baghdad Mayorship forms committee to address rainwater

Baghdad (IraqiNews.com) -Baghdad Mayorship declared forming a committee to address the rains that fell in Baghdad and other provinces which were considered as the heaviest during the last ten years.

Baghdad Mayorship reported in statement received by IraqiNews.com on Monday "The formed committee will be headed by Baghdad Mayor Abdul Hussein al-Murshidi and includes the municipal and technical representatives of Baghdad Mayorship in addition to the General Director of Baghdad Sewage Department," noting that "The members of the committee followed the work of the services cadre and operating the main sewage stations."

"Hundreds of municipality vehicles work continuously to withdraw the rainwater from Baghdad streets and the Ministry of Electricity provided electricity power to operate the main sewage stations," he added.

"Baghdad Mayorship forms committee to address rainwater", 26/11/2012, online at: http://www.iraqinews.com/features/baghdad-mayorship-forms-committee-to-address-rainwater/



Syrian rebels seize key dam on Euphrates

Rebels have seized control of a strategic dam on the Euphrates river in northern Syria after days of

fierce fighting, activists and a watchdog said on Monday.

Videos posted on the Internet show about a dozen rebel fighters in military fatigues walking at night

on a road crossing the Tishreen dam, which straddles Aleppo and Raqa provinces, with others inside

a control room, as one man proclaims: "The Tishreen dam is under Free Syrian Army control."

The authenticity of the videos could not be confirmed but the Syrian Observatory for Human Rights,

which receives information from a network of activists and medics on the ground, confirmed the dam

had fallen to the rebels.

"Rebels have taken control of the Tishreen dam and surrounding buildings in Aleppo province after

fighters from several battalions stormed the area on Sunday," the Britain-based Observatory said.

The strategic advance came after several days of clashes and a siege of the dam by the insurgents,

with the military responding with air strikes, according to the watchdog.

In one of the videos, rebels are seen milling inside a room containing an enormous control board of

buttons and dials.

"Control room of the Tishreen dam," a man says from behind the camera. Outside the window, the

dam can be seen in daylight.

Two rebels casually rest their Kalashnikovs on the tiled floor and watch as a man in civilian clothing

works in front of five computer monitors. An older man in a wool sweater serves tea: "The

employees, the engineer," the cameraman says.

Opposition fighters had already seized control of one of the main routes to Raqa, with the Tishrin

dam giving them a second passage, while also connecting a wide expanse of territory between the

two provinces bordering Turkey.

www.ORSAM.org.TR



The Observatory also reported that Syrian troops on Monday pressed an assault on rebel strongholds in the northeastern outskirts of Damascus, killing a boy and girl from the same family in shelling attacks on the town of Irbin.

Elsewhere, fighting erupted along the ceasefire line of the Golan Heights, with two rebels killed in the villages of Al-Buraykah and Bir Ajam, both of which lie within the Syrian section of the demilitarized zone, the watchdog said.

The Israeli military earlier reported that gunfire on Sunday night from Syria hit the Israeli-occupied Golan Heights close to an Israeli military vehicle monitoring the ceasefire line but causing no injuries.

A military spokesperson said Israeli troops in the area had not returned fire as they have done on previous occasions.

Fears of a spillover of the conflict which has ravaged Syria for more than 20 months and left over 40,000 people dead, have widened as violence has spread to Syria's borders with Turkey, Lebanon, Jordan and Iraq.

"Syrian rebels seize key dam on Euphrates", 26/11/2012, online at: http://www.nowlebanon.com/NewsArchiveDetails.aspx?ID=460602



❖ Rainbow trout aquaculture growing in Bekaa Valley

HERMEL, Lebanon: While not native to Lebanon, or the region, freshwater rainbow trout can be found in abundance at the headwaters of the Orontes river, in the Bekaa Valley.

The Lebanese section of the river stretches some 25 km from its source, close to Hermel, to Lebanon's northeastern border with Syria, and it has become the top site in the country for raising the fatty fish, as the water there is deep and relatively clean.

The Orontes is the fastest flowing river in the country, with an average of around 660 cubed meters of water flowing every minute, and the temperature is also the most suitable for raising trout, ranging between 12 and 16 C. This unique water environment in <u>Lebanon</u> is ideal for the species, which only lives in flowing water that is deep and clean.

There are around 150 fish breeding farms along the Orontes basin, providing the only source of income to over 300 families and more than 1,000 jobs – from supervising the farms, raising the fish, transporting them to markets to distributing them to shops.

Annual production ranges from 1,000-1,500 tons, with the price of a ton at around \$4,000.

Agricultural engineer <u>Malek Nassereddine</u> says that fish breeding is the biggest agricultural sector in the area of Hermel, and that trout might in the future be the major product produced in the area, as the conditions there are so ideal for the fish, which would help boost the economy of this poor and underdeveloped area.

Native to North America, Europe and Asia, the eggs are imported to Lebanon by specialists, who hatch the eggs, and the farmers buy them as small fish and transport them to their farms, attached to the Orontes. It is consumed in Lebanon and surrounding countries, mainly Syria.

Nassereddine adds that trout is highly nutritious and is a healthy and cheap alternative to red meat, the price of which is increasing.

www.ORSAM.org.TR



One kilogram of red meat currently sells for about LL16,000 to LL20,000, while a kilogram of trout costs only about LL6,000.

Nutritionist Rola al-Fakih highlights the benefits of eating trout, which provides high levels of Omega-3 fatty acid, is good for the heart and blood vessels, lowers cholesterol and also helps protect against cancer.

Agricultural engineer Hussein Qanso, the director of <u>Al-Jawad Center</u> for Development and Agricultural Guidance in Hermel, says this sector is currently prospering because the species is easy to breed.

Trout farming also provides an opportunity to use the banks of the river, which cannot be cultivated for growing plants or crops due to the rocky nature of the ground there.

Qanso adds that trout can be sold throughout the year, unlike saltwater fish, supplies of which are affected by the weather as fishermen cannot go out on the seas during the winter.

However, Mohammad Tashm, who raises fish in one the farms off the Orontes river, says he and his colleagues are facing difficulties that are starting to impede the development of the sector.

"Individual initiatives make the difference in this sector, but those raising the fish have limited financial capabilities, and there is an absence of cooperative efforts," Tashm says.

This lack of coherent policy causes chaos in the sector, with farms being built without supervision, without meeting required standards or the scientific standards necessary for raising fish.

"Small farmers are being exploited by larger scale farmers and fodder merchants, with animal fodder being used to feed the fish, rather than normal fish food," the fish farmer adds.

"This practice jeopardizes the environment and poses a danger to the health of consumers."

Mohammad Mahfouz, the director of the <u>Office of Planning and Development</u> in Hermel, says the major problem facing fish farmers in the region is that most farms in the river's basin are small, with the annual income of its owner not exceeding \$5,000.



"Not enough funds are being provided for farmers to develop their farms and increase their productivity, forcing them to use cheap animal fodder to feed their fish," he says.

"This makes raising fish a burden on the farmers themselves, on the river's environment and on tourism in Hermel," Mahfouz adds.

There are many big cafes and restaurants scattered along the river banks, and as some fish farmers are known to dump excess fodder into the river, this leads to water pollution.

A small-scale farmer will have to make one of two choices: either sell his fish at the price decided upon by larger merchants, who buy the fish and distribute them at markets, or retain the fish at the farm in the hope that he can sell it at a better price, which is unlikely to happen, and will likely see him reduce his profit margin.

"In addition to this, the Lebanese consumer has a negative view of river fish, and prefers sea fish, thus the Lebanese market consumes only 30 percent of the total produce, while the rest is exported to Syria," Mahfouz says.

As there is no agreement governing the export of fresh water fish to Syria, the trout are actually smuggled across the border, tying farmers' business to the security situation along the border.

According to Mahfouz, the solution lies in opening an office to manage the resources of the Orontes River, oversee the process of raising fish, and monitor which type of fodder is being fed to the fish.

The office should also provide funding to the farmers, provide fodder, and help the farmers market their produce, he adds.

"Rainbow trout aquaculture growing in Bekaa Valley", 28/11/2012, online at: http://www.dailystar.com.lb/Culture/Lifestyle/2012/Nov-28/196324-rainbow-trout-aquaculture-growing-in-bekaa-valley.ashx#axzz2DWFLMBrn



❖ World Bank Invests in Expanded Water and Sewage Services for Gaza

A US\$6.4 million project will support the development of better water management systems

Washington, November 27, 2012 – A US\$6.4 million grant to improve and expand coverage of water and sewage services in Gaza was approved by the World Bank Group Board of Directors today. The Gaza Water Supply and Sewage Systems Improvement Project will finance the rehabilitation and expansion of existing water and wastewater systems and enhance the capacity to provide and maintain water and sewage services.

Gaza citizens depend heavily on underground resources for their water supply. Though the only significant available source, groundwater is over utilized and badly contaminated. The over-drafting of the sole aquifer is causing a decline of the groundwater table and a deterioration of water quality. Moreover, most sewage is returned to lagoons, wadis and the sea. The area is now choked with untreated sewage threatening Palestinian health and life, as well as remaining water resources and the environment.

"We are concerned about the lack of clean water supply and the deterioration in the quality of water resources in the Gaza Strip, one of the most densely populated areas on earth," said Mariam Sherman, World Bank Country Director for West Bank and Gaza. "The new project is very important to Gaza citizens. Not only will it increase the sustainability of water and sewage networks, but it will also allow the utility to better serve the needs of their customers."

The World Bank has had a longstanding focus on water and sanitation in its program for West Bank and Gaza and is stepping in now to help address the critical deterioration of the Gaza water system.

"As part of the Bank strategy for the West Bank and Gaza to support local institutions, the project will provide technical and operational assistance so that water and sewage services may be more efficiently managed," said Iyad Rammal, Senior World Bank Infrastructure Specialist.

The project will fund the construction of water tanks to collect and blend water from different sources in order improve the quality and efficiency of Gaza water supply and wastewater services. In addition, major well fields supplying the middle and southern governorates will be connected. The



project will also rehabilitate water distribution networks and water wells. Along with helping the utility improve water collection and reduce system losses, the project will also support more efficient billing and enhanced customer services. A strategic partnership with the Islamic Development Bank will allow a contribution of US\$11.14 million in parallel financing to the project.

"World Bank Invests in Expanded Water and Sewage Services for Gaza", 27/11/2012, online at: http://www.worldbank.org/en/news/2012/11/27/world-bank-invests-expanded-water-sewage-services-gaza



❖ Water-energy nexus to be focus of Israel's CLEANTECH 2013

TEL AVIV, ISRAEL, Nov. 27, 2012 -- Mashov Group, the organizer of CLEANTECH 2013 -- the 17th annual international event for Clean Technologies -- announced today the program for the international Water-Energy Nexus Symposium, to be held on Jan. 29, within the framework of CLEANTECH 2013, at the Israel Trade Fairs & Convention Center, Tel Aviv.

Prof. Avner Adin, President of CLEANTECH 2013: "One third of the energy of cities around the globe goes to <u>water</u> and <u>wastewater</u> services. Jointly, the growing shortage of water and energy presents the greatest threat -- and challenge -- to Humanity in the 21st century.

"Water plays a pivotal role in the green <u>environment</u>. The international water Symposium, focusing on the tight connection between water and energy, will emphasize their importance in technological and business aspects."

About CLEANTECH 2013

CLEANTECH 2013 - the 17th Annual International Summit and Exhibition for <u>Water Technologies</u>, Energy Efficiency, Renewable Energy, Recycling, Green Transportation and Green Building - will be held during January 29-30, at the Israel Trade Fairs & Convention Center, Tel Aviv. Some 20,000 attendees are expected to take part in the event, including missions from around the world.

The event is a well-recognized and esteemed international business arena for the Clean Technologies industry. It brings together a high quality audience from all around the globe - companies, authorities, researchers and professionals of the International CleanTech community - providing them with vital face-to-face networking, and excellent business opportunities.

"Water-energy nexus to be focus of Israel's CLEANTECH 2013", 27/11/2012, online at: http://www.waterworld.com/articles/2012/11/waterenergy-nexus-to-be-focus-of-cleantech-2013.html

BACK TO TOP



❖ Israel to help Azerbaijan reconstruct plumbing

by Peter Lyukimson, Israel. Exclusively for Vestnik Kavkaza

Alex Vizhnitser, chairman of the board of the National Water Company of Israel (Mekorot), and Shimon Ben-Hamo, the Director General of the company, have arrived in Baku to discuss plumbing reorganization in Azerbaijan.

The Azerbaijani water system has remained unchanged since the 1960s. Azerbaijan chose the Israeli company as one of the world's best in purifying, monitoring and transporting water in Europe and Asia.

Moreover, the two countries have good ties, allowing them to resolve any issues at minimal time.

Mekorot is expected to modernize the water system in Sheki and Ganja at the first stage. The two cities have water available only for 2-4 hours a day.

The Swiss government and KfW (German bank) offer €249 million for realization of the initiative.

"Israel to help Azerbaijan reconstruct plumbing", 27/11/2012, online at: http://vestnikkavkaza.net/news/economy/34209.html



'Protecting environment takes care of the future'

Environmental concerns will be a decisive issue in this January's upcoming election as the country looks forward to taking care of its future generations, Keren Kayemeth LeIsrael-Jewish National Fund Chairman Efi Stenzler told The Jerusalem Post on Monday.

"The environment is the most important thing for the next generation," Stenzler said, during an interview at his Jerusalem office. "And as long as the country becomes more developed, this issue becomes more important."

While many countries around the world still may not care about what happens to the environment – as occurred in the 1960s and '70s in Israel – this is certainly no longer the case in Israel, according to Stenzler.

Environmental protection takes care of the next generation and supports development efforts for the future, he said.

In order to contribute to both the protection and development efforts, KKLJNF has been active since 1901, developing forests and greenery all over Israel with the help of 45 JNF branches across the Jewish Diaspora, according to Stenzler.

One of KKL-JNF's newest projects that it is trying to push forward is the development of a canal from the Mediterranean Sea to the Dead Sea. As opposed to the path from the Red Sea to the Dead Sea, this route would contain flat land and would be ideal for a hydroelectric industry, ultimately supplying much-needed water to the Israeli and Jordanian Dead Sea regions as well, Stenzler explained.

"For this project we need all the Jewish people around the world," he said.

In the recent Operation Pillar of Defense, Stenzler said he was happy to see that the fruits of KKL-JNF work provided a shelter and oases to the soldiers on standby.

"The army stood in our places and in forests we planted years ago," he said, noting that the troops rested under shade as opposed to open space.

www.ORSAM.org.TR



While the organization has already developed many towns and recreation spots for Negev residents as well as for former Gush Katif evacuees, Stenzler stressed that his teams are trying to provide additional aid to those affected by the recent turbulence.

"After this operation our people are now going from one city to another city looking for what we can do to help create better places for these people," he said.

One such ongoing example is the Beersheba Park, which will soon contain Israel's second largest lake and will provide a recreational oasis for southern residents, according to Stenzler.

Meanwhile, KKL-JNF teams have planted trees all along the border of the Gaza Strip, in order to challenge the visibility of terrorists launching missiles and rockets to southern Israel, he explained.

"Now before Tu Bishvat we will increase those numbers of trees," he said.

"Protecting environment takes care of the future", Jerusalem Post, 27/11/2012, online at: http://mideastenvironment.apps01.yorku.ca/?p=6397



❖ Water, land reclaiming project underway at IMI complex

Experimental, NIS 11 million project to explore purification of lands, water in old Military Industry compound in central Israel ahead of its relocation, area's rezoning for residential projects

The Israel Land Administration will invest NIS 11 million (about \$2.83 million) in an experimental project to purify underground water running under the Israel Military Industry (IMI) complex in Ramat Hasharon, in central Israel.

The pilot project, promoted by the Defense and Finance ministries, the ILA and the Water Authority, will explore ways to reclaim the water, as part of the efforts to relocate the complex and reappropriate the area for residential building.

IMI's decades-long operations in the area are believed to have caused severe land and underground water pollution in the area.

Should the pilot prove successful, funds amounting to NIS 600 million (\$154.25 million) will be allocated to reclaim the land and underground water across the entire compound.

The project will be funded partially by the State and partially by the Defense Ministry. The final budget division will be decided by the Treasury by July 2014.

The government seeks to rezone the area for residential building of 23,000 housing units by 2020

"Water, land reclaiming project underway at IMI complex", 29/11/2012, online at: http://mideastenvironment.apps01.yorku.ca/?p=6428



Zarqa Wastewater Network project launched

AMMAN — US Ambassador Stuart Jones and Minister of Water and Irrigation Mahir Abul Samin on Thursday attended a ceremony to mark the beginning of construction work on the wastewater network project in Zarqa.

The US-based Millennium Challenge Corporation is funding the \$55 million project with supporting grants from the US government, according to a statement from the US embassy.

Once completed, the network will upgrade and expand the wastewater network in Zarqa Governorate through the construction of 170km of sanitation lines that will serve 4,200 households, the statement said.

Jones noted that in the last 10 years, the US has invested approximately \$537 million in the Kingdom's water sector with the aim of achieving greater water security, a healthier environment and more sustainable economic growth.

"Zarqa Wastewater Network project launched", Jordan Times, 29/11/2012, online at: http://mideastenvironment.apps01.yorku.ca/?p=6430



This past April, MASHAV, Israel's agency for international development cooperation, signed a memorandum of understanding with the United States Agency for International Development (USAID). The memorandum is aimed at addressing food security through partnerships with farmers in Uganda, Tanzania, Ethiopia and Rwanda. Israel will contribute expertise in irrigation, water technologies, agricultural production and climate change.

Israeli experts have experience with desertification and hostile, dry environments. The Negev Desert makes up around 60 percent of Israel's total landmass. Yet, since its establishment in 1948, Israel has managed to create a thriving agricultural economy. This experience could be particularly valuable in African countries with scarce water resources.

According to reports by Agri-pulse Communications, an American industry media group, Israel's agricultural sector annually contributes \$5 billion to the nation's GDP and exports over \$2 billion worth of fresh and processed products. The Israeli Ministry of Foreign Affairs estimates that Israel produces 93 percent of its domestic food requirements.

"We were a developing country and now we are a developed country," said Daniel Carmon, head of MASHAV. "We know how to do it."

Technological Innovation for Poverty Alleviation (TIPA) is one of MASHAV's primary programs in Africa. It helps small-scale farmers install water-saving irrigation systems. While MASHAV has similar programs in Benin, Kenya, Ethiopia and Niger, TIPA is devoted primarily to farmers in Senegal, where 75 percent of the population is involved with farming.

"We especially want to devote resources to women," said Carmon. In Sub-Saharan Africa women make up an estimated 70 to 80 percent of small-holder farmers. MASHAV is also implementing major, joint agricultural projects dealing with citrus in Ghana.

Over the past five years, MASHAV experienced what Carmon called a revolutionary change. "We used to have a menu of activities and trainings to choose from. Now we have demand-driven activity," said Carmon. "We shouldn't tell the developing world what they need. We need to listen. Now we ask what is needed first."



But MASHAV represents only a tiny fraction of Israel's annual \$14 million foreign assistance budget. Carmon stressed MASHAV's emphasis on developing Africa's human capacity.

"We don't bring money to the table. We don't bring high-tech where high-tech is not needed," he said. "Israelis share their experience, roll up their sleeves and work alongside the people on the ground." Over 100,000 African professionals have participated in MASHAV's training activities. In addition, private Israeli businessmen, such as Gilad Millo in Kenya, are spearheading entrepreneurial ventures in African agriculture and education.

Corporate Interests

Many skeptics believe that Israel's recent surge of diplomatic attention devoted to Africa has self-serving motivations. Among them is President of the New Israel Fund and former Deputy Speaker of the Knesset, Naomi Chazan. She also formerly served as a visiting scholar and lecturer for both the University of Ife in Nigeria and the University of Ghana.

Chazan described the recent developments as a mild shift. "The shift began when Avigdor Lieberman [Israel's Foreign Minister] visited Africa," she said. In 2010 and 2011 Israel enjoyed the fastest economic growth in the developed world. African markets were only marginally affected by the crisis in the west. Lucrative African markets have gained obvious appeal.

Chazan has been highly critical of private Israeli businesses operating in Africa, especially those involved in the purchasing and managing of natural resources, warning against the privatization of Israeli involvement in the region. Her writings also denounce the Ministry of Foreign Affairs, arguing that its Africa division is woefully understaffed. For example, the Embassy of Israel to Cote d'Ivoire is also responsible for relations with Liberia, Togo, Burkina Faso and Benin.

In 2011, Global Witness, an international NGO established to publicize links between natural resource exploitation, conflict, poverty and corruption, alleged that Zimbabwe's secret police, the Central Intelligence Organization (CIO), received clandestine financing from individuals linked to corporations owned by Israeli business moguls, including Lev Leviev, his brother, Moshe Hallak, and Eliezer Nefussy, an Israeli living in Namibia. Global Witness reports denounced recent purchases of vast natural resources, predominately diamonds and oil, in both Zimbabwe and the Democratic Republic of Congo.



National Interests

Israel's economic future depends on stability in Africa. The Horn of Africa – including Ethiopia, Kenya, both North and South Sudan – influences the shipping lanes to Eilat in southern Israel. Israel is the only country in the world land-linked to the African continent. "Events in North Africa obviously affect Israel," said Granot. In Febuary 2012, pollution from North Africa drifted towards the Jewish state and shut down Israeli airports for two weeks.

Africans are now also part of Israel's human landscape. Over the past two decades, Israel has absorbed over 120,000 immigrants from Ethiopia and at least 60,000 asylum-seekers, predominately from North Sudan and Eritrea.

"African crises are no longer happening far away," said Schler. "Israel can't afford to ignore problems in Africa."

According to Granot, both Mubarak and Gaddafi were obstacles to establishing deeper connections in Africa. Recent revolutions have created new opportunities. "We hope to <u>reestablish those</u> <u>ties</u> between Israel and African nations," said Granot.

There are currently over 1,000 university students in Israel taking courses in African studies, what Schler referred to as a revival.

"I'm also interested in what role Africa will play in Israel's future," said Schler.

"What can we learn from Africa?"

"Israel Strengthens Environmental Ties to Africa: Part 2", 27/11/2012, online at: http://www.greenprophet.com/2012/11/israel-strengthens-environmental-ties-to-africa-part-2/



❖ A Parched Jordan Places Hopes in Reservoir

AMMAN — Jordanians took to the streets this summer to protest water shortages and disruptions. Some demonstrators burned tires and blocked roads while others carried empty plastic gallons in the street symbolizing the scarcity of water in their homes.

<u>Jordan</u> is the world's fourth-poorest country in terms of water resources per capita, according to the World Bank. According to U.N. data, 80 percent of Jordanian territory is desert and only 5 percent of its land is considered arable.

In late summer, the government Water Authority had to hire guards to protect main water wells and infrastructure in remote regions against the theft of pumps and other parts.

"Every village and city in Jordan right now is only receiving water once a week," said Basem Telfah, secretary general of the Ministry of Water and Irrigation. "Some provinces are receiving water once every two or three weeks."

The water shortage took on an even more urgent aspect this week when the government announced that an anticipated long-term solution, a project that would have extracted 2.15 billion cubic meters, or nearly 570 billion gallons, of water from the Red Sea every year, was to be scaled back because of its high cost, estimated at more than \$14 billion.

Against that background, Jordan is betting heavily on a major pipeline, the Disi Water Conveyance Project, which is expected to start carrying water next year to the capital, Amman, from deep underground sources in southern Jordan, which the country shares with <u>Saudi Arabia</u>.

The largest infrastructure project yet undertaken in Jordan, the project will cost an estimated \$1.2 billion, according to the Disi project director, Bassam Saleh. But there is a serious drawback: Tests on some wells feeding the Disi pipeline have revealed high levels of radioactivity, raising public concern about the long-term health risks of drinking Disi water.

Government officials, scientists and water experts say they recognize the high levels of radioactivity in the water but they say that with proper treatment this should not pose a threat.



"We have to seriously study the degree of contamination and not lower it in our reports or standards or hide it," said Dureid Mahasneh, a former Jordan Valley authority chief.

Mr. Mahasneh said the radiation problem could be treated through a process called ion exchange or by dilution.

Radiation is present in the water in the form of radon, a radioactive, colorless gas, but dissipates when the water is exposed to air on the surface, said Bahjat Al Adwan, the head of the Jordanian Geologists Association.

The first controversy over the Disi project arose in 2009 when a research team of scientists from Jordan, the <u>Palestinian</u> territories, Israel and the United States published a report in the journal Environmental Science & Technology. The report showed high radioactivity in water from 37 wells, used mostly for agriculture, in the Disi area.

Scientists and academics in Amman responded by organizing public discussions on the Disi project. Despite that, several conspiracy theories started to circulate.

People propagating conspiracy theories "thought the Israelis and the Americans had deceived the Jordanians," Mr. Mahasneh said. Still, he said, "it is known in science that water of deep aquifers in such areas do have radiation.

"We don't like the results, but can we handle it? Yes."

Measured radiation levels varied from well to well: Water experts and scientists say that more accurate data could be collected once all the 55 wells planned to supply the pipeline have been completed. They also point to the need to measure radiation levels after treatment.

"The question should not be if there is high radiation or not, but if the water is treatable," said Elias Salameh, professor of hydrology and hydrochemistry at the University of Jordan in Amman. "We need to drink water and we have no alternative."

Most of the Disi aquifer lies under Saudi Arabia, which is already using water from it.



In Aqaba, on Jordan's Red Sea coast, people have also been drinking water from the Disi for almost 20 years, with no apparent increase in the number of cancers.

"There has been no significant record" of abnormal cancer rates, Mr. Mahasneh said. Still, he added, "I admit that we need to investigate it further."

Meanwhile, the need to find additional supplies of water continues to grow more acute.

Jordan receives fewer than 40 days of rain per year on average, according to Mr. Telfah. The Jordanian population is increasing 3. 5 percent a year — and in the past few months alone the population has ballooned with the arrival of hundreds of thousands of Syrian refugees.

The refugees are concentrated mostly in northern Jordan, where one camp alone holds more than 30,000.

The Disi pipeline was first proposed almost a decade ago but was long deemed too expensive. Construction finally began in 2007. Consumers will pay 95 U.S. cents to \$1.40 per cubic meter of water.

"As a water expert I am worried" by the radiation risk, Mr. Mahasneh said. "But Jordanians are worried about having water or not having water. To be or not to be."

"Ask everyone in the streets and they are saying, 'Thank God we will have water next year," he said.

"A Parched Jordan Places Hopes in Reservoir", 28/11/2012, online at: http://www.nytimes.com/2012/11/29/world/middleeast/a-parched-jordan-places-hopes-in-reservoir.html?_r=0



❖ Gaza Given Grant by World Bank to Improve Water, Sewage Services

The <u>Gaza Strip</u>, where a conflict between <u>Israel</u> and the Palestinian group Hamas left about 175 people dead this month, will receive a grant from the World Bank to help improve the region's water and sewage conditions.

The \$6.4 million World Bank grant in one of the most crowded areas where there's a "critical deterioration of the Gaza water system" will be augmented by \$11.1 million in financing from the Islamic Development Bank, the Washington, D.C.-based organization said in a statement.

"We are concerned about the lack of clean water supply and the deterioration in the quality of water resources in the Gaza Strip, one of the most densely populated areas on Earth," World Bank West Bank and Gaza director Mariam Sherman said. The population of Gaza is 1.6 million.

Gaza's groundwater is over-utilized, badly contaminated and "the over-drafting of the sole aquifer is causing a decline of the groundwater table and a deterioration of water quality," the World Bank said. "Most sewage is returned to lagoons, wadis and the sea. The area is now choked with untreated sewage, threatening Palestinian health and life as well as remaining water resources and the environment."

The funds will help construct water tanks to collect and blend water from different sources to improve the quality and efficiency of Gaza water and wastewater and to connect major well fields supplying Gaza's middle and southern areas, it said. Water distribution networks will also be upgraded.

"Gaza Given Grant by World Bank to Improve Water, Sewage Services", 28/11/2012, online at: http://www.bloomberg.com/news/2012-11-28/gaza-given-grant-by-world-bank-to-improve-water-sewage-services.html



Ministers and International Organizations Participating in AFED Annual Conference on 29 November in Beirut

Delegates from over 48 countries have confirmed their participation in the 5th annual conference of the Arab Forum for Environment and Development (AFED), including the Ministers of Environment from Egypt, Lebanon, Tunisia, Sudan and Palestine, as well as many heads of regional and international organizations and corporate leaders. The conference will be under the patronage of His Excellency the President of Lebanon, General Michel Sleiman, who will deliver the opening address, and is set to convene at the Phoenicia Intercontinental Hotel in Beirut on 29-30 November 2012. AFED will release during the conference its long anticipated report entitled "Survival Options and Ecological Footprint in Arab Countries." It includes an Arab atlas of ecological footprint and biocapacity, detailing for the first time available natural resources and demand on them, to show the extent of ecological deficit. Figures analyzed so far revealed that 3 of the countries that have the highest ecological footprint per capita, as well as 3 countries that have some of the lowest figures are in the Arab region, which makes for a very interesting case of comparison.

In one of the highlights of this regional event, AFED will host the International Union for the Conservation of Nature (IUCN) regional network meeting, which will be attended by IUCN Director General Julia Marton-Lefèvre accompanied by a high level delegation. Ms. Lefèvre will also give a keynote speech during the conference's opening ceremony.

Another main feature of this year's conference is a session dedicated to university students from all over the Arab region, under the heading "Future Leaders: Arab youth speak out about their right to natural resources."

Organizers expect that 500 delegates will participate in the AFED annual conference. High level delegates include Mathis Wackernagel, President and founder of the renowned Global Footprint Network that was commissioned by AFED to produce the first Ecological Footprint Atlas for the region. Also present will be Dr. Ashok Khosla, President of the Club of Rome and Sus Ulbæk, Deputy Foreign Minister and Ambassador of Global Challenges in Denmark.

"Ministers and International Organizations Participating in AFED Annual Conference on 29 November in Beirut", AFED, 27/11/2012, online at: http://mideastenvironment.apps01.yorku.ca/?p=6393



***** We are drinking our sewage

One of the 'symbols' of emerging Bihar, apart from the ubiquitous branding of that chickpea-flour-

filled, smoke-roasted dough ball smeared in aubergine hash called litti-chokha, is the annual bathing

ritual in honour of the Sun god, the festival of Chhath. The most important feature of the ritual is that

utter cleanliness is an imperative, and as every denizen of Bihar can affirm, it's a fact that local

citizens and government agencies do their utmost to get the garbage off the roads. For about 48

hours, one can see what a garbage-free city looks like, and this mirage disappears with the return of

the Sun worshippers the morning after Chhath.

"It's the same old story, and every year this question is tossed around â€" why can't we have clean

streets every day? The obvious answer is that the Sun god will not send his punishing flames to

engulf you on any other day. His wrath against impurity lasts only as long as the ritual!" an

academician reflected dourly over a single malt at one of Patna's upmarket watering holes.

A deeper problem is the way our faulty waste management and water management continue to

impact our rivers, especially the Ganga, another socio-cultural icon of the state.

"Patna is drinking its own sewage," screamed a headline a few months ago. It raised an eyebrow for a

moment, and then it was forgotten with the turn of the page.

The latest report from the Centre of Science and Environment, which was 'unveiled' by Bihar urban

development minister Prem Kumar a few months ago, states that Patna suffers from a problem of

plenty - of water and sewage. It depends on the Ganga and groundwater for drinking.

The report stated that less than 10% of the Patna is connected to a sewage network; which means

90% of the city's excreta is discharged into open drains and eventually into the Ganga! From the

drains, it also percolates into the groundwater which is pumped up by the Patna Municipal

Corporation (PMC).

"Bihar's water quality problems are worsening by the year on account of poor sewage management,"

maintains A K Ghose, head of the Environment and Water Management department of A N College.



This is because of increasing urbanization coupled with faulty and non-inclusive planning. According to PMC estimates, we generate around 290 MLD of sewage in Patna. Half of this flows into the Ganga directly. The remainder seeps underground mixing with the groundwater.

Patna has four sewage treatment plants with a combined capacity of 121 MLD, but only a little over 50 MLD of sewage reaches these plants. This is because our sewage system is ill-maintained, archaic and dysfunctional.

The plants also perform poorly on account of power failures, poor maintenance and non-functional treatment zones. So, in effect, the sewage running through the plants is largely untreated.

The Public Health Institute in Patna has tested water samples and found more than half to be full of bacterial contamination and unfit for human consumption. Against the permissible level of 100 per millilitre of faecal coliform, tests have indicated an average of 5,056; the permissible level for total coliform is also 100 per ML but tests have shown this to be an average of 13,533! Faecal coliform are bacteria found in excreta. We are, in a manner of speaking, drinking our own sewage. Patna needs about 215 million litres per day (MLD) of water, and gets 202 MLD.

"We are drinking our sewage", 25/11/2012, online at: http://articles.timesofindia.indiatimes.com/2012-11-25/patna/35347441_1_sewage-treatment-plants-sewage-system-mld



* "Women in Water" in Pakistan Shows the Way

Pakistan's population of nearly 181 million is growing at 2% per year; this population explosion has resulted in the country meeting the international definition of water stress—water availability in Pakistan has plummeted from about 5,000 cubic meters per capita in the early 1950s to less than 1,100 m3 per capita in 2011 (see Guidelines for Efficient Agri. Water Management Financing 2011). This ominous, mounting water paucity impairs the lives of Pakistan's rural women, who bear the arduous responsibility of collecting and providing water for their households. The absence of a safe water supply at or near their homes—and the resulting need to walk up to 4 km or more to get water each day—has aggravated the burden of women's duties in many ways, making them vulnerable in terms of both their health and personal safety.

Rural women are the worst victims of water scarcity; however, in some communities, evidence indicates that women are emerging as a "herald of change."

Cases in point: In Pakistan's Punjab province, women in three communities—Rehmatabad, Yazman, and Ather—have been actively engaged as community organizers, mobilizers, and change managers. The results have been a significant improvement in access to clean drinking water, which has had a dramatic impact on education, health, economics, and women's empowerment.

The improvement efforts had their roots in the Public Health Engineering Department (PHED), a provincial government department that has a mandate to supply drinking water to rural populations of the province. In the mid '90s, PHED began institutional reforms to improve service delivery in rural areas by empowering communities. The community development unit (CDU) under the Rural Water Supply project funded by the Asian Development Bank (ADB) initiated social mobilization and active participation—especially of women—in the project cycle. Through this mobilization effort, a group of women leaders emerged in each community who played a very significant role in achieving the project's initial targets. The department thereby realized that supporting women's involvement and their leadership role had a significant impact on a community's success.

As I described <u>here</u>, the Water and Sanitation Program (WSP) —through its newly launched Women in Water Initiative (WiWi)—conducted case studies in Rehmatabad, Yazman, and Ather in Punjab, Pakistan, to document the role of women in RWS planning, decision making, community



development, entrepreneurship, and operations and maintenance. Findings from those case studies

show dramatic improvements in several key areas, including economics, education, and health.

Prior to the projects, women spent most of their day gathering water. In Rehmatabad, for example,

women had to walk 2 to 4 km and wait in line for four hours for their turn to collect water, an effort

requiring six to eight hours each day. The installation of domestic water connections in all three

communities has eliminated this water collection effort, freeing women to pursue economic and

education opportunities.

Following are some examples of the case study findings on the economic and educational impact of

increased water access in the three communities.

Rehmatabad:

Education. The community's overall literacy rate has risen from 3% in 2006 to 25% in 2012.

Economic opportunities. Microcredit has enhanced women's participation in the local economy and

allowed them to earn their livelihood via small-scale loans. The increase in available time has given

women time to learn and develop their skills; vocational training centers offer instruction in

embroidery, sewing, knitting, and so on, thus supporting a cottage industry.

Yazman:

Education. The community now has primary and secondary schools for both boys and girls, and

school enrollment shows an upward trend from 5% in 2004 to 11% in 2012.

Economic opportunities. As water reservoirs diminished, most community women associated with

teaching had to give up their careers. Spending hours fetching water each day also confined them to

the household. After completing the ADB/PHED Rural Water program, these women once again

engage in socioeconomic and community development activities and many have now resumed their

teaching careers.

Ather:

Education. Today, the community has 13 primary and middle schools (both government and

private), up from four or five primary schools in the year 2004. Two Madrassas also provide religious

education to the community's children.



Economic Opportunities: Microcredit has provided economic opportunities for entrepreneurs. Women are now earning their livelihood running small enterprises, including cattle grazing, poultry, and kitchen farming.

In all three communities, health findings show a significant reduction in previously widespread waterborne (bacterial and viral) diseases, including skin allergies, tuberculosis, diarrhea, gastroenteritis, and hepatitis (publication pending -- Women in Water: The Contribution of Women in Sustaining Rural Water Supply Schemes in Rehmatabad, Ather and Yazman, Punjab, Pakistan).

These studies show that gender mainstreaming has transformed these once-marginalized areas into rapidly progressing Punjab communities with improved literacy, more economic opportunities, and improved health. This progress is not an outcome of overnight efforts, but rather the result of robust endeavors by both PHED and community members.

People have enormous potential to adapt to and thrive under social and economic reforms, which can yield fruitful results for community development projects. This potential in women has been largely untapped in many parts of the world, but efforts such as this prove that supporting women's involvement can indeed herald deep and meaningful change.

"Women in Water" in Pakistan Shows the Way", 27/11/2012, online at: http://blogs.worldbank.org/water/women-in-water-in-pakistan-shows-the-way



❖ Kalabagh dam be constructed with consensus of all provinces: Shahbaz

LAHORE, (SANA): Chief Minister Punjab Mian Shahbaz Sharif has said that Kalabagh Dam should

be constructed with the consensus of all the four provinces but the verdict of the court to construct

the dam should be accepted by all.

Talking to media here on Thursday after inaugurating the campaign "helmet for all", Shahbaz said

that construction of dams is imperative with the economic development of the country.

PML (N) has always respected the verdicts of the courts and if it gets a chance it would build

Kalbagh Dam with consensus, he said.

Shahbaz Sharif announced to give 20,000 deserving youths of the province free helmets while

addressing a ceremony. He also rode motorcycle with helmet on.

Shahbaz Sharif also announced that under the Ujala program, male and female students would be

given lamps for which a Chinese company would provide 10,000 solar lamps.

Shahbaz Sharif called the previous Punjab government the most corrupt and that Transparency

International had also called it the most corrupt. International institutions have called the present

Punjab government the most transparent, he added.

He said that implementing the traffic rules is necessary for road safety, adding that by observing

traffic laws, accidents can be controlled to a great extent and hundreds of precious lives can be saved

from the accidents.

Shahbaz Sharif said that when PML-N came into power in the Punjab, rescue 1122 was working only

in three districts and now by the grace of Almighty Allah, this service has reached to 36 districts and

this service is being extended to the Tehsil level.

He said that Metro Bus project is the unique and the greatest project in the history of the transport in

the country and working on this project is speedily in progress and more than eight kilometers large

flyover which is the largest flyover in the Sub-continent, is being constructed for the Metro Bus.



He praised the services of the Chief Traffic Officer Lahore, district administration, traffic and police staff for their efforts in the province.

He said that Punjab government is at the forefront for promotion of transparency and ending the corruption and the international institution has also declared it the most transparent province.

"Kalabagh dam be constructed with consensus of all provinces: Shahbaz", 02/12/2012, online at: http://www.sananews.net/english/kalabagh-dam-be-constructed-with-consensus-of-all-provinces-shahbaz/



Shamsul Mulk says Kalabagh Dam to benefit Sindh & KPK; says folds in KPK come due to Swat & Kabul rivers

ISLAMABAD, (SANA): Former governor, chief minister of Khyber Pakhtunkhwa (KPK) and former chairman WAPDA Shamsul Mulk has said that construction of Kalabagh Dam is not the issue of rulers but it is the issue of the masses, adding that the rulers would go abroad with their baggage in the hour of trial in the country.

In an interview with a private TV channel, he said that the construction of Kalabagh Dam would be more beneficial for the KPK and the Sindh. He said that due to non-construction of Kalabagh Dam, annually Sindh is experiencing loss of Rs. 30 billions and KPK is facing loss of Rs. 22 billions.

He said that floods in KPK are caused by the river Kabul and river Swat not by the Kalabagh Dam.

Shamsul Mulk said that construction of Kalabagh Dam has political and economic benefits. He said that if the verdict of the court had come 20 years ago, the country would not have passed through the hard times.

He said that he does not represent any lobby or political party, it is a technical matter, KPK and Sindh would take more benefit from the construction of Kalabagh Dam as compared to Punjab.

He said that there is lie everywhere and dearth of truth in the country, adding that people are saying that construction of Kalabagh Dam would make the Sindh barren whereas Sindh is receiving more than 70 lac acre feet water from Mangla and Tarbela per annum. He said that how Kalabagh Dam would be different from the Mangla and Tarbela.

He said that floods do not come in the country due to construction of dams, adding that Kalabagh Dam is not the problem as regards the flooding in the country.

Shamsul Mulk said that Generals, Bureaucrats, politicians and bureaucrats have ruled the country but the masses of the country never ruled the country. He said that the rulers have no problem from load shedding and price of electricity. He said my own home is near the Kabul River and my family also has faced floods. He said that the whole world says the biggest problems of the world are energy, food and water.

"Shamsul Mulk says Kalabagh Dam to benefit Sindh & KPK; says folds in KPK come due to Swat & Kabul rives", 02/12/2012, online at: http://www.sananews.net/english/shamsul-mulk-says-kalabagh-dam-to-benefit-sindh-says-folds-in-kpk-come-due-to-swat-kabul-rives/

BACK TO TOP



Delhi must check its greed for land and water

Delhi is spread over an area of 1,483 sq km. Of this, the water bodies are not even total two per cent (30 sq km); the notified ridge area is just five per cent (77.77 sq km) and the Yamuna riverbed, including the flood plains, is about seven per cent (97 sq km). The pertinent question is: Can't the national capital conserve and mange properly barely 14 per cent of its life-giving, life sustaining area?

Owing to the rising demand for land due to urbanisation, more and more portions of the Yamuna, the ridge and the water bodies are being encroached upon by the growing population.

Following a 1994 water sharing agreement between Yamuna's riparian states, Delhi has a limited share and hence traps all fresh water for human use at Wazirabad. "Delhi will have to sacrifice something. It can get water from somewhere else but just can't kill the Yamuna at Wazirabad. A river is a complete eco-system, it can never be replaced by a flow of cleaned sewage," said Satish Sinha of NGO Toxics Link.

Brajraj Sharan of the Man Mandir Sewa Sansthan Trust that runs the Save Yamuna campaign, said, "Following a Supreme Court order in 1999, a high-powered committee and the Central Pollution Control Board had recommended measures that are yet to be implemented. Solution: Release enough water in the Yamuna throughout, divert all sewage canals emptying into the Yamuna and after recycling, use it for agriculture, domestic or industrial usage."

For the conservation of water bodies, Manu Bhatnagar, an environmentalist, said, "Several water bodies fall in the 'aabadi' (human population) areas and people actually do not want these for various reasons."

Citing the example of the Tree Act, he said, "If one water body is converted into a green area, another water body double its size should be developed."

Diwan Singh of Campaign for Preservation of Commons said, "Involvement of the community is important for preservation, which can happen if the people are convinced of the utility of the water body."

Experts suggest a multi-pronged strategy, which include planning and development of regulated flood plain reservoirs in low lying areas; ensuring efficient and effective functioning of the STPs and ETPs and removing non-compatible and pollution causing land uses from the river bed. Apart from that increased accessibility to the riverfront and attracting people there by developing eco-friendly arts/entertainment/cultural venues was another important step.



AK Jain, former DDA commissioner (planning) said, "The objective of DDA Act is to promote planned development and not 'regularise' the unplanned development, specially in the ridge or the river bed. Zonal plan for Yamuna area legally bans all construction."

"Delhi must check its greed for land and water", 26/11/2012, online at: <a href="http://www.hindustantimes.com/India-news/NewDelhi/Delhi-must-check-its-greed-for-land-and-water/Article1-964231.aspx?utm-source=Circle+of+Blue+WaterNews+%26+Alerts&utm-campaign=3f0ed94857-RSS_EMAIL_CAMPAIGN&utm_medium=email



CM justifies big dam construction

NEW DELHI, Nov 28 – Chief Minister Tarun Gogoi on Wednesday downplayed Governor J.B.Patnaik's recent remarks regarding BTAD, even as he reiterated his support of construction of dams in the region.

Talking to newsmen, the Chief Minister justified construction of big dams but sounded a note of caution over its downstream impact. "We want big dams but we have to explain to the people about its positive aspects," he said, reacting to the latest outcry overshipment of the turbines by NHPC for its 2000 MW Lower Subansiri Hydroelectric Project.

Gogoi said protests have been going on against the Project, underlining the need to run an awareness campaign in favour of dams. But he added that State Government was opposed to adverse downstream impact of the project.

All Assam Students' Union and Krishak Mukti Sangram Samiti (KMSS) are up in arms after the latest bid to move the turbines came to light. Both the organisations opposed to the Project have threatened fresh agitations opposing the move.

Meanwhile, the Chief Minister, who arrived here last evening, came out in defence of the Governor, explaining that Governor has a major role in the administration of BTAD, though the State Government is in charge of the overall law and order under the Home Department. Governor is the Constitutional head of the autonomous council created under the Sixth Schedule of the Constitution

In the aftermath of resurgence of violence in the BTAD areas, the Governor directed the police to conduct house-to-house searches to seize illegal weapons.

Gogoi said that the State Government has instructed the police to seize illegal weapons and that there was nothing wrong in the Governor's order.

Meanwhile, addressing a press conference, president of Bodo Sahitya Sabha
KameswarBrahma expressed resentment over the Governor's order and demanded that
such seizureoperations should be conducted all over the State and should not only be confined to
BTAD areas. Coordination Committee Indigenous Tribal National Organisations (CCITNO) staged



"CM justifies big dam construction", 28/11/2012, online at:

http://www.assamtribune.com/scripts/detailsnew.asp?id=nov2912/at08

WATER RESEARCH PROGRAMME -Weekly Bulletin-

a demonstration at Jantar Mantar here yesterday pressing for fulfilment of their 12-point charter of demands.



❖ Water board to fund rainwater project in city

If implemented properly, rainwater harvesting structures could save groundwater and money.

In a bid to drive home the message of groundwater recharge, the Central Ground Water Board (CGWB) will execute demonstrative projects in various institutions across the city.

Sources in CGWB said the Board would funding a project to provide artificial recharge structures on the premises of National Institute of Technical Teachers Training and Research in Taramani. A 25-metre-long and 8-metre-wide pond would be created to alleviate the water crisis faced by the institute.

Structures are also being provided to collect rooftop rainwater runoff that could be filtered and used.

The Rs. 40-lakh project is being jointly executed with the Tamil Nadu Public Works Department.

Sources in CGWB said that the change in water level would be monitored regularly through a well dug up on the premises.

To increase the aquifer recharge, the pond is being provided with a recharge shaft running to a depth of 5 metres. Such shafts are effective in harnessing rainwater as they penetrate impervious soil layer. Once the structures are completed in three months, the institute would tide over the water shortage, an official said.

Central Leather Research Institute, Adyar, where a similar project worth nearly Rs. 8 lakh was implemented a decade ago, harnesses nearly 1.06 crore litres of rainwater every year. As water is available almost round the year, CLRI has reduced purchase of water through tankers.

Residents around CLRI have also reaped the benefit as groundwater, which was earlier at a depth of about 9 metres below the ground, has now come up to 5 metres below ground level.

The Board is funding such projects to demonstrate the benefits of harnessing rainwater.



In a bid to reach out to school children, a painting competition was organised in which nearly 3.51 lakh students from about 12,000 schools across the State participated.

"Water board to fund rainwater project in city", 26/11/2012, online at: http://www.thehindu.com/news/cities/chennai/water-board-to-fund-rainwater-project-in-city/article4133999.ece



***** Laos has not violated Mekong pact: official

Laos has complied with the procedures for notification, prior consultation and agreement under the 1995 Mekong Agreement before starting construction of the Xayaboury dam on the mainstream of the Mekong River, according to a senior official from the Lao National Mekong Committee Secretariat.

Lao National Mekong Committee Secretariat Deputy Secretary General, Aloune Xayavong, made the comment on Friday in response to a retired Thai senator and NGO officials who accused the Lao government of contravening the 1995 Mekong Agreement after beginning construction of the dam.

"It is a groundless accusation and all of the legal experts are well aware that we have not violated any international agreement," he told *Vientiane Times*.

"I suspect that the people made this accusation because they wanted to discredit us and create dispute among the MRC member countries."

Aloune said that as a signatory to the 1995 Mekong Agreement and founding member of the Mekong River Commission (MRC), Laos held prior consultations with MRC member countries concerning construction of the Xayaboury dam, and completed the process of prior consultation in April last year.

During the prior consultation process, Laos provided comprehensive information on the dam to MRC member countries. However, some member countries continued to express concern that construction of the dam would cause trans-boundary impacts.

"Laos could have begun construction of the dam immediately after completing the consultation process. But we did not because our neighbours were still concerned about the trans-boundary impacts. We then reviewed all of these concerns to maintain Mekong spirit and cooperation with our neighbouring nations," Aloune said.



To address the concerns of neighbouring countries, the Lao government and the project developer hired reputable international experts Poyry and Compagnie National du Rhone (CNR) to redesign the dam, to ensure there would be no significant environmental impacts either up or downstream.

Aloune explained that the Xayaboury dam was a run-of-river dam and did not store large amounts of water, therefore it would not cause water flows to dry up downstream. The dam has a navigation lock so that boats can pass, built-in fish ladders so that fish can migrate, and a sediment flushing system that enables sediment to flow downstream.

"The Xayaboury dam is a state-of-the-art dam; it is a kind of transparent dam, which means it is a dam without a dam," he said.

Under the 1995 Mekong Agreement, any MRC member country that wishes to use water or develop a project on the mainstream of the Mekong River or its tributaries must follow the prior consultation process.

If a country wants to use water from Mekong tributaries in both the wet and dry seasons, it is required to notify all of the MRC member countries.

If a country wants to use water from the mainstream of the Mekong River in the wet season, it needs to notify the other member countries. However, a country is required to enter into prior consultations with other member countries if it wants to divert water from the Mekong basin to other basins.

If a country wants to use water from the mainstream of the Mekong River in the dry season, it is required to have prior consultations with other member countries.

"Laos has not violated Mekong pact: official", 26/11/2012, online at: http://www.asianewsnet.net/home/news.php?id=39389&utm_source=Circle+of+Blue+WaterNews+%26+Alerts&utm_campaign=7a09b66355-RSS_EMAIL_CAMPAIGN&utm_medium=email



❖ Study reveals extent of Mekong dam food security threat

The planned construction of hydropowered dams on the Mekong River in South-East Asia could jeopardise livelihoods, water access and food security for 60 million people, across Cambodia, Laos, Thailand and Vietnam, according to a study

The study reports that dams will block fish migration routes and decimate fish supplies in the lower Mekong region.

As fish dwindle, communities will have to look for alternative sources of protein, such as livestock and poultry. Raising these will require more land and water, and be prohibitively expensive.

"People talk about food security in relation to dams but we need to put the numbers to what that really means," says Stuart Orr, freshwater manager at World Wildlife Fund (WWF) International and co-author of the study published in the October issue of Global Environmental Change.

Orr presented the study at the Third Mekong Forum on Water, Food and Energy, convened by the Consultative Group on International Agricultural Research's (CGIAR) Challenge Program on Water and Food (CPWF), in Hanoi, Vietnam, this month (November 13-14).

Orr says that if all 88 planned dams were developed, Mekong communities would be faced with sourcing close to 40 per cent of lost fish protein from other sources.

And to replace fish protein with domestic livestock protein would require up to 63 per cent more pasture lands and up to 17 per cent more water, the study says.

"Study reveals extent of Mekong dam food security threat", 29/11/2012, online at: http://www.enn.com/ecosystems/article/45279



❖ Will China run out of water by 2030?

China's ambitions are high. By 2020, it aims to double its 2010 GDP and per capita income of urban and rural residents both. China's economic track record has been impressive. It now has a middle class population of more than 300 million and has experienced the fastest ever economic growth over the past 30 years. But it may not be able to maintain this momentum unless it overcomes one of its core policy challenges: water, both in terms of quantity and quality.

Economic growth is no rocket science. Abundant supply of cheap labor and energy powers a country's industrialization. Without affordable energy, however, energy-intensive businesses are driven out of the market and many factories are unable to produce goods at competitive prices. This link between economic growth and energy - the energy-growth-nexus - is widely acknowledged. But most analysts and policymakers today ignore what really an energy industry is powered by: abundant and sustainable supply of water.

Indeed, China's economy runs on water. Water is needed at one stage or another to generate energy. China's industry is the second largest water consumer - it consumes 139 billion cubic meters of water a year - with only the agriculture sector consuming more. And by 2030, Chinese industry's water consumption is projected to increase to 265 million cubic meters.

Energy generating plants in China are the largest industrial users of water, consuming about 42 million cubic meters of water a year. Since China's installed energy capacity is projected to double by 2020, energy producers' share of water will continue to rise. This growing demand will not be matched by the availability of water. For example, the Water Resources Group, projects that if China carries on with business as usual, its demand for water will outstrip supply by 199 billion cubic meters.

China is running out of water, which could soon curb its growth unless immediate countermeasures are taken.

What exacerbates this shortage is the vicious circle of energy and water - if power-generating plants need water then water treatment and supply facilities need energy. The Third World Centre for Water Management estimates that the water sector consumes as much as 25 percent of the electricity



generated globally. Though China's water sector is not yet among the country's most energy-intensive industries, it will gradually become so with new hubs of growth emerging in the water-scare western region and the increasing demand for wastewater treatment. Already, about 52 percent of China's economic output comes from water-scarce regions.

Unfortunately, China does not have much water to begin with. It is home to almost 20 percent of the world's population but has only 7 percent of its freshwater reserves. Water is one of its scarcest resources. And it is extremely inefficient in the use of water and a world leader in water pollution.

China is the world's largest producer and consumer of coal, which meets more than 70 percent of its energy needs. The country produced 3.8 billion tons of coal in 2011 - almost half of the world's total. Coal may be considered a cheap source of energy, but the air and water pollution caused by the mining and use of the mineral is devastating. According to Greenpeace, 2.5 tons of water is polluted for each ton of coal produced. About 25 percent of all wastewater in China comes from washing coal, and it contains large amounts of chemicals and heavy metals that are almost impossible to recycle. All this makes the true cost of coal in China as high as 1.7 trillion yuan (\$272.82 billion), or about 7 percent of its GDP.

So what can the country do to combat these problems? As a first step toward tackling water pollution, China needs to rapidly reduce its reliance on coal. A more ecological alternative could be shale gas. According to the US Energy Information Administration, China has the world's largest shale gas reserves - up to 36.1 trillion cubic meters. And China does want to increase its shale gas production to 6.5 billion cubic meters by 2015.

Natural gas emits 45 percent less CO2 per unit of energy produced compared to coal. And though hydraulic fracturing, the technique used to exploit shale gas, requires about 4.5 million gallons of water per well, it is equal to what a 1,000-megawatt coal-fired power plant consumes in just 10 hours. Fracturing, nevertheless, could contaminate groundwater. No wonder, France banned hydraulic fracturing in 2011. The use of shale gas, therefore, may not result in cleaner water in China.

If China takes the water-energy-growth nexus into account, it would most certainly seek a more balanced energy mix and not focus solely on exploiting shale gas, for its planned rapid exploitation of shale gas may reduce its CO2 footprint but it will also exacerbate its water shortage.



Admittedly, Chinese policymakers are taking the water problem seriously. But water is still isolated from the country's energy and growth policies. China aims to reduce its water intensity by 30 percent during the 12th Five-Year Plan (2011-15) period. It has also set new pollution-reduction targets, particularly for the agriculture sector.

The country must adopt a coordinated approach to water, which will gradually price in the external costs of shale gas or coal. Yet there is no sign of China recognizing that water has to be managed cross-sectorally. Its latest plans do say that "water is the source of life, production and ecology", but it does not have a coordinated policy approach to manage water, energy and economic development holistically, without which it will not be able to fuel its economic growth indefinitely because it will run out of water.

Asit Biswas is distinguished visiting professor at Lee Kuan Yew School of Public Policy, Singapore, and founder of Third World Centre for Water Management. Julian Kirchherr is a graduate student on public policy and management at the London School of Economics (LSE) and National University of Singapore.

"Will China run out of water by 2030?", 29/11/2012, online at: http://usa.chinadaily.com.cn/opinion/2012-11/29/content 15969924.htm

ORSAM
ORTADOĞU STRATEJİK ARAŞTIRMALAR MERKEZİ
CİNTER FOM MİDDLE BATTERM STRATEĞÜR STRÜDİSS
'AÇEĞİ İİR'ÇE İŞİ'ÇE İİR'ÇE İŞİ'ÇE İ

WATER RESEARCH PROGRAMME
-Weekly Bulletin-

Massive nomad settlement to protect "mother river"

LANZHOU, Nov. 30 (Xinhua) -- More than 737,000 nomads have been resettled out of the

headwaters region of the Yellow River over the past five years as part of efforts to protect China's

"mother river" from over-grazing, according to newly revealed figures.

The nomads, all ethnic Tibetans, now live in new settlement communities set up away from the

threatened prairie and wetlands in the southern tip of Gansu Province in northwest China. Their herds

were moved with them.

"We want to give the grassland a break," Wang Hongwei, a senior development planning official of

Tibetan Autonomous Prefecture of Gannan, told Xinhua on Friday.

He said about 1 million heads of cattle were moved away from the more than 774,600 hectares of

grassland covered by the settlement scheme.

The counties of Maqu and Luqu in Gannan are primarily composed of grassland and wetlands caused

by flows of melt-water from the Qinghai-Tibetan Plateau. This relative trickle develops into the

headwaters of the Yellow River that runs 5,464 km across China form west to east before entering

the Pacific.

But over the years, the wetlands have shrunk, sands encroaching on the prairie, raising fears that the

"mother river" that has sustained China throughout its thousands of years of civilization might dry up

some day in the future.

Climate change, over-grazing and burrowing by booming numbers of rats are to blame, according to

Chinese experts.

Land erosion has affected over 90 percent of Maqu's 12.88 million mu (858,667 hectares) of

grassland, according to a survey by the county's animal husbandry and veterinary bureau last year.

ORSAM
ORTADOĞU STRATEJİK ARAŞTIRMALAR MERKEZİ
CENTER FOR MINDLE EASTERN STRATEGIC STUDIES
AÇĞÇ İMÜÇE İYE'DE

WATER RESEARCH PROGRAMME
-Weekly Bulletin-

The nomad settlement is part of a package of measures to protect the ecology of the headwaters

region of the Yellow River. The package, with an estimated investment of 4.45 billion yuan (700

million U.S. dollars), was launched in 2007.

"Harmony between man and nature" is a major theme in ancient Chinese philosophy, but it has been

challenged by the country's robust economic expansion since the late 1970s. Factories have spawned

across the land, the air has been polluted, rivers and underground water have been drained for

industry.

The authorities in recent years have been working to reverse the trend. In its recently closed national

congress, the ruling Communist Party of China advocated "ecological progress" as one of the

country's top development priorities.

China is faced with "increasing resource constraints, severe environmental pollution and a

deteriorating ecosystem," Hu Jintao said in his report to the congress.

Across the country, the government has taken restricting herding as a key measure to preserve

grassland. Herding was banned in areas affected by deteriorating ecology in a nation-wide policy

issued last year. Herders received compensation from the state.

For nomads in Gansu, settlement also means a great leap toward modern-day living.

"Settled nomads have much easier access to public services like education, medical care, cultural

facilities and daily utilities," according to Wang.

In Luqu, each of the more than 2,300 settled nomad households has access to water and electricity.

And nearby there are roads, a school, a clinic and a community recreation center.

Settler Gongpo, 72, is particularly impressed by the neighborhood clinic.

"Now, I can just walk five minutes from home to ask for medicine," he said, after living as a nomad

for more than six decades before. "We used to spend half a day on horseback to do that."



Wang said the government is now working to settle the rest of the prefecture's 19,000 nomads in the coming few years.

"Massive nomad settlement to protect "mother river"", 30/11/2012, online at: http://news.xinhuanet.com/english/china/2012-11/30/c 132010973.htm?utm source=Circle+of+Blue+WaterNews+%26+Alerts&utm campaign=0b88e22ae2-RSS EMAIL CAMPAIGN&utm medium=email



Haiti seeks \$2bn to fight cholera outbreak blamed on UN soldiers

were source of infection

Haiti is to call upon the international community for more than \$2bn to fight cholera amid growing

Government to unveil 10-year plan for water and sanitisation as evidence grows that peacekeepers

evidence that the world's worst epidemic was started by UN peacekeepers.

The government's 10-year plan to improve sanitation and water provision will be unveiled with the

backing of foreign aid groups and the UN, which is accused of one of the greatest failures in the

history of international intervention.

It follows reports of a recent spike in cholera cases in the wake of <u>hurricane Sandy</u> and warnings from

NGOs that the US and other big donors are cutting back on funding for disease control.

A growing body of medical research points the finger at Nepalese peacekeepers as the source for the

pathogen, which had been unheard of in Haiti for a century until the death in October 2010 of a

villager who lived downstream of the UN camp in Mirebalais.

Since then, cholera has spread along the river, across the flood plains and into the slums of the

capital, Port-au-Prince. About 6% of the population have been infected and more than 7,500 people

have died – a higher toll than the political violence that brought the peacekeepers to Haiti.

According to the World Health Organisation, the 340,000 cases in Haiti last year were more than the

rest of the world put together. This year, cases have declined, but hundreds of new infections are still

being diagnosed every week, particularly in the wake of hurricane Sandy.

Last week the International Organisation for Migration says Haitian officials had reported a spike of

3,593 cholera cases since the middle of October. The organisation's spokesman, Jumbe Omari Jumbe,

told reporters in Geneva: "The numbers are going up particularly in [refugee] camps around the

capital, Port-au-Prince."

The government will ask for more than \$500m (£315m) for the next two years in a short-term

emergency response to the epidemic. Another \$1.5bn or so will be requested for the following eight

years to eliminate the disease.

www.ORSAM.org.TR



While this plan will call on funds from private donors, corporations, NGOs and international bodies, many victims and activists believe the UN must take a greater responsibility because its personnel are

likely to have brought the cholera to Haiti.

The UN has not accepted culpability. It launched an investigation into its role, but a panel of experts

concluded in 2011 that the outbreak was not the fault of "any group or individual".

Although it acknowledged inadequate sanitation at the Mirebalais barracks as a possible source of the

bacterium, it said this was not completely certain and that other factors - including poor public

sewage systems and water treatment – contributed to the outbreak.

However, a former panel member – US cholera specialist Daniele Lantagne –recently cited new data

that suggests the Nepalese troops were most likely to have been the source. Based on full genome

sequencing, she concluded: "We now know that the strain of cholera in Haiti is an exact match for

the strain of cholera in Nepal."

This backs up long-held suspicions of locals in Mirebalais. Although the Nepalese troops have been

replaced by Uruguayans and the sewage canal from the camp has been cleaned up, residents have not

forgotten or forgiven what the UN peacekeepers did to their area.

"The troops were shitting and pissing in the river. It used to stink. Many people got sick," said

Johnson Pierre as his girlfriend washed clothes in the stream. "We don't like the UN. They have

given us nothing. They're not clean. And we are still getting cholera."

In Meye village, which sits across the road from the barracks, a sign above the first house reads:

"Have Mercy Nepalese."

Everyone in the community has either had cholera or knows a relative or neighbours who has been

infected.

"There were people dying in hospital and I thought I was going to join them," says Audeline Louis-

Jeune, a 23-year-old villager who was one of the first to suffer in 2010. She is unsure how she was

infected, but like all the local residents she has never stopped using the river to wash clothes.

At the hospital in Mirebalais, medical staff recall the first cholera patient they saw on 17 October

2010 – a woman from Pageste village. Since then, they have accepted thousands of cases despite



education campaigns to encourage locals to be careful about possible sources of infection. "It's very difficult in Haiti to get treated water. Many people have no choice but to use the river for washing, despite the risk of contamination," said Thelisma Heber, a doctor with the Partners in Health NGO.

Asked if the outbreak was linked to the UN base, Heber was cautious. "I don't have the information to prove that the Nepalese troops are the origin. All I know is that before 2010, there was no cholera."

Last year, a coalition of lawyers and campaigners lodged a multibillion dollar claim at the UN headquarters for 5,000 plaintiffs. It demands \$100,000 compensation for each of the families of the victims and calls on the UN invest at least \$750m in the water infrastructure of Haiti, which ranks last on global water poverty indexes despite its many rivers, lakes and streams.

In its 67-year history, the world body has never set up a committee to assess large-scale claims for compensation, although its rules permit it to do so. But momentum is building behind the Haiti case.

"There is general agreement that this wall of impunity is going to come down at one time or another," said Brian Concannon, director of the Institute for Justice & Democracy in Haiti. "If any case should do it, this would be it as the case is so clear. We are on right side of the tide of history."

His group plans to expand the lawsuit to include thousands more cases. If the UN fails to respond, he says lawyers are preparing to file the case in a national court in the US, Haiti or Europe.

Pressure for action is also coming from grassroots organisation. Haitian senators are also drafting a resolution calling for reparations that will be submitted next month, according to Camille Chalmers of the Haitian Platform to Advocate Alternative Development.

"If the UN doesn't take responsibility, there'll be protests," he says.

The UN's head of humanitarian affairs in Haiti, Nigel Fisher, said the matter was under consideration by the organisation's lawyers. "Obviously we are aware of the latest reports and analysis. Unfortunately, we have to leave this in the hands of the legal process until they have worked that through," he said. "I hope that is sooner rather than later. We'd all like to put that issue behind us so we can contain the continued epidemic."



Though cholera deaths have fallen from 7,000 up until the end of 2011 to 600 this year, they continue

to tarnish the UN's reputation and add to doubts about whether the \$600m of foreign aid being

poured into Haiti each year is helping or hurting the country.

Cholera is not just a disease of the poor; it is a disease that worsens poverty. Villagers must now buy

bottled water to drink and cook. They need chlorine to purify water before they bathe. Poor

governance and the dire conditions in much of Port-au-Prince add to the problems.

Driving past street vendors selling meat and vegetables off a floor littered with rubbish and puddled

with murky water, Mathieu Fortoul of Médecins sans Frontières explained the risks.

"You can see why it has spread," he said. "People know the risks, but they lack the means to protect

themselves. The problem here is that people don't have access to soap and drinkable water."

The death toll would be much higher if it were not for the tented control centres that have sprung up

around the country. The facilities are basic, but effective: beds, drips, disinfectant and careful

segregation of confirmed and suspected cases.

At the Carrefour centre, five-year-old Yvena Marcellus was brought with the typical symptoms of

diarrhoea and vomiting. She still has stomach ache but is likely to make a full recovery. "We don't

know how she got infected. She was just playing on the ground," said her aunt, Mikerlande Eugene.

The Haitian government has practically renounced any responsibility for cholera treatment in the

capital. Even before a recent doctors' strike, hospitals were turning away patients or referring them to

foreign NGOs.

"If we are over capacity, it is because of the health ministry. They refer all cases to NGOs, but with

the fall in international funding, there is a struggle," said Fortoul. "In May we treated 70% of the

cholera cases in Port-au-Prince. At the peak, that was 500 cases in a week. Two years after the start

of an epidemic, that's not normal. The ministry of health should take responsibility. We shouldn't be a

substitute."

NGOs are finding it harder to get donations.



Louise Ivers, a senior adviser at Partners In Health, said the US government's funding for their Haiti cholera programme would run out in February. "But the emergency isn't over. Cholera is still a leading cause of death in Haiti and we continue to see cases spike with rain," she said.

While a new drive for funding is prepared and the legal wrangles continue, the disease continues to take a toll – and there is little optimism that it will be eradicated in the near future. "Haiti had never seen a case of cholera before October, 2010, yet somehow needless cholera deaths are beginning to be accepted as the new norm. That is an outrage that we cannot accept," Ivers said.

"Haiti seeks \$2bn to fight cholera outbreak blamed on UN soldiers", 29/11/2012, online at: http://www.guardian.co.uk/world/2012/nov/29/haiti-cholera-plan-un?CMP=twt fd&utm source=Circle+of+Blue+WaterNews+%26+Alerts&utm campaign=0b88e22ae2-RSS EMAIL CAMPAIGN&utm medium=email



War over Nile River water between Egypt and Ethiopia?

ADDIS ABABA: War over the Nile River? It seems that every few weeks, commentary is published suggesting that Egypt and Ethiopia are ready for military battles over the future of the Nile River.

This week, Robele Ababya wrote a piece titled "Likely war over the Blue Nile River?" that highlighted the growing concern in Ethiopia over the future of Egypt's tenuous democracy that has seen massive unrest in recent days.

Ababya wrote: "The matter is so serious that I gave it a rather scary title after a lot of soul-searching, but the arrogant stance of prominent Egyptian leaders begged for it as mentioned in the paragraph below – notwithstanding my long held dream that democratic Ethiopia and Egypt will one day emerge as powerful allies working together as keepers of stability and engines of economic growth in the region and beyond in the African continent."

Ababya added that with the ongoing turmoil in Egypt and the uncertainty over their ability to reach compromises, the future relations with Ethiopia, despite an optimistic tinge, are not looking positive.

"But the new Egyptian regime appears to have dimmed any hope of engendering a secular democratic state given that liberal democratic political forces that have spearheaded the Egyptian revolution have withdrawn from drafting the constitution. It seems the government is bent on following in the footsteps of its predecessors," Ababya continued.

That precedent does not engender a warm feeling in many Ethiopians, who have seen decades of Egyptian obstinate behavior over Nile water. Now, with the government in Cairo teetering on collapse, Ethiopia remains concerned over the future of what the government and its people believe is a right to water resources.

Ethiopia and Egypt have been butting heads for some time over water resources and who has a right to the Nile River.

With the first-ever Nile Basin Initiative (NBI) report on the status of the Nile River published last month, the situation between Egypt and Ethiopia and the angst between the two foes finally has some



statistics and analysis to deal with. However, it is unlikely to see any changes in the current policies that have both countries eying future water resources along the world's longest river.

Top Ethiopia government officials have told Bikyamasr.com that they are looking at jumpstarting the massive Renaissance Dam project along the Nile River in an effort to increase water resources and energy for the East African country.

The moves could threaten the regional stability after the Egyptian government said it remained "concerned" over Ethiopia's actions along the Nile River.

The International Monetary Fund (IMF) has also called on Addis Ababa to push the dam project to the backburner in order to focus on other economic initiatives.

While Cairo has denied any intention of attacking the dam, as reported by whistleblower website Wikileaks, the country's Water Resources and Irrigation Minister Mohamed Bahaa el-Din said last month that his country was maintaining its concerns about the construction of the Renaissance Dam in Ethiopia.

He did say that officials at the Ethiopia foreign ministry "assured Egypt and Sudan that in case there was any impact on their water quota to the dam, other projects will be carried out to collect lost water and cover shortages."

It is the latest in the ongoing battle for the world's largest river's water, with Egypt and Sudan continuing to remain obstinate in amending any of the colonial treaties that guarantee their countries with a lion's share of water from the Nile.

Wikileaks released documents this month that revealed Egypt and Sudan had been planning to attack an Ethiopian dam project to "protect" their rights over Nile water based on colonial era treaties.

In documents revealed by Wikileaks, the Egyptian and Sudanese government appeared ready to develop a launching pad for an attack by Egypt against the dam.

Wikileaks has leaked files allegedly from the Texas-based global intelligence company, Stratfor, which quote an anonymous "high-level Egyptian source," which reported that the Egyptian



ambassador to Lebanon said in 2010 that Egypt "would do anything to prevent the secession of South Sudan because of the political implications it will have for Egypt's access to the Nile."

Ethiopia's massive dam project has seen much concern from Cairo and Khartoum, who fear the establishment of Africa's largest dam would affect previous colonial deals on Nile water-sharing.

It is to be built some 40 kilometers upstream from Sudan on the Blue Nile.

But even before the official announcement of Ethiopia's prime minister's passing on August 20, Egyptian officials told Bikyamasr.com that they believed a post-Meles region could bring forth new negotiations and compromise over Nile water.

An Egyptian ministry of water and irrigation told Bikyamasr.com last month, two weeks before Zenawi was pronounced dead, that with the combination of Egypt's new President Morsi and the potential of seeing a new leader in Ethiopia, they hoped the tension over Nile River water could be resolved.

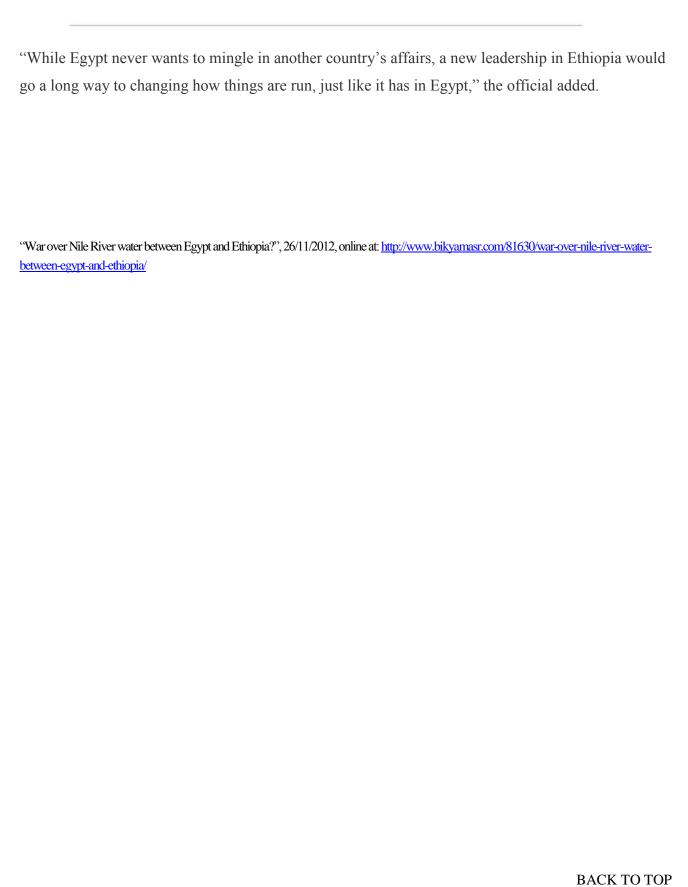
"While this can in no way be official policy at this point, I believe that there would be more maneuvering with a new leadership in Ethiopia because there would be the ability to communicate and not be seen as antagonistic," the official said, adding that they were not authorized to speak to the media.

"Let us be frank about the situation between Egypt and other Nile countries," the official continued. "We in Egypt have not been the best at compromise so I think overall, there is so much that can be done to help bring countries together, and Ethiopia has been a leader in its criticism of Egypt so starting there would be good."

With the Nile comes a new set of issues, and with Egypt holding onto a lion's share of water from the world's largest river, upstream countries such as Ethiopia have taken it on their own to begin building dams and other water related endeavors, much to the anger of Cairo.

However, officials hope that solutions can be had in the new post-revolution Egypt that could see the growing tension between countries along the Nile reduce.





www.ORSAM.org.TR



❖ National Coalition on Climate Change for Egypt is born

The global COP18 conference on climate change opens in Doha Monday. About 17,000 participants from all over the world have flown to the Qatari's capital to try to reach an agreement on how to mitigate and significantly reduce the impact of climate change.

In Egypt, a group of dedicated environmentalists from across the board have recently gathered to build Egypt's first National Coalition on Climate Change.

Because climbing temperatures, rising sea levels, the reduction of fertile soil availability and water evaporation have already taken a toll on Egypt's economic, industrial and agricultural sectors, there is a lot of work to be done through this coalition.

Each year, 3–5 millimeters of the coast in the Nile Delta is swallowed by the sea, in an area that is home to 40 percent of local industry. If climate change continues unabated, up to 2 million residents would be forced to migrate from the Nile Delta, and thousands of feddans of fertile land could be abandoned to salinity and drought.

Egypt ranks 31st worldwide in overall emissions and produces 221.1 million tons of carbon dioxide per year, which makes it responsible for 0.59 percent of global emissions. Its share of emissions may be small when compared to developed countries, but Egypt's geographic location, its sole river that is increasingly deteriorating and its arid, barren landscape make the country especially vulnerable to temperature changes.

To address the issue of climate change at large, two renowned environmentalists, Lama El Hatow and Sarah Rifaat, have called for the creation of a National Coalition on Climate Change for Egypt.

The inception of this new coalition took place in the premises of icecairo, a downtown environmental hub, and gathered a large crowd of biogas experts, sanitation specialists, green energy students, antinuclear campaigners, Nile river researchers, hydroponics developers, urban planners, bike aficionados and coral reef conservationists.

"The fact that so many of you showed up is already a victory," announced Hatow at the beginning of the meeting.

Issues of urban planning, agriculture, biodiversity, energy, community development, water sanitation and public transportation were discussed in relation to climate change, and priorities for each theme were defined.

The issues that came up the most were the lack of political will to implement favorable changes in the country and the failed policies undertaken by the government.



The meeting ended with a brainstorming session to define what the role of the new coalition should be.

"This coalition should put pressure on the government," said one participant, while Noor Noor, from Nature Conservation Egypt NGO, believes it should help better communicate the main environmental issues that concern each of us.

Mindy Baha el Din, from the same NGO, pushes for an advocacy role.

"We need to advocate immediately for sound policies, and convince the government that we are going to be a solution," she said.

Another participant suggested that existing initiatives related to climate change should be reviewed, and the reason for their success or failure studied.

Reem Labib, head of the recently founded Environmental Justice Department at the Egyptian Initiative for Personal Rights, argued that the coalition should draw the missing link between the public health sector, environmental issues and the government.

Rifaat — also general coordinator of 350.org movement, which aims to decrease the amount of carbon dioxide emissions in the atmosphere to 350 parts per million — promised that another meeting would follow in December to clarify the goals and structure of the new coalition.

"National Coalition on Climate Change for Egypt is born", Egypt Independent, 27/11/2012, online at: http://mideastenvironment.apps01.yorku.ca/?p=6401



❖ Mena water supply forecast to halve by 2050

The amount of available water per person in the Middle East and North Africa (Mena) is set to halve by 2050 as the region's population rises and industrial growth continues at a rapid rate.

The dire prediction came in a report by the consulting firm Frost & Sullivan (F&S).

"There has to be more private sector participation," said an environmental analyst at F&S, which has a policy of not naming its employees.

"The government has to play a major role in creating policies for private participation," the analyst said.

With many water municipalities around the region failing to recover their costs in producing and supplying water, F&S says more efficient private sector operations have to be put in place to help grow the industry.

"They have to combat the lack of skilled manpower, high costs of water treatment, poor water distribution and inefficient water management," the report said.

In each economy in the Mena region, it is estimated this shortage of skills costs 1 to 3 per cent of GDP.

"This is the cost and a problem across all the countries," said the F&S analyst.

"If 100 per cent of the costs are to be recovered, consumers need to be paying more than their current bills. But this is not likely to happen in the immediate future as it requires policy and institutional reforms."

Although investment is being made in water infrastructure, particularly in the UAE, more needs to be done to close the growing gap between demand and supply.

Investment by Mena countries totalled US\$9 billion (Dh33.05bn) last year, which is expected to grow to \$18.85bn by 2015, according to F&S.

Diversification away from the oil industry in countries around the region has led to rapid growth in other water-heavy sectors, such as agriculture. Despite the high level of imported food in the region, agriculture makes up 78 per cent of total water consumption.

The average water availability per person is close to 7,000 cubic metres each year around the world, but in the Mena region, it is just 1,200 cu metres.



Although the availability of water is scarce, those using the water have a higher usage per person than the global average.

"With the population expected to grow from nearly 300 million in 2008 to almost 500 million in 2025, the already dismal per capita availability of water is expected to halve by 2050," the F&S report said.

It added an industrial growth rate of between 10 and 12 per cent will exacerbate this trend.

"Mena water supply forecast to halve by 2050", 03/12/2012, online at: http://www.thenational.ae/business/economy/mena-water-supply-forecast-to-halve-by-2050



❖ Saudi National Water to Spend \$38 Billion on Water: MEED

Saudi National Water Co. plans to spend \$38 billion on water projects over the next 16 years, the Middle East Economic Digest reported, citing Nasser al-Amiri, the company's treated sewage effluent department chief.

The investment plans include an average of \$600 million a year for treated sewage projects and \$1.5 billion on related water and wastewater works in Riyadh, Jeddah and Mecca over the next four years, the London-based publication said, citing al- Amiri's comments at a conference.

Saudi Arabia, the largest user of desalinated water, is expanding its water facilities to meet increasing demand in the kingdom. The Saline Water Conversion Corp. awarded companies led by Shanghai Electric Group Co. and Samsung Engineering Co. a 11.3 billion-riyal (\$3 billion) contract to build a desalination plant on the Red Sea coast in Saudi Arabia.

"Saudi National Water to Spend \$38 Billion on Water: MEED", 26/11/2012, online at: http://www.businessweek.com/news/2012-11-28/saudi-national-water-to-spend-38-billion-on-water-meed



❖ MIDDLE EAST: Talking about climate change

DUBAI, 27 November 2012 (IRIN) - The Gulf states are warm but pleasant at this time of year - a world away from melting ice caps, the damage caused by Hurricane Sandy in the USA or flooding in Pakistan.

But for the thousands of experts and delegates meeting at this year's annual UN Climate Change conference in the Qatari capital Doha the environmental impact of climate change may not be so far from the city's conference centre and hotel rooms.

While talk of emissions' reductions may dominate discussions at a conference described by chief convener Abdullah Al Attiyah as "a historic conference of crucial importance", major climatic threats face the host region.

Greenhouse gases: The tiny state of Qatar may be doing a good turn by hosting the UN Climate Change talks, but its citizens are responsible for more carbon dioxide and overall greenhouse gas emissions per person than anywhere else on earth. The United Arab Emirates (UAE) and Kuwait come in at second and third for greenhouse gas emissions per capita.

While all countries in the Middle East have ratified the Kyoto protocol on climate change, the key obligations fall on industrialized nations. The first phase of the protocol runs out at the end of the year but developing and middle income nations (including all those in the Middle East) have consistently argued that they are the victims not the causes of climate change.

The Middle East and North Africa region still only produces less than 5 percent of global greenhouse gas emissions, though emissions' increases grew three times faster in this part of the world than the world average between 1990-2007, according to the World Bank.

Rising temperatures: One of the principal aims of Doha will be to persuade countries to reduce their greenhouse gas emissions, which are blamed for global warming. The Intergovernmental Panel on Climate Change (IPCC) estimates that temperatures in the Middle East and North Africa will



increase by two degrees Celsius in the next 15-20 years, rising more than four degrees by the end of the 21st century. That is likely to have a number of negative impacts: Perhaps the most significant will be a**drop in rainfall** of around 20 percent by the end of the century (IPCC). A "projected temperature rise will further exacerbate the already high level of desertification of the region, increasing the lack of arable land and water resources," according to a report published this week. The region already has the highest levels of water scarcity anywhere in the world. Around threequarters of water resources are being used by humans in the region, so any reduction in groundwater would add significant environmental stresses, which could even increase the risk of conflict. The current Arab population is estimated at 359 million but could reach 600 million by 2050. On the other hand, the World Bank says that because of centuries of water scarcity and other tough environmental conditions, the region could be a "valuable repository of traditional and institutional knowledge, which, if preserved and made accessible, could prove an important contribution, globally, to efforts to address climate change." ☐ **Rising sea levels** due to the melting ice caps would also hit the region harder than average. Around 3 percent of the population in the Middle East and North Africa would be directly affected by a one metre rise in sea levels. Even a 50cm rise would displace an estimated 3.8 million people in Egypt's Nile Delta. In the UAE, rising sea levels could contaminate ground water, threatening food produce and soils. **Increasing extreme weather conditions:** Few things get people talking about climate change as

much as the apparent increase in extreme weather conditions. Scientists say climate change would



bring more of these extreme weather events to the Middle East. The region could see more events like Cyclone Gonu in 2007, which killed at least 50 people in Oman and created damage costing an estimated US\$4.2 billion. It was the strongest cyclone ever recorded in the Arabian Sea. More flash flooding is also predicted in Yemen.

Economic impact: As well as the immediate environmental impact of climate change, there is also predicted to be an effect on the regional economy. More frequent droughts, floods and heat would make agriculture even more difficult in one of the driest regions on earth. Places like Yemen have been told to expect more drought and reduced agricultural productivity. At the same time, coastal regions, where many of the major cities are found, could be threatened by sea level rises, affecting business and tourism. And, of course, any large switch away from fossil fuels could impact those economies in the region dependent on oil production.

"MIDDLE EAST: Talking about climate change", 27/11/2012, online at: http://www.irinnews.org/Report/96905/MIDDLE-EAST-Talking-about-climate-change



❖ GHANA: \$125 million seawater desalination plant breaks ground

International seawater desalination solutions provider Abengoa has broken ground for the \$125 million Nungua seawater desalination plant in Ghana, the first such project in west Africa.

The design, build, operate, own and transfer contract was awarded to Abengoa in April last year after the company signed an agreement with public water utility Ghana Water Limited Company.

According to Abengoa the agreement also includes the development of the necessary infrastructure for the seawater intake, the application of the ultrafiltration pretreatment system using proprietary technology, desalination using reverse osmosis, and the use of energy recovery.

Design details of the plant, which will be constructed over a 24-month period, shows that it will have the capacity to produce 60,000 cubic metres/day.

'Abengoa will be responsible for the design and construction of the plant, as well as its subsequent maintenance and operation for a 25 year period,' said Abengoa.

The Spanish company expects to recover project costs from water revenues estimated at \$1.3 billion by the end of the 25-year agreement period.

An estimated three million people in Accra, particularly such areas as Teshie, Nungua and Tema with perennial water shortages, will benefit from the project.

A previous government statement said: 'Teshie and its surrounding environs have for the past 25 years been experiencing acute water shortage which has become as a source of worry to most of the inhabitants as they have to travel long distances in search of water.

'The desalination project is expected to supplement shortfalls in water production in the Accra-Tema areas which require a minimum of 160 million gallons (608 million litres) of water every day but currently produces 80 million gallons (304 million litres) on a daily basis,' the statement said.

Abengoa says the Ghana desalination project will increase its installed water desalination capacity to nearly 1,200,000m³/day, 'sufficient to supply drinking water to more than 7.6 million people.'

"GHANA: \$125 million seawater desalination plant breaks ground", 26/11/12, online at: http://www.iwapublishing.com/template.cfm?name=news1393&utm_source=Water21+Mailing+Signup+form&utm_cam_paign=b48670e0d9-GND_27_November_2012&utm_medium=email



❖ Zimbabwe: Harare's Underground Water Under Threat

THE water table in Harare is fast dwindling and the city's boreholes may run dry if the uncontrolled drilling of boreholes continues, a recent report by a local geologist warns.

The report by Tim Broderick, a renowned geologist, notes that most of the rock material under Harare was notoriously poor for the development of underground water and the city should come up with plans to create artificial wetlands, while preserving the existing ones.

"The chaotic drilling of private boreholes in response to a failure in the regular supply of municipal water, notably across the northern suburbs of Harare, peaked through the years 2007 to 2009," the report reads.

"There would seem to be no doubt that the increased abstraction of groundwater through this dense array of borehole use is aggravating drawdown of the water table."

Following years of failure to provide tap water, the City of Harare, like many others, advised residents to start drilling boreholes and digging shallow wells.

Suburbs affected by serious water shortages include Mabvuku, Tafara and newer ones such as Mainway Meadows. In the more affluent neighbourhoods, residents also drilled boreholes to augment Harare's water supplies, which often dried out.

When running water is available, it usually comes out dirty and smelling of human waste, making it unfit for drinking purposes, even for other domestic chores.

Broderick says much of the southern portion of Harare, which includes Amby, Msasa, Waterfalls, Hatfield, Highfield and the western suburbs was situated on granite rocks, which made it difficult for the water to be accessed through boreholes, but is easily available through hand-dug wells.

These areas are, however, in the vicinity of wetlands and the digging of boreholes affects rain run-off into Harare's main water sources and this could affect the availability of water when there is a poor rainfall season.

www.ORSAM.org.TR



Broderick, in the report published by Kubatana, paints a gloomy picture of the abstraction of groundwater, suggesting that the Zimbabwe National Water Authority (Zinwa) should tax users of boreholes in an effort to preserve the resource.

"If borehole water users cannot recognise the excesses of their use of this delicately balanced resource through, say the over irrigation of gardens and road verges, then it is up to the subcatchment councils to earn their keep, provided for in the payment of quarterly 'monitoring fees' on registered boreholes, by enforcing the sound management principles provided for by the water law, regulations and standards that exist," the report reads.

"Zimbabwe: Harare's Underground Water Under Threat", 25/11/2012, online at: http://allafrica.com/stories/201211250383.html?utm_source=Circle+of+Blue+WaterNews+%26+Alerts&utm_campaign=3f0ed94857-RSS_EMAIL_CAMPAIGN&utm_medium=email



USAID Helps Rehabilitate Sana'a Schools

The U.S. Agency for International Development (USAID) organized a festival to celebrate the conclusion of a U.S. government-funded project to rehabilitate seven Sana'a schools by better preparing them to effectively use water.

The celebration was held in Ruqia School in Sana'a, and Minister of Education Dr. Abdulrahaman Al-Ashwal and representatives of USAID attended.

The project, which focused on the issue of water scarcity in Sana'a and in Yemen, implemented rooftop rainwater and collection systems and tanks. The water collected from the low roofs during rainfall is transferred to water tanks to be later used. These systems harvest rainwater for each school's gardens and restrooms.

The goal of rooftop water harvesting is to save water that would otherwise be wasted through runoff or evaporation.

Robert Wilson, the director of USAID in Yemen, said these projects are in-line with cooperation initiatives between the American and Yemeni governments to resolve water problems in Yemen.

"Given the critical water shortage issue that Yemen is facing, there is a serious need for water conservation and management techniques such as rainwater harvesting."

The rainwater collection technique is an easy, cheap way for collecting water from low roofs, which could result in many advantages, he said.

During the past eighteenth months, 69 schools nationwide were rehabilitated, and 17 more schools will have water collection systems installed.

Al-Ashwal told the Yemen Times that the school organized the festival to help teach students about methods for preserving water and about advantages of rainwater collection. Based on expert



opinions, the festival addressed how to take advantage of rainwater in Sana'a, as it is threatened by a drought.

Al-Ashwal said educating youth on important issues facing the country is the way toward building a new Yemen.

"USAID Helps Rehabilitate Sana'a Schools", 29/11/2012, online at: http://www.yementimes.com/en/1629/report/1675/USAID-helps-rehabilitate-Sana%E2%80%99a-schools.htm



Water security has improved when...

Dr. Danka Thalmeinerova, GWP's Knowledge Management Officer, wrote this blog after attending GWP's Expert Group Workshop on Water Security Indicators, November 20-21, 2012, at the GWP global secretariat in Stockholm, Sweden.

How do we know when water security has improved? That's a challenging question for policy makers who are responsible for making well informed decisions about national development. It's also an important question for investors and financial institutions so they can tailor investments to the best financial options.

Water security has been a subject of academic research for more than two decades. It is also GWP's vision. It is easy to visualize what a water secure world looks like: reliable water supply and sanitation services, free from floods and droughts, and enjoying nature along clean beaches. A water secure world integrates a concern for the intrinsic value of water together with its full range of uses for human survival and well-being. The simplest indicator of water security is that people have access to water. But what does it mean in practice?

GWP gathered 26 experts to look at developing water security indicators. Even though there were different approaches to what the indicators should be, one conclusion was inescapable: improving the way we manage water resources is a pre-condition to water security which is a prerequisite to other securities, be it food security, energy production, poverty reduction, economic growth, human health, and even national security.

Water and development planners at the Asian Development Bank recently developed the <u>Asia Water Development Outlook</u> that assesses five key dimensions of water security. These include satisfying households with water and sanitation needs, providing water for productive economic growth including food production, providing satisfactory water management services for cities including flood protection, restoring ecosystems, and improving communities' resilience to changes including climate change.

The presentation of the Overseas Development Institute emphasized the need to <u>adopt meaningful</u> <u>metrics when it comes to water security</u>. It is a challenge to balance political aspirations and technical feasibility. It was shown that measuring the level of water security is a game of numbers: sophisticated statistical methods are employed to illustrate different facets of water use and water services and tag them to other indicators such as GDP and the Human Development Index. Thus, indicators have a strong political dimension.

The University of Brasilia presented experiences from a watershed sustainability index as the indicator of water security in basins. Hydrological, environmental, livelihood and policy indicators



were analyzed and calculated in several basins in Brazil that were simulated for different scenarios of economic and social development.

Other presentations showed experiences from the Canadian Program for Water Governance made by the University of British Columbia regarding nine indicators ranging from water quantity and quality to ecosystem and human health, infrastructure and governance. A Wageningen University presentation focused on flood security that might be an undervalued aspect of water security. Madrid Polytechnic University presented the results on an assessment of good water status as ruled by the EU Water Framework Directive. Global and regional organizations such as UNECE, UN Water, and OECD have also developed several approaches to assess diverse aspects of water resources performance.

How much water security can we afford? This question, and others, led to animated discussion. Should tools of risk assessment and impact assessment used by banks and insurance companies tell us what the next development decisions should be? Are ambitious legal frameworks and robust water institutions a guarantee that we will improve water security? Can we – should we – reduce a long list of indicators into one or two that get buy-in from governments, especially in light of the post-2015 agenda working its way through the UN system? How do we influence that agenda now that there is a 'thematic consultation' on water?

The workshop did not answer any of these questions definitively. Rather, it said that more research, discussions and brainstorming are needed to have a better understanding of the multi-dimensional character of water security.

Which leaves me with one suggestion: work fast, time is running out!

"Water security has improved when...", 27/11/2012, online at: http://globalwaterpartnership.wordpress.com/2012/11/27/water-security-has-improved-when/



U.N. climate talks start in Doha

Modest expectations marked the start of <u>U.N. climate talks</u> Monday, as negotiators and experts all

warned that the two-week session would only lay the groundwork for a potentially ambitious global-

warming pact by the end of the decade.

This is "a transational climate conference," said <u>Todd Stern</u>, U.S. special envoy for climate change: It

will end the negotiations of the past five years and inaugurate a new phase in which major emerging

economies will be called on to play a larger role in curbing their greenhouse-gas emissions.

The session, taking place in Doha, Qatar, under the <u>U.N. Framework Convention on Climate Change</u>

(UNFCC), includes representatives from nearly 200 countries.

Aiming for the end of the decade may not be soon enough, say scientists, environmental activists and

many of the world's poorest nations. The world's governments must commit to deeper carbon cuts

now in order to avert dangerous climate impacts. Last week, the World Bank issued a

reportsuggesting that a temperature rise of 4 degrees Celsius (7.2 degrees Fahrenheit) by 2100,

which scientific forecasts say is possible, could cause widespread crop failures, malnutrition and

significant sea-level rise.

World leaders have pledged under the UNFCC to keep warming from exceeding 2 degrees Celsius

(3.6 degrees Fahrenheit) above pre-industrial levels by the end of the century.

A recent U.N. Environment Programme report projected that the emissions trend could produce a

global temperature rise of between 5.4 and 9 degrees Fahrenheit by the century's end.

"Time is running out," the UNFCC executive secretary, Christiana Figueres, told reporters at a news

conference in Doha. "The door is closing fast on us because the pace and the scale of action is simply

not yet where it must be."

On Monday, a coalition of 100 countries, including the Alliance of Small Island States, the Africa

Group and the Least Developed Countries, called upon industrialized nations to commit to legally

binding carbon cuts.



"This conference comes in the wake of disasters that offered an alarming glimpse at what life on a

warming planet looks like," the group said.

But much of the ongoing negotiations will focus on more procedural matters, such as determining

which countries will commit to a second round of emissions cuts under the 1997 Kyoto Protocol.

Any new Kyoto agreement will cover less than 15 percent of the world's carbon output: While

developing countries say a second round is critical, it will fail to change the global emissions

trajectory.

China's chief climate negotiator, Xie Zhenhua, recently said China's emissions could peak when its

per capita gross domestic product reaches roughly half of what it was when developed countries'

emissions peaked. According to an HSBC Bank analysis, that would be around 2030, more than a

<u>decade later</u> than scientists say would be required to meet the world leaders' temperature goal.

Pennsylvania State University professor Michael E. Mann, who directs the Penn State Earth System

Science Center, said policymakers have assumed if they kept atmospheric carbon concentrations at

450 parts per million they'd have a 50 percent chance of limiting temperature rise to 2 degrees

Celsius. But new research suggests the estimates were too optimistic about uncertainties such as the

extent to which future cloud cover will reflect sunlight.

"So often uncertainty is offered as a reason for inaction," Mann said. "It can really break against us.

It's an argument for why we need to take action."

While this year's round of talks is not expected to produce any major breakthroughs, the fact that the

United States is on track to meet its goal of reducing its greenhouse-gas emissions 17 percent below

2005 levels by 2020 and has provided \$7.46 billion in international climate assistance over the past

three years may give it some leverage with other countries.

Michael Wolosin, who directs research and policy at the consulting firm Climate Advisers, said the

funding amounts to a "very real and sustained increase in international climate finance by the United

States . . . even in a time of difficult fiscal pressures."



Still, Michael MacCracken, chief scientist for climate change at the Climate Institute, said the U.S. will have to make deeper cuts in emissions in order to show economic growth and reconcile low carbon emissions. "Developed countries need to show a modern economy can prosper on low greenhouse-gas emissions," he said.

"U.N. climate talks start in Doha", 27/11/2012, online at: <a href="http://www.washingtonpost.com/national/health-science/un-climate-talks-start-in-doha/2012/11/26/3510186c-37de-11e2-8a97-363b0f9a0ab3_story.html?wprss=rss_energy-environment&utm_source=Circle+of+Blue+WaterNews+%26+Alerts&utm_campaign=7a09b66355-RSS_EMAIL_CAMPAIGN&utm_medium=email



❖ UN climate change talks begin in Doha with call to build on existing agreements

26 November 2012 – Thousands of government representatives, international organizations and civil society members have gathered in the Qatari capital of Doha for the United Nations Climate Change Conference, which kicked off today with a call to build on and implement previously agreed decisions to curb global carbon emissions by the year 2020.

"We have a precious opportunity over the coming days, and we must make full use of it," said the President of the Conference of the Parties (COP 18), Abdullah bin Hamad Al-Attiyah, on the opening day of the talks, urging conference attendees to stick to agreed timetables and speedily implement already-agreed decisions.

The ten-day meeting brings together the 195 Parties to the UN Framework Convention on Climate Change (<u>UNFCCC</u>), the parent treaty of the 1997 Kyoto Protocol.

Under the Protocol, 37 States – consisting of highly industrialized countries and countries undergoing the process of transition to a market economy – have legally binding emission limitation and reduction commitments. Government delegates at the Conference will, among other goals, try to extend the Kyoto Protocol, which expires at the end of 2012.

In her opening remarks to the Conference, UNFCCC's Executive Secretary, Christiana Figueres, highlighted recent UN-led reports which point to the urgency of keeping global average temperatures from rising beyond an internationally agreed level of two degrees Celsius, beyond which climate change would have serious impacts.

Analysis published by the World Bank last week shows the world remains at risk of seeing a four degree Celsius rise in temperatures by the end of the century. In its recently-released 2011 Greenhouse Gas Bulletin, the UN World Meteorological Organization (WMO) said greenhouse gas concentration reached a record high last year, while the Emissions Gap Report by the UN Environment Programme (UNEP) warns that the gap between what is needed in terms of emission reductions to stay below two degrees Celsius and what is so far promised by countries is still widening, not decreasing.



Ms. Figueres stressed that countries can still reverse these trends if they decide to act, since the knowledge, technology and policy options needed to curb emissions are already available to them. However, she emphasized that time is running out.

"Expert analysis consistently says that we do have the possibility to keep on track and that to act now is safer and much less costly than to delay," she said. "In the last three years, policy and action towards a sustainable, clean energy future has been growing faster than ever. But the door is closing fast because the pace and scale of action is simply not yet enough. So Doha must deliver its part in the longer-term solution."

During a similar gathering in the South African city of Durban last year, 194 UNFCCC parties agreed on a package of decisions – known as the Durban Platform – which include the launch of a protocol or legal instrument that would apply to all members, a second commitment period for the Kyoto Protocol, and the launch of the Green Climate Fund, which was created to help developing nations protect themselves from climate impacts and build their own sustainable futures.

During informal talks in Bangkok, the Thai capital, in September, countries also set specific objectives for the meeting in Doha, which include triggering a new phase of climate action and filling in the gaps in the international policy response to climate change.

The Doha gathering will seek to meet the objectives set forth in another climate change meeting, held in Bali, and plan the work of the Durban Platform. In addition, it will address other issues such as deforestation, agriculture, and development and transfer of technology.

Climate initiatives in developing countries which have improved the lives of the urban poor will also be showcased at the Conference, as well as other innovative approaches to find solutions for climate change.

"UN climate change talks begin in Doha with call to build on existing agreements", 26/11/2012, online at: <a href="http://www.un.org/apps/news/story.asp?NewsID=43600&Cr=climate+change&Cr1=&utm_source=Circle+of+Blue+WaterNews+%26+Alerts&utm_campaign=7a09b66355-RSS_EMAIL_CAMPAIGN&utm_medium=email#.ULYrFORdbbV

BACK TO TOP



***** The Doha Climate Debate

As the delegates gather in Doha for this year's climate change talks, circumstances have changed in many ways in the twenty years since the UNFCCC was initiated. Negotiators need to bear in mind both that climate change is now a reality, and that mechanisms to slow the process have had very limited success.

Arctic Ocean sea ice has receded far faster than most scientific projections had assumed. Summer heat waves in Asia in 2010 and North America this year, numerous typhoons in recent years in the Asia Pacific, and now superstorm Sandy in the United States have made it clear that climate change is a matter of the present, not a matter of the future.

Unless things change very soon, the commonly agreed target of limiting global warming to 2 degrees Celsius will not be met. The difficult but important truth is that twenty years of discussions, the <u>Kyoto Protocol</u>, and plans for a successor agreement have not stopped the growth of greenhouse gases in the atmosphere.

It is now crucial to stimulate cooperative ventures that work to reduce emissions rather than merely offsetting them.

The focus on short-term economic costs and benefits in the negotiations between states has been to the detriment of any long-term collective action. These competitive stances—trying to avoid short-term relative costs in the economic calculations of emissions limits, offsets, and development mechanisms in a binding treaty—preclude either longer-term thinking or more cooperative ventures.

Assuming that states can sort out all the details in a single treaty hasn't worked so far, although it remains the ideal arrangement. It is also clear that there is no magic formula that will break the many logiams in the negotiations.

Climate change touches so many facets of human activity that it may simply be too complex to be encapsulated in a single treaty arrangement between states. Governing climate change may better lie in the possibility for lots of cooperative initiatives by corporations, municipalities, and other actors.



Constraining the emissions of greenhouse gases is essential, but much new thinking is needed about how to build new forms of economy not dependent on fossil fuels. While a binding treaty remains an important goal, it is now crucial to stimulate cooperative ventures that work to reduce emissions rather than merely offsetting them. The issue is now simply too urgent to wait for a perfect treaty.

"The Doha Climate Debate", ;Simon Dalby, 28/11/2012, online at: http://www.cigionline.org/articles/2012/11/doha-climate-debate



❖ Why we should fear the Amazonian tipping point

In a <u>series of blog posts</u> curated by the World Economic Forum's <u>Climate Change Initiatives</u>, a number of leading voices will present their perspectives on climate change. Contributions are linked to the Forum's <u>Green Growth Action Alliance</u> project and the Forum's <u>Global Agenda Council</u> on Climate Change. In the following post, Carlos Nobre, National Secretary of Research and Development Policies, <u>Ministry of Science, Technology & Innovation of Brazil</u>, and Juan Carlos Castilla-Rubio, Chief Executive Officer, <u>Planetary Skin Institute (PSI)</u>, share their perspective on climate change. Both are active in the Global Agenda Council on <u>Measuring Sustainability</u>.

Humans have been part of the vast forest-river system of the Amazon Basin for thousands of years. But, unprecedented agriculture expansion, logging and urban dynamics during the past decades are upsetting the fragile environment.

The human population of the Brazilian Amazon region increased from 6 million in 1960 to 25 million in 2010; forest cover for the region has declined to about 80% of its original area. Efforts to reduce deforestation, however, have led to steep declines in deforestation rates from nearly $28,000 \, \text{km}^2/\text{y}$ to $6,400 \, \text{km}^2/\text{y}$ ear in 2011.

The river system produces about 20% of the world's total freshwater discharge into the oceans. Forest biomass is estimated to hold about 120 billion tonnes of carbon – which is equivalent to 15 years' worth of 100% fossil fuel emissions – and forest ecosystems harbour about 15% of terrestrial biodiversity.

Maintaining the ecosystem function integrity of the Amazon and the ecosystem services it provides to local, regional and global communities will require a step change in understanding the vulnerability and resilience of Amazonia in the face of rapid change.

The notion of climate-induced Amazon "dieback" has recently attracted more and more attention. The core motivation for developing an early warning system to detect risk of large-scale Amazon dieback is that predictions of Amazon forest dieback and "savannization" urgently need to be improved and the risk needs to be quantified. Modelling-based studies anticipate thresholds not to be transgressed for avoiding an Amazonia tipping point: warming not exceeding 4°C in the Amazon and deforestation not exceeding 40%. So far, temperature increase is close to 1°C and total deforestation close to 20%.

We lack understanding of human-driven changes of Amazonian land-use patterns in the climate system. In 2010, Amazonia experienced a record-breaking dry year as it did in 2005 (two 1 in 100 year events). In 2009 and 2012, Amazonia experienced the other extreme with heavy flooding (two 1 in 500 year events). Do we fully understand what happened?

No. It seems that Amazonia is oscillating within two extremes. Could be an early indicator of system phase change? In ecosystems, transitions between these states are often one way, or nearly



irreversible and are many times preceded by oscillations between extremes. Studies have shown that this can happen for Amazonia, and that the less favourable stable state is one that resembles a savannah-type ecosystem.

Global climate change could negatively affect Amazon land cover over the next 30-50 years through a large scale dieback of Amazonian forests. Such a scenario would not only affect regional water resources and precipitation patterns, biodiversity and livelihoods, but also affect global climate as far as Europe and North America through alternations in energy exchange and circulation as well as through substantial emissions of greenhouse gases associated with forest loss.

Whether change comes gradually or suddenly, it is of great importance to enable early detection of any signals that point to substantive degradation. In addition to detection, there should be practical guidelines on appropriate response measures. Ambitious as it may be, an early warning system for detecting the risk of large-scale Amazon dieback is critically needed, decades in advance of any impending, sudden forest dieback. An early warning system should address in great detail the controlling aspects of these indicators.

In Amazonia, some systems are in place to monitor land-use change and rivers. However, there is little else operational to systematically monitor and integrate the state(s) of the climate, the biodiversity or even the regional economy.

We have the opportunity to develop an early view of more complex and dynamic land-change patterns by integrating advanced land-change geospatial mining approaches to better detect and characterize forest fragmentation and forest degradation dynamics historically and near real time Amazonia-wide (ALERTS).

"Why we should fear the Amazonian tipping point", 29/11/2012, online at: http://forumblog.org/2012/11/why-we-should-fear-the-amazonian-tipping-point/