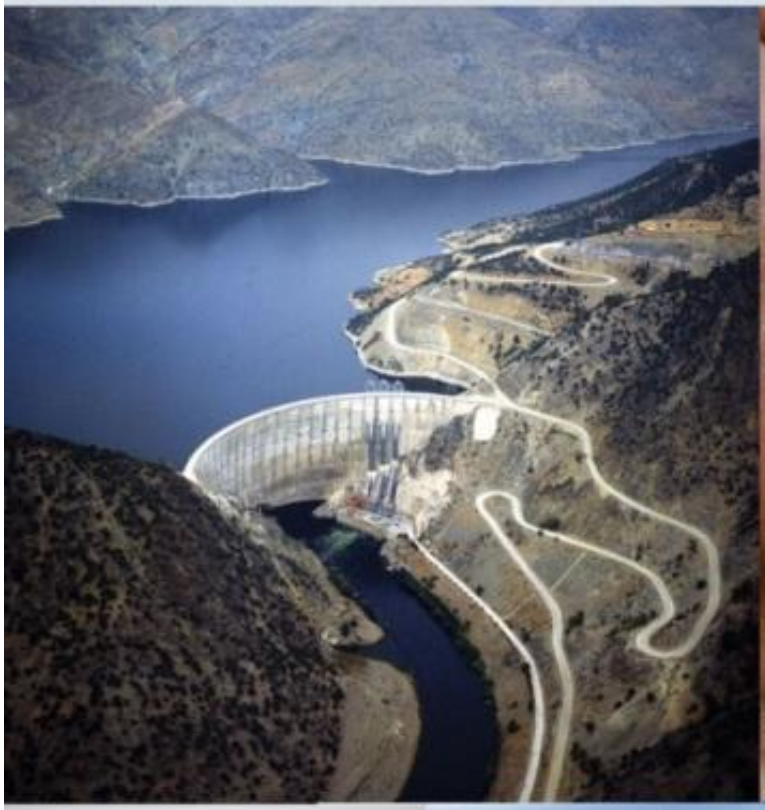


ORSAM WATER BULLETIN

Weekly Bulletin by ORSAM Water Research Programme

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





Issue 85

ORSAM WATER BULLETIN

16 July – 22 July 2012

- Darbankhan water refinery completed
- Iran Cuts Flow of al-Wind River
- Iraq examines reasons behind increase of dust storms and water scarcity
- Iran drying up Iraqi rivers, triggering environmental crisis: report
- Iranian VP Agree to Maintain Environmental Cooperation
- Concerns about quality of water in Tehran
- FACTBOX - Regions where water disputes are fuelling tensions
- Jordan Cuts Energy Use at Water Facilities
- Israel plans to revive ailing Jordan river
- Israel upgrades drinking water standards
- Israeli researchers find that gray water is safe for household use
- Israel, European Commission Agree to Expand Water Collaborations
- Palestine: Israel issues demolition order on two water cisterns
- OECD report lauds Israel's irrigation management
- Israeli soldiers confiscate water storage tanks on West Bank
- Desert dams to help restore badia ecosystem
- Hydroelectric technology unveiled in desert
- Construction of dams: government urged to take up issue with India
- India's CPCB Has Not Filed Bhopal Groundwater Report
- Indian Parliament Wants to Bring Water Issues Under Federal Jurisdiction
- U.S. Helps Fund Water Pump Replacement Program in Islamabad
- Water crisis in South Asia
- India Issues Third National Water Policy Draft as States Protest
- Nepal Perspective: Politics of Water in South Asia
- Morsi visits Ethiopia to seek unity in Nile nations over water

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

- **Kuwait, Algeria Partner for Desal Projects**
- **Saudi Development Fund Gives Egypt $80 Million USD for Irrigation**
- **China Looks to Increase Efficiency of Large-Scale Conservation, Irrigation Projects**
- **2.3 million affected in central China rainstorms**
- **Zimbabwe Kicks off Water Project with Help from China**
- **Chinese Exim Bank Lends Angola $500 Million USD for Water Treatment**
- **BEWG Signs Five Water Contracts in June**
- **Ningxia Transferring Water Rights to Fight Shortages**
- **Laos Delays Xayaburi Dam, But Allows Sitework, Resettlements to Continue**
- **Experts seek ways to avert water crisis in Dhaka**
- **Slum Upgrades Bring East African Countries Closer to Water, Sanitation MDGs**
- **Contract Award at Zimbabwe's Mtshabezi Dam Challenged in Court**
- **U.S. concerned about effects of Xayaburi Dam**
- **Xayaburi dam project commits 100 million dollars to redesign**
- **Mekong Legal Network explores regional strategies for hydropower, human rights and business**
- **Tibetan glaciers shrinking rapidly**
- **Ancient Maya Dam Found In Guatemala**
- **SIWI's New Director Seeks to Bridge Gaps Between Civil Society, Governments, Private Sector**
- **When National Disasters Go Global: Drought in the U.S., Food and Global Insecurity**
- **GCC Governments invest US$100 billion In Water Sectors To Combat Water Scarcity In The Region**
- **Thirsty South Asia's river rifts threaten "water wars"**

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

❖ Darbankhan water refinery completed

ERBIL, July 23 (AKnews) – All stages of the construction of Darbandikhan's water refinery have now been completed.

The refinery provides 1,000 cubic meters of water in one hour. The project will help the town's citizens to drink cleaner water and live healthier, according to a statement from the Kurdistan Regional Government.

A foreign company was supposed to complete the Darbandikhan refinery but left the project uncompleted. Local teams then finished the project.

Project engineer Hunar Mustafa said the project cleans water in five stages. From now Darbandikhan residents will have clean water to drink.

The town had problems with unclean water in the past.

The Kurdistan Region's Deputy Prime Minister Imad Ahmed congratulated the local committee in charge of the project.

"Darbankhan water refinery completed", 23/07/2012, online at: http://www.aknews.com/en/aknews/2/318163/

BACK TO TOP

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

❖ Iran Cuts Flow of al-Wind River

Iran has again has blocked the flow of water from the al-Wind [Wand, Alwand, Hulwan] river, in a move which has angered Iraqi farmers and citizens, according to PUKmedia.

Protesters are demanding that Iran release water into the river, saying their fertile land turning barren because of the repeated cuts and shortages in the river's flow during recent years.

Dozens of Iraqi farmers blocked a border crossing with Iran recently in protest at its diversion of the river which helps to irrigate one of their country's main agricultural regions.

Describing Diyala as "the breadbasket of Iraq", the report says that agricultural lands in the Khanaqin area of the province have gone dry.

The water flowing into Iraq is estimated at 0.25 square meters per second that has massively damaged the environment, sheep and agricultural sector in the region, according to the measurements of Khanaqin chamber of water resources.

"With the coming of summer with a high temperature, Khanaqin needs 6-7 cubic meters per second of water to irrigate the agricultural lands, gardens and supplying drinking water", Tahir Muhammad, head of Khanaqin water resources, told PUKmedia. Current flows are estimated at 0.25 cubic meters per second.

The 50-km-long tributary of al-Wind river flows from Iran and enters Iraq's Diyala province through the Khanaqin city near the border, before it flows into Diyala tributary, one of the five major tributaries that flow into Tigris River. Khanaqin was a key military post in the 1980-1988 war between Iran and Iraq.

"Iran Cuts Flow of al-Wind River", 17/07/2012, online at: **http://www.iraq-businessnews.com/2012/07/17/iran-cuts-flow-of-al-wind-river/**

BACK TO TOP

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

❖ Iraq examines reasons behind increase of dust storms and water scarcity

ERBIL, July 18 (AKnews) - Iraq is trying to ascertain the reasons behind the increasing dust storms and water scarcity in addition to ways to address climate change through a committee of experts.

Iraq suffers from frequent sand storms because of years of drought and the problem has increased in the past few years.

Head of advisers to the Prime Minister Thamer al-Ghadban said in a statement that the new committee held a second meeting attended by ministers and officials to "implement a national project to address this issue," adding that the committee will also discuss the increasing desertification in Iraq.

The expansion of desert areas increases the sand storms and often paralyzes life in any city in Iraq.

The water level in Tigris and Euphrates rivers decreased because dams were built on the rivers by neighboring countries, such as Turkey.

Iraq accuses its neighbors, particularly Turkey and Syria, of being behind the low level of water in Euphrates River because of dams to generate electricity, saying this is damaging the agricultural sector in Iraq.

"Iraq examines reasons behind increase of dust storms and water scarcity", 18/07/2012, online at: http://www.aknews.com/en/aknews/3/317592/

BACK TO TOP

❖ Iran drying up Iraqi rivers, triggering environmental crisis: report

The UK-based Institute of Development Studies (IDS) warned of an environmental catastrophe that might hit the eastern and southern provinces of Iraq if Iran keeps on tampering with Iraq's share of rivers that run through both countries.

The IDS report, obtained by Al Arabiya, stated that Iran stopped the flow of Alwand River, which runs from western Iran to eastern Iraq, for the past four years.

This caused the damage of around 10% of arable land and rendered the residents of several villages around the river homeless.

The production of several crops has also been greatly affected whether through quantity with a loss that amounted to 80% in some years or through quality that has witnessed a remarkable drop.

Iran, the report added, has also been pumping drainage water into several Iraqi rivers, which led to a rise in their salinity levels and in turn inflicted a substantial damage on marine life, basically demonstrated in the death of several fish species.

This also caused the migration of birds that lived in the area and the emergence of snakes which attack crops and kill livestock.

Iran has also diverted several tributaries of the Tigris River and built dams on others, which had a negative impact on the residents of provinces overlooking the river.

The report noted that the percentage of potable water in Iraq has dropped by 20% and is expected to drop to 40% over the coming 10 years if serious measures are not taken to stop the fast deterioration.

Turkey, the report explained, is also playing a role in the environmental crisis from which Iraq is expected to suffer. The construction of the Ilisu Dam on the Tigris River in southeastern Turkey will decrease the amount of water flowing to Iraqi land by 10 billion cubic meters a year.

The procedures taken by both Iran and Turkey are expected to decrease the level of fresh water on the Iraqi part of the Tigris by 70%.

According to the report, water problems in Iraq are aggravated by the change of climate in Iraq, where temperature could reach to 50 degrees Celsius and sand storms have increased by 30% during the past 30 years. Both factors have led to the desertification of large areas of arable land estimated at 2.8 million dunams.

The report stated that the Tigris River alone is currently losing 33 billion cubic meters every day which will lead to the drying of some of its parts within the coming 20 years. This, coupled with the remarkable decrease in rain water, triggered a critical shortage in potable water and drove Iraq to import water from the laboratories of Saudi Arabia and Kuwait.

The report pointed out, poses several questions about how Gulf nations that do not have rivers like

Iraq are capable of exporting water while Iraq, historically known as the Land Between Two Rivers, is not capable of providing its people with water.

Another problem, the report added, is the threat of power outage and which means the stoppage of desalination stations hence more shortage in potable water especially in the southern provinces which are already not getting enough.

The IDS said serious measures need to be taken on all those fronts in order to save Iraq from an environmental disaster that is bound to affect the land, the people, and the economy in the most negative way.

"Iran drying up Iraqi rivers, triggering environmental crisis: report", 17/07/2012, online at: http://english.alarabiya.net/articles/2012/07/17/226887.html

BACK TO TOP

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

❖ Iranian VP Agree to Maintain Environmental Cooperation

YEREVAN (Times.am) — Armenian President Serzh Sargsyan received the Vice President of the Islamic Republic of Iran, President of the Environmental Protection Organization Mohammad-Javad Mohammadizadeh. At the meeting, the interlocutors stressed the importance of cooperation between the Environmental Protection Organization of Iran and the corresponding agency in Armenia, considering the necessity of deepening cooperation on identifying, studying and addressing environmental problems. According to the parties, the resolution of the environmental problems is important for all the countries of the region which are obligated to use efficiently the water resources in the border areas, fight against the water and environmental pollution and abide by the environment protection rules. The President of Armenia and Vice President of Iran spoke about the joint monitoring and use of the waters of Arax River, implementation of the idea of creation the Park of Peace refuge in the Armenian-Iranian border area which will be preserved jointly. Discussed were also other issues of mutual interest.

"Iranian VP Agree to Maintain Environmental Cooperation", 18/07/2012, online at: http://www.ooskanews.com/daily-water-briefing/armenian-president-iranian-vp-agree-maintain-environmental-cooperation_23457

BACK TO TOP

❖ Concerns about quality of water in Tehran

Tehran City Council Chairman Mehdi Chamran said on Tuesday that officials in charge of Tehran water and sewage system have reported the replacement of chlorine water by bleach water in Tehran.

> *According to wikipedia page Water supply and sanitation in Iran Greater Tehran with its population of more than 13 million is supplied by surface water from the Lar dam on the Lar River in the Northeast of the city, the Latyan dam on the Jajrud River in the North, the Karaj River in the Northwest, as well as by groundwater in the vicinity of the city.*

Chlorination is the process of adding the element chlorine to water as a method of water purification to make it fit for human consumption as drinking water.

In an interview with the Mehr News Agency, Chamran said, "Officials have said consumption of bleach water is better than chlorine water and the city council has requested a complete report on the water quality in the first 6 months of the year after the implementation of the plan."

He went on to say that usually the quality of water in Tehran is not good when water reserves in dams are reduced and as a result the underground water should be used "but that is not the case right now and the dams are full of water."

"There have been times in Tehran when the level of water reservoirs has gone down so much that 48 percent of consumable water came from the wells," the councilor stated.

With regard to the quality of water in southern and northern Tehran, he said, "With the completion of the Mamlo Dam, the quality of water in south Tehran will improve and there will be no problem regarding the quality of water in various parts of the city."

Mamlo Dam, near Tehran, will provide drinking water for the capital city as well as irrigation of the farms.

Water bleach is a system of water purification which can be used in times of emergency. According to Washington State Department of Health, the following are ways of purifying water.

There are two primary ways to treat water: boiling and adding bleach. If tap water is unsafe because of water contamination (from floods, streams or lakes), boiling is the best method.

- Cloudy water should be filtered before boiling or adding bleach.
- Filter water using coffee filters, paper towels, cheese cloth or a cotton plug in a funnel.

Boiling

- Boiling is the safest way to purify water.
- Bring the water to a rolling boil for one minute.

- Let the water cool before drinking.

Purifying by adding liquid chlorine bleach

- If boiling is not possible, treat water by adding liquid household bleach, such as Clorox or Purex. Household bleach is typically between 5 percent and 6 percent chlorine. Avoid using bleaches that contain perfumes, dyes and other additives. Be sure to read the label.
- Place the water (filtered, if necessary) in a clean container.
- Mix thoroughly and allow to stand for at least 30 minutes before using (60 minutes if the water is cloudy or very cold).

"Concerns about quality of water in Tehran", 19/07/2012, online at: http://www.payvand.com/news/12/jul/1166.html

BACK TO TOP

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

❖ FACTBOX - Regions where water disputes are fuelling tensions

Disputes over water are common around the world, exacerbated by climate change, growing populations, rapid urbanisation, increased irrigation and a rising demand for alternative energy sources such as hydroelectricity.

Following are a few of the regions where competition for water from major rivers systems is fuelling tension.

SOUTH ASIA

India is home to three major river systems -- the Ganges, Brahmaputra and the Indus -- which support 700 million people. As an upstream nation, it controls water flows to Bangladesh to the east and Pakistan to the west. The Indus supplies some 80 percent of Pakistan's irrigated land.

India and Pakistan are both building hydropower dams in disputed Kashmir along Kishanganga river. Pakistan fears India's dams will disrupt water flows.

India, for its part, is concerned that China is building dams along the Tsangpo river, which runs into India as the Brahmaputra.

CENTRAL ASIA

Central Asia is one of the world's driest places, where, thanks to 70 years of Soviet planning, growing thirsty crops such as cotton and grain remain the main source of income for most people.

Disputes over water use from the Syr Daria and Amu Daria rivers have increased since independence in 1991. Problems are compounded by rising nationalism and lack of progress on a regional approach to replace Soviet-era systems of water management.

Kazakhstan, Turkmenistan and Uzbekistan need more water for growing populations and farming, while economically weaker Kyrgyzstan and Tajikistan want more control for hydropower and irrigation.

Afghanistan, linked to Central Asia by the Amu Daria, is claiming its own share of the water.

NILE BASIN

The countries of the Nile basin are Egypt, Sudan, South Sudan, Ethiopia, Eritrea, Uganda, Kenya, Democratic Republic of Congo, Burundi, Rwanda and Tanzania.

Egypt and Sudan control more than 90 percent of the Nile's waters due to colonial-era and other treaties but others in the basin want a bigger share.

Demand for irrigation has risen, with millions of hectares leased for large-scale farming. Dams have complicated access to water.

Water needs are expected to rise as the Nile basin population is projected to reach 654 million by 2030, up from 372 million in 2005, according to UN estimates.

TIGRIS-EUPHRATES RIVER SYSTEM

The Tigris-Euphrates basin is mainly shared by Turkey, Syria and Iraq, with many Tigris tributaries originating in Iran.

Iraq, struggling with water shortages due to aridity and years of drought, says hydroelectric dams and irrigation in Turkey, Iran and Syria have reduced the water flow in both rivers.

Increasing desertification, especially in Iraq, is compounding problems. A large amount of Euphrates' waters evaporate due to extreme heat. Contamination from pesticides, discharge of untreated sewage and excess salinity due to low water levels are all common.

Iraq, Syria and Iran want more equitable access and control from Turkey, where almost 98 percent of Euphrates waters originate. Despite some cooperation on common management, a final agreement has yet to be reached.

JORDAN RIVER BASIN

The river basin is highly stressed due to aridity in Jordan, Israel and Palestinian Territories.

All three discharge untreated or poorly treated sewage. The Mountain Aquifer - a key fresh water source for West Bank Palestinians and major Israeli cities - is threatened by decades of over-exploitation and groundwater pollution.

Despite efforts to cooperate, agreements to share water resources are complicated by the long-stalled Middle East peace process. Israel dominates the Palestinian water economy.

MEKONG RIVER BASIN

Most Mekong countries, especially China, have been planning and building hydropower dams since the late 1980s.

Thailand, Laos, Cambodia and Vietnam argue that China diverts or stores more than its fair share of water due to dam-building on the Upper Mekong.

There is growing concern about serious environmental damage to agriculture, fisheries and food security for some 60 million people due to plans by Laos and Cambodia to build more than 10 dams along the Lower Mekong.

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

Despite cooperation efforts by Cambodia, Thailand, Laos and Vietnam through the Mekong River Commission, national interests are getting in the way of joint river management.

Sources: Reuters, AlertNet, Institute of Peace and Conflict Studies, Brookings Institute, International Crisis Group, Nile Basin Research Programme, GRAIN, UNDP

"FACTBOX - Regions where water disputes are fuelling tensions", 23/07/2012, online at: http://in.reuters.com/article/2012/07/23/water-conflicts-idINDEE86M06N20120723

BACK TO TOP

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

❖ Jordan Cuts Energy Use at Water Facilities

AMMAN, Jordan — The Jordanian government last week unveiled a national plan to cut the amount of energy used at water treatment facilities.

The Ministry of Water and Irrigation said it would carry out a study to measure the energy used in the water sector, with the ultimate aim of reducing power consumption over the next few years.

The cost of energy used in water facilities nationwide totals $106 million USD annually, and it is expected to reach $120 million USD next year, according to ministry officials.

This constitutes a major challenge for the country's water and energy sectors.

"Studies show that we can cut energy costs in water facilities by $14 million USD annually," said Jordanian Water and Irrigation Minister Mohammed al Najjar.

"Energy bills at water facilities are increasingly becoming a heavy burden on the Water Authority. The energy bill of the Desi water project, for example, will increase by $7 million USD annually," he added.

The ministry will also launch a national plan to upgrade water pumping stations in order to save energy.

The Water Authority's annual budget is around $565 million USD, but its revenues are only about $212 million USD.

The government aims to bridge the gap in part by reducing energy bills.

The Jordanian government is planning to build a nuclear power plant to secure energy supply for water and other development projects.

The country's nuclear agency is currently seeking a strategic partner to fund construction of the plant; the government will contribute 30 percent of the cost.

The proposed nuclear plant will provide around 900 megawatts of power, which will be used to pump water from the Red Sea to the Dead Sea and to desalinate 800 million cubic meters of water annually and pump it to the Jordanian capital, Amman.

Jordan is ranked among the five most water-poor countries in the world. By 2020, available water resources are expected to meet only one-third of the country's needs, according to government estimates.

The kingdom already suffers from an annual water shortage of 500 million cubic meters.

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

It depends mainly on rainwater, and uses around 60 percent of its water resources (estimated at 990 million cubic meters per year) for agriculture.

"Jordan Cuts Energy Use at Water Facilities", 18/07/2012, online at: **http://www.ooskanews.com/daily-water-briefing/jordan-cuts-energy-use-water-facilities_23444**

BACK TO TOP

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

❖ Israel plans to revive ailing Jordan river

Once vibrant biblical river is struggling with pollution stagnant but authorities aim to use desalination, wastewater recycling to revive it.

The River Jordan is neither deep nor wide these days. The Biblical river, which has inspired countless spirituals and folk songs, is just a narrow stream in many parts – polluted and stagnant. But that is about to change.

Thanks to desalination and wastewater recycling, there is more fresh water to go around and the River Jordan will slowly be returned to its former glory.

From a dusty overlook in 40C degree heat, Ramon Ben Ari, head of Israel's Southern Jordan Drainage Authority, pointed to a spot where, years ago, water once climbed hundreds of metres when the river overflowed.

It was at the southern Jordan river, the Bible says, that the people of Israel crossed into the Promised Land. And in its waters, Christians believe Jesus was baptized.

Today, as a result of years of overtaxing for irrigation and drinking water, it snakes irresolutely along the valley from the Sea of Galilee to the Dead Sea. As far as the eye can see, it is just a few metres wide.

"It's five percent of what once flowed," said Ben Ari, who is one of the rehabilitation project leaders. "You can easily walk across without getting your head wet."

Almost all the water that feeds the river is diverted by Syria, Jordan and Israel before it reaches the south, he explained.

But for the first time, Israel – which is two-thirds arid and has battled drought since its establishment 64 years ago – has a water surplus.

This follows decades of massive investment in the country's water infrastructure. It re-uses 75% of its wastewater, mostly for agriculture, and by next year, 85% of drinking water will come from desalination plants.

The Israeli government has chosen to use this bounty to rehabilitate the country's rivers. The Jordan tops the list.

An average of 150 million cubic metres of water will be returned each year, said Energy and Water Minister Uzi Landau when he announced the plan a few weeks ago.

"That way in ten years, we will erase our debt (to nature)," he said.

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

Tourist hot spot

One of the most immediate benefits of this project will be a boost in tourism, which is at an all-time high in Israel.

An average of about 300,000 visitors arrive each month and about half of them are Christian pilgrims, said Tourism Minister Stas Misezhnikov.

"These pilgrims build their trip in the Holy Land around water. When the Jordan river is rehabilitated, it will directly influence their movement," he said.

Christians from around the world still flock to the Jordan to repeat the baptism ritual. But they can only do so at two dedicated sites. Even the simple ceremony could be dangerous in the rest of the river that carries waste and refuse.

The government plans to spend tens of millions of dollars to clean the Jordan river valley and develop it into an even bigger tourist hotspot, with campgrounds and lodgings by its banks.

A major wastewater treatment facility is already being constructed at the southern tip of the Sea of Galilee which, when opened in two years, will improve river water quality.

Another obstacle is that some areas on the bank of the southern river, which straddles the Israel-Jordan border, contain mines left over from years of hostility. After fighting two wars, the neighbors signed a peace treaty in 1994.

Clearing those areas, as well as turning the old military outposts into tourists sites, is part of the plan

"Israel plans to revive ailing Jordan river", 21/07/2012, online at: http://www.ynetnews.com/articles/0,7340,L-4257919,00.html

BACK TO TOP

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

❖ Israel upgrades drinking water standards

New regulations deemed 'strictest ever implemented' place Israel on par with US, EU

The Knesset's Internal Affairs and Environment Committee approved a new set of regulations pertaining to the quality of drinking water in Israel.

The new regulations, which have already been deemed the "strictest ever implemented" in the field, place Israel on par with the United States and EU nations.

The new standards intend to update the previous Public Health Regulations on the quality of drinking water, which were established in 1974.

Several key changes include mandating water suppliers to test taps in individual homes and institutions at the request of the consumer; publishing information regarding water quality on the supplier's website and the immediate report of any deviation from water quality levels.

One of the most controversial issues to be addressed during the meeting was the addition of fluoride to drinking water.
The Health Ministry insisted that fluoride must be added to water in order to fight tooth decay, but environmentalists and water experts argued that fluoride may cause a series of potentially serious ailments.

The committee eventually granted a one-year permit for the addition of fluoride to drinking water, at the end of which the issue will be reviewed again.

The Health Ministry also sought to add magnesium to desalinated water – a proposal that met the Water Authority's objections.

The committee agreed to set up an experimental facility at one of Israel's desalination plants and to review the matter again in three years.

Committee Chairman MK Amnon Cohen (Shas) said that the agreement was "historic": "The approval of water regulations will ensure that the water quality will be at the highest level of international standards for residents of Israel."

"Israel upgrades drinking water standards", 20/07/2012, online at: http://www.ynetnews.com/articles/0,7340,L-4258093,00.html

BACK TO TOP

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

❖ Israeli researchers find that gray water is safe for household use

Health Ministry opposition nixes plan for household recycling systems.

Scientists from the Technion - Israel Institute of Technology and Ben-Gurion University of the Negev have proven the efficiency of gray water purification systems and that people should be encouraged to use such water.

The project is one of the most comprehensive ever undertaken anywhere in the world to study the re-use of gray water - water that is generated in homes in laundry, dishwashing and bathing and can be recycled to irrigate gardens.

The study found that in most cases the quality of the water stored after treatment was very high. Among the categories checked were clarity, quantity of solids and concentrations of bacteria, which dropped after the addition of disinfectants, chlorine tablets and ultra-violet light.

An average household system supplies between 100 and 120 liters of water a day for irrigating the garden.

The findings have been presented to the Health Ministry, which, however, refuses to change its stance against the use of gray water in private homes. The ministry wants to see additional research on the health implications of recycling such water.

Use of gray water purifications systems are on the rise in Israel are are believed to be in use in 10,000 households. However, they are not approved by the Health Ministry, which is concerned about breakdowns in the system, and the ministry has issued no standards for use of such systems.

The new study, which was underway for nearly two years, was carried out by Prof. Amit Gross of Ben-Gurion's Zuckerberg Institute for Water Research, and Prof. Eran Friedler of the Faculty of Civil and Environmental Engineering at the Technion.

The study was funded by businessman Maccabi Carasso, who recently founded the Coalition for Gray Water Recycling in Israel, encompassing water experts and other scientists.

The study followed up 20 homes in various parts of Israel that used a gray water irrigation system developed in the Zuckerberg Institute. The system consists of two plastic tanks, one for purifying the water and the other for storing it. In case of a breakdown, the water flows to the central sewerage line instead of to the garden.

"We found that the system provides not only good-quality water, but the number of breakdowns is small and even when a breakdown occurs, the water does not reach the environment," Friedler said, adding that the soil itself was also checked and found not to have been harmed. "There were some cases in which water quality did not meet Health Ministry requirements and it is not at all certain that this was because of the gray water. It must be remembered that this can happen in any system," Friedler said.

The Health Ministry said in a statement that it was "in dialogue with the researchers," adding that they had held a meeting on the matter just last week. The Health Ministry said the research and the method have not proven that there is no risk in gray water irrigation, and that is why the ministry does not authorize such systems for private homes.

The ministry said it proposed that the researchers undertake a health-risk assessment compared to non-irrigation and irrigation with purified waste water throughout the country. "The researchers accepted the proposal and we will continue discussing the subject," the ministry said.

Friedler said the Health Ministry's concerns were "not unreasonable." However, he said they were being "a little strict in their quality demands" and that in a study of scientific literature no evidence of damage to health using gray water was revealed.

In recent years the Health Ministry has allowed the use of gray water recycling systems in public buildings, after demands were met for supervision and monitoring to prevent breakdowns. For example, some of the grounds of the sports center in the eastern coastal plain city of Shoham are irrigated with gray water.

"Israeli researchers find that gray water is safe for household use", 20/07/2012, online at: http://www.haaretz.com/print-edition/news/israeli-researchers-find-that-gray-water-is-safe-for-household-use-1.452354

BACK TO TOP

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

❖ Israel, European Commission Agree to Expand Water Collaborations

Israel and the European Commission agreed to a five-year plan to expand collaborative efforts to develop sustainable water supplies such as desalination and boost energy-efficiency efforts.

The agreement is an "important milestone in the progression of development between Israel and the EU," Prime Minister Benjamin Netanyahu said. "The more we cooperate, the more it will benefit our respective societies."

Renewable energy, smart grids, energy-saving measures and oil fuel alternatives are among the areas to be focused on in the accord, the EU said in a statement.

"Israel, European Commission Agree to Expand Water Collaborations", 16/07/2012, online at: http://www.bloomberg.com/news/2012-07-16/israel-european-commission-agree-to-expand-water-collaborations.html

BACK TO TOP

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

❖ Palestine: Israel issues demolition order on two water cisterns

On Tuesday, the Israeli army raided Al Qanoub area in Sa'ir, eastern Hebron and issued a demolition order on two cisterns used to irrigate land for the benefit of twenty people, of whom more than half are children.

One cistern owned by Basem and Omar al-Shalaldais is used to irrigate farmland of more than 10 dunums containing 210 seedlings.
The other cistern owned by the family of Shaher al Shalalda's is used to water 5 dunums of land planted with 185 fruit tree seedlings.

The two cisterns were built with the aid of the Improving Livelihood in the Occupied Palestinian Territories Program funded by the Netherlands Representative Office.

Palestinians are rarely issued with planning permission to build on their own land in the occupied territories, while illegal Israeli settlements are free to expand without restriction.

"Palestine: Israel issues demolition order on two water cisterns", 19/07/2012, online at: http://www.muslimnews.co.uk/news/news.php?article=22863

BACK TO TOP

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

❖ OECD report lauds Israel's irrigation management

Use of recycled sewage, desalinated water makes farming efforts more fruitful.

Israel's careful management of its agricultural water supply and its implementation of innovative water technologies have led to an increase in crop productivity, a report from the OECD and the UN's Food and Agriculture Organization has determined.

In a chapter on "Achieving Sustainable Agricultural Productivity Growth" in July's Organization for Economic Cooperation and Development-FAO Agricultural Outlook 2012-2021, the report reflects how Israel's use of efficient water systems has helped farmers become more fruitful in their produce.

The purpose of the overall Agricultural Outlook is "to build a consensus on global prospects for the agriculture, fisheries and food sectors, and on emerging issues which affect them," according to the OECD. Among the many chapters are global analyses and market projections for biofuels, cereals, oilseeds, sugar, meats, dairy products and fish and seafood for the 2012 to 2021 period.

Within the chapter on productivity growth is a section in which Israel appears, titled, "What farm practices can increase sustainable agricultural productivity growth?" The section uncovers that average productivity from natural rainwater in dry areas of North Africa and West Asia amounts to only about 0.35 to 1 kg. of wheat grain for every cu.m. of water, quoting an International Center for Agricultural Research in the Dry Areas paper drafted for a 2006 ICARDA meeting in Syria.

The ICARDA report found that with supplemental irrigation and good water management processes, that same cu.m. can produce 2.5 kg. of grain, but only looked at water efficiency systems in Egypt, Iran, Jordan, Lebanon, Libya, Morocco, Oman, Sudan Syria, Tunisia, Turkey and Yemen.

Just after mentioning these ICARDA statistics, athe report praises water management in Israel, noting that "agricultural use of water in Israel decreased almost continuously from the mid-1990s to the early 2000s," after which, the quantities became stable around 2008.

This overall diminished agricultural water use has caused agriculture's share of total water use to drop from over 70 percent in 1980, to 57% in 2005, to an expected 52% in 2025, the report says.

The increased use of recycled sewage and desalinated water has also contributed heavily to Israeli agriculture's significant decreased burden on the country's water supply.

While agricultural water use is expected to begin rising again by the year 2025, it will likely do so at a much lower rate than that of urban and industrial water.

One crucial component of the Israeli agricultural water system is the way the overall efficiency of the sector has been improved due to technological advancements in irrigation innovation.

"As a result of these improvements in agricultural water use efficiency, Israel is now a world leader in the management and technologies related to irrigation in arid environments," the report adds.

Drip irrigation, which was developed in Israel in the 1960s, has since become "the key innovation behind the rise in technical water use efficiency," and its use combined with the implementation of advanced sprinkler technologies have eliminated the need for flood irrigation.

Israel's substantial increase in water efficiency has also led to an increase in crop production "Better water management can generate benefits for health, agricultural and industrial production, and can preserve ecosystems and the watershed services they provide, thereby avoiding the enormous costs that can be imposed by flooding, drought or the degradation of watershed services," the report adds.

Another highlight refers to partnerships among small land holders and large companies that have led to productivity growth in Indonesia – for palm oil, rubber, sugarcane growth. A program initiated by Indonesia's Agriculture Ministry provides large, nucleus companies capital and long-term leases to state land, on condition that they provide incentives and credit and services to small land holders.

Additional systems featured for achieving increased agricultural productivity include a revamped urea fertilizer system used by Bangladeshi rice farmers, and zinc fertilizer boosters for increasing grain yield in Central Anatolia, Turkey

"OECD report lauds Israel's irrigation management", 18/07/2012, online at: http://www.jpost.com/Sci-Tech/Article.aspx?id=277873

BACK TO TOP

❖ Israeli soldiers confiscate water storage tanks on West Bank

EIN AL HILWA, WEST BANK // These rocky foothills are a forbidding place even for the scattered Bedouin communities that have herded livestock here for generations. Yet it is not the summer heat that is threatening their way of life.

Last month, Israeli soldiers began confiscating water-storage containers used by Bedouin in several pastoral encampments on the northern fringes of the West Bank's Jordan Valley area.

No explanation was given to the dozens of impoverished residents, who have since been rationing their already scarce water supplies and tending to thirsty livestock.

But no explanation was needed. Many here see the confiscations as the latest Israeli tactic to put pressure on Bedouin and Palestinian residents to leave this resource-rich area.

"Water is the source of life. Without it, how can we live here?" said Mohammed Aleyan, 34, a shepherd from Ein Al Hilwa encampment.

He said the soldiers came without notice and handcuffed him and his 15-year-old nephew before emptying water containers and leaving with the mobile tanks.

Because the encampments are denied access to Israeli utilities, the Bedouin have had to bring in water from distant springs by lorry.

Fatimah Ka'abne, a mother of seven aged in her 30s, said that some women pleaded with the soldiers to stop "but they threw us to the ground". She said: "They laughed at us."

The incidents highlight the broader struggle over the Jordan Valley and its fertile fields and substantial supplies of underground water.

The vast area, essential for a viable Palestinian state, forms more than a quarter of the West Bank, which Israel has occupied since 1967. Under the 1993 Oslo Accords, Israel was allowed to directly administer more than 60 per cent of the West Bank - including most of the Jordan Valley.

Little remit was granted to the Palestinian Authority (PA) and that may never be increased.

Few expect Israel to relinquish control any time soon, said Shlomo Brom, a fellow at the Institute for National Security Studies in Tel Aviv.

Israelis had begun to question the ability of Jordan - which maintains a peace treaty with Tel Aviv - to police its boundary with the Jordan Valley.

"The situation in Jordan is more chaotic than it used to be," Mr Brom said.

Jordan - like Egypt, the other Arab country that has a peace treaty with Israel - has formed an integral pillar to Tel Aviv's regional security.

Israel's prime minister, Benjamin Netanyahu, echoed this sentiment last year, reaffirming his position that Israel must retain a long-term military presence in the Jordan Valley in the event of a peace deal with the Palestinians because "Israel's line of defence begins here".

In the meantime, Israel has been expanding Jordan Valley settlements and extracting disproportional amounts of water from aquifers.

The area's 37 settlements, home to about 9,500 residents, control an estimated 86 per cent of Jordan Valley land. Much of that is used for an extensive network of farms. So much, in fact, that Jordan Valley settlers use about a third of the annual amount of water available to all 2.5 million West Bank Palestinians, according to the Israeli-rights watchdog of the occupied Palestinian territories, B'Tselem.

Some Jordan Valley Bedouin survive on 20 litres a day, which B'Tselem describes on its website as barely meeting the World Health Organisation's standard for "short-term survival".

For Palestinians, the reason for such disparities is clear. Before the Israeli occupation began, between 200,000 and 320,000 Arabs, both Palestinian and Bedouin, lived in the Jordan Valley. Now, that number is about 56,000.

"They want to kick us out of the Jordan Valley and concentrate us in the cities," said Ibrahim Sawaftah, a Palestinian activist in the area.

Many non-Jews have left the valley because of Israel's policies of home demolitions and military exercises in the area.

Demolitions have increased over the past year. In 2011, Israel demolished 212 Palestinian structures in the area, displacing 432 people, according to statistics provided by the Displacement Working Group, a collection of non-governmental organisations and aid agencies.

Even though human-rights organisations say demolitions violate obligations under international law as an occupying power, Israel argues they were built without permits. Obtaining such permits is practically impossible for Palestinians.

Days before confiscating water containers in encampments in and around Ein Al Hilwa, soldiers demolished two Bedouin structures and conducted military exercises. Israel designated these areas as firing zones in the 1970s, rendering their inhabitants - including those living in the area before then - illegal.

Muna Aleyan, 36, her seven children and neighbours were last month forced out of their encampments by soldiers for a training exercise. They were allowed to return the following day.

"We had to leave all our possessions, and they just threw us in the street like animals," she said.

A few days later, the soldiers came again to confiscate their water, Mrs Aleyan said. She added that soldiers had for several years blocked their access to a nearby spring, forcing them to pay higher sums for water shipped in from other West Bank areas.

"They don't do this to the Jews," she said, pointing to the Israeli settlement of Maskiyot on the adjacent hilltop.

The coordinator of government activities in the territories, a branch of Israel's defence ministry that operates in the West Bank, said that the water confiscations were punishment for the "expanding phenomenon of water theft" from mains in the area.

It did not mention whether anyone had been charged with a crime.

Officials from the PA have intervened by giving new storage containers and mobile-water tankers to families in the area. Mr Aleyan said he was able to provide water for his family and his sheep because of the PA's assistance.

Given the restrictions, he doubted how long that would last, citing a comment made to him by an Israeli soldier who confiscated his water tank.

"I asked: 'What do you want me to do now'?" Mr Alayan recalled. "The soldier looked at me and said: 'You can leave'.

“Israeli soldiers confiscate water storage tanks on West Bank”, 19/07/2012, online at: http://www.thenational.ae/news/world/israeli-soldiers-confiscate-water-storage-tanks-on-west-bank#page2

BACK TO TOP

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

❖ Desert dams to help restore badia ecosystem

AMMAN — Fifteen desert dams with a total capacity of two million cubic metres will be established in the northeastern badia by 2013 to provide local communities with permanent water resources, according to officials.

The desert dams will be established under two agreements signed on Sunday between the ministries of environment and water and irrigation, with the aim of rehabilitating damaged badia ecosystems and introducing water harvesting schemes in the arid area.

The agreements, worth around JD2.150 million, will raise the efficiency of rainwater harvesting and also rehabilitate several artesian wells to supply local communities and their livestock with water, according to the officials.

"The desert dams and rehabilitated wells will be used for agricultural purposes and for watering livestock. In addition, water from the wells will be desalinated and treated in the northeastern badia for drinking purposes," Minister of Water and Irrigation Mohamad Najjar said on Sunday.

The desert dams and ponds are part of a project for the rehabilitation of natural pastures in the northeastern desert.

The agreements are funded by the environmental compensation granted to the Kingdom by the United Nations Compensation Committee (UNCC).

In 2005, the UNCC awarded Jordan $160.5 million in compensation for damage incurred to the country's water, environment, wildlife, marine life and agriculture in the aftermath of the first Gulf War, in addition to $1.4 million to tackle the salinity of underground water basins.

The funds will be used to support projects that focus on returning the badia's ecosystem to its pre-1990 status and address the negative consequences of random grazing and wildlife deterioration. "The Badia Restoration Programme is progressing according to schedule and so much achievement can be seen on the ground… several projects will also be implemented in the badia in the future, including projects to improve veterinary services," Environment Minister Yaseen Khayyat said during Sunday's signing ceremony.

Khayyat underscored that several other agreements will be signed within the next two months with different ministries and local institutions to rehabilitate the badia's ecosystems, increase its green cover, improve the productivity of pastures and raise the efficiency of livestock production.

The Badia Restoration Programme focuses on improving the area's vegetation cover and biodiversity, providing veterinary services for livestock, managing pastures, introducing water harvesting techniques and cultivating fodder.

"Desert dams to help restore badia ecosystem", Jordan Times, 17/07/2012, online at: http://mideastenvironment.apps01.yorku.ca/?p=5435

❖ Hydroelectric technology unveiled in desert

Leviathan Energy unveils a new hydroelectric technology that operates not in outdoor dams but in underground pipes.

In the middle of the arid Negev desert, just minutes from the Gazan border, Leviathan Energy unveiled a new hydroelectric technology that operates not in outdoor dams but in underground pipes, where it is fine-tunable according to changing pressure of the pipe flow.

The Jerusalem Post was on a tour of the company's testing site at Kibbutz Re'im, where the parts for the system are manufactured at the on-site kibbutz company, Isralaser.

Leviathan's new hydroelectric turbine – called the Benkatina Turbine – can operate inside a water pipe, taking the excess pressure from the piping system and turning it into electricity, according to the company.

Unlike in a dam, where water flow conditions and pressure are stable, the water flow inside a pipe is variable, and Leviathan's machinery makes use of only the pipe's excess pressure to maintain the system's integrity, explained CEO and founder of the company, Dr. Daniel Farb, who was not actually onsite at the day of the launch.

"In spite of these challenges, we are here today to celebrate the fact that we have achieved 55 percent efficiencies even at very low flow rates, and we expect higher efficiencies, closer to that of traditional hydroelectric power, as we continue to test higher flows and develop the next round of engineering," Farb said in a statement.

Isralaser, whose office parking lot contains a massive water pipe transformed into a kassam-rocket shelter, provides Leviathan – and many other bodies across Israel – with laser beam cutting and water-jet slicing of metals, to quickly mold and meld metal products.

Although around 60% of Isralaser's clientele is military, the firm also has many private civilian customers, and never shuts down production even in the midst of falling rockets, according to marketing manager Eron Ron.

Isralaser is in charge of assembling every part of Leviathan's products, from its new hydroelectric developments to its small, tulip-shaped vertical wind turbines.

Outside assembly and in practical use and implementation, three trial phases of the hydroelectric apparatus have thus far occurred, two in Mekorot National Water Company pipelines and one in Malagos, the Philippines, Avner Farkash, vice president of research and development and chief engineer for Leviathan, explained at the launch meeting, also attended by the Energy and Water Ministry's chief scientist.

Commercially, employing such a system could allow industries to reduce their electricity bills, as the system can inject useable electricity into the grid and thereby provide a feed-in tariff to customers, according to Farkash.

For both agricultural sites in Israel and remote villages in India or Africa that do not yet have electricity, the system could provide a much needed source, he added. In addition, the inpipe hydroelectric apparatus could be a homeland security tool, as it can act as an undercover supply of power.

The generators, Farkash said, have a supply capacity of anywhere between 20 and 60 kilowatts of energy, and the flow of the turbines is constantly "tunable."

The company is hoping to conduct a full-fledged pilot project of the system in cooperation with Hagihon municipal water supplier in Jerusalem, so that it can further prove the efficiency of its techniques, said Joe Van Zwaren, vice president for business development.

"This is a technology that can be quickly implemented, assuming complete cooperation on all fronts, throughout the country to help relieve the electricity shortage by next summer," Farb said. "Furthermore, it is completely clean and functions on current infrastructure."

"Hydroelectric technology unveiled in desert", Jerusalem Post, 17/07/2012, online at: http://mideastenvironment.apps01.yorku.ca/?p=5424

BACK TO TOP

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

❖ Construction of dams: government urged to take up issue with India

Farmers Associates Pakistan (FAP) expressing its concern on rapidly developing water shortage and India's building of dams on all rivers including Indus in total contravention of the Indus Water Treaty, has urged the government to immediately take up the issue with India.

'In fact the government should link awarding of MFN status to India with the settlement of water issue.' It also demanded immediate building of Kala Bagh Dam, otherwise India will deprive Sindh of water from River Indus, the FAP members observed at the 120th Extra Ordinary General Body meeting held recently with Hussain Jehania Gardezi in the Chair. Besides FAP President Tariq Bucha a large number of farmers from all over Pakistan attended the meeting.

FAP President Dr Tariq Bucha while throwing light on various matters discussed in the meeting said that the farmers attending the meeting criticised the wheat procurement policy of Punjab government and PASSCO (under the control of Federal Government) and described the recent procurement procedure as coercive and exploitative besides being anti farmer and full of corruption.

They said that farmers were running from pillar to post due to the government's decision as it threw the farmers at the mercy of Patwaris, resultantly the small farmers became unable to sell their produce (Wheat) at government support price. The government official on duty for procurement completed their procurement drive from middle man/Arthies proving this system to have failed and promoted corruption rather than transparency.

Farmers said the government should have as suggested by FAP much before the present procurement to involve the real stakeholders for the real participation of stakeholders by involving private public intervention. The farmer body also felt that for the next year government should allow free trade of the wheat to the farmers as the pre conditions set by Punjab food department and followed by PASSCO resulted in corruption without any real benefit to the producer**.**

"Construction of dams: government urged to take up issue with India", 15/07/2012, online at: http://www.brecorder.com/agriculture-a-allied/183/1216191/

BACK TO TOP

❖ India's CPCB Has Not Filed Bhopal Groundwater Report

NEW DELHI (Two Circles) — The Central Pollution Control Board (CPCB) has failed to file a report in the Supreme Court on the status of groundwater contamination at the Union Carbide plant site in Bhopal, an environmental group said Sunday. The pollution control board was asked by the apex court to submit the report by June 4 but in a letter to Toxics Watch Alliance (TWA), Vijay Panjwani, Supreme Court lawyer for CPCB, said that the report is not yet ready. "CPCB would file report (on groundwater contamination by Dow's Bhopal plant) as soon it is ready. There is no reason for CPCB to hold back or delay filing of report on contaminated groundwater near the Union Carbide plant in Bhopal," the letter said. According to the TWA, test results of the groundwater samples after the rains will not be credible due to dilution by rains. "Although the deadline has been over by more than a month, the report with regard to the removal of contamination of the ground water in the area where the factory is situated has not been filed," said Gopal Krishna of TWA. Krishna said the report in question is of huge significance and involves public interest. "This will reveal the status of the adverse impact of industrial disaster in UCC's Bhopal chemical pesticide plant. All the environmental and human rights groups concerned with the issue are anxiously waiting for the report," he said. TWA has requested CPCB to submit its report latest by July 31, 2012. "In case of CPCB's failure, legal action will be pursued to ensure that Supreme Court's orders are complied with," he added

"India's CPCB Has Not Filed Bhopal Groundwater Report", 17/07/2012, online at:http://www.ooskanews.com/daily-water-briefing/indias-cpcb-has-not-filed-bhopal-groundwater-report_23438

BACK TO TOP

❖ Indian Parliament Wants to Bring Water Issues Under Federal Jurisdiction

NEW DELHI, India — As water availability drops throughout the country, and shared water resources become a contentious issue between states, Indian parliament members are suggesting putting water issues under greater federal control.

Currently, water is regulated by state governments.

At a special meeting in New Delhi on July 14, MPs suggested that federal involvement could lead to more efficient coordination of water management throughout the states.

But they acknowledged that some "safeguards" would be needed to protect the interest of states.

"Water is a national resource, therefore, the state governments should not have the sole right over it," local media quoted one MP as saying after the meeting.

Hindu Bhartiya Janta Party (BJP) MP Gyan Prakash Pilania, was quoted by The Indian Express newspaper as saying: "We have unanimously recommended that water must be a subject included in the Concurrent List (of legislate powers shared by the state and federal governments). The division of authority often leads to dilution of responsibility and ineffective coordination which results in not proper, efficient and equitable management of water."

If the committee's recommendations are accepted, the federal government will have a stronger hand in addressing inter-state water disputes and dealing with issues like river-linking.

Federal Minister of Water Resources and Parliamentary Affairs Pawan Kumar Bansal said an over-arching national legal framework for water issues was needed to pave the way for essential legislation on water governance in every state.

The country also needs to move towards transparent and participatory water pricing mechanisms through independent water regulatory authorities, he added.

Bansal expressed concern over the drop in the groundwater table across the country, noting that current laws situation give every landholder the right to pump unlimited quantities of water from borewells. There is no regulation of groundwater extraction and no coordination among competing users, he said. Inadequate and sub-optimal pricing of both power and water is promoting continued misuse of the resource.

He suggested treating groundwater as a common property resource held by the state under public trust.

Aquifers should be mapped to quantify water availability and give the community the information they needed to manage these resources and ensure water security, he added.

"Indian Parliament Wants to Bring Water Issues Under Federal Jurisdiction", 20/07/2012, online at: http://www.ooskanews.com/daily-water-briefing/indian-parliament-wants-bring-water-issues-under-federal-jurisdiction_23495

BACK TO TOP

❖ U.S. Helps Fund Water Pump Replacement Program in Islamabad

The U.S. is helping fund a water pump replacement program in Islamabad to improve water supplies in the Pakistani capital and reduce power consumption.

USAID country director Jonathan Conly and Capital Development Authority Chairman Farkhand Iqbal replaced the first pump yesterday at Fatima Jinna Park as part of a $1.2 million aid project, the CDA said in a statement.

The CDA has 187 tube well pumps in Islamabad. Only 132 are working, the rest being out of order in a city suffering from water shortages. Those still working operate with less than 30 percent efficiency, raising electric bills and failing to provide enough water for residents, the CDA said.

Replacement of the pumps will save about 2 megawatts of electricity, enough to power 4,500 Pakistani households, it said. The AID project follows one in which the agency and Ministry of Water and Power helped 2,600 farmers replace pumps.

"U.S. Helps Fund Water Pump Replacement Program in Islamabad", 18/07/2012, online at: http://www.bloomberg.com/news/2012-07-18/u-s-helps-fund-water-pump-replacement-program-in-islamabad.html?utm_source=Circle+of+Blue+WaterNews+%26+Alerts&utm_campaign=71ff6d729d-RSS_EMAIL_CAMPAIGN&utm_medium=email

BACK TO TOP

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

❖ Water crisis in South Asia

THIS is with reference to the letter 'India's water war' (July 5). The ongoing various dams and hydropower projects of India, which are in violation of the 1960 Indus Waters Treaty, reflect that water crisis in South Asia has been assuming serious shape that needs urgent attention.

If this issue remains unnoticed and unaddressed at the policy level, it could lead to a big debacle in future in South Asia.

This region is confronted with various issues related to water. All those need timely resolution in effective and sustainable way.

As International Rivers Network has indicated in a report, South Asian basins hydrologically depend on China. The main river systems, the Indus, the Ganges and the Brahmaputra are all connected to the Tibet Autonomous Region (TAR) of China. The headwaters of all these rivers, except the main Ganga River, rise within a few hundred kilometres of each
other, in the south western region of the Tibetan plateau.

China has various ongoing designs of dam construction and hydropower plants. In November 2010, China officially confirmed the construction of the 510MW Zangmu hydropower project at Gyaca County in the Shannan Prefecture of TAR. Reportedly, five other dams are under consideration on the river and its tributaries.

Moreover, there are reports of south-north river diversion projects to feed the water scarce northern region of China.

Secondly, it is an appalling fact that both India and China have plans to establish inter-basin water diversions to meet their water and energy needs.

Such hydrological dependence of South Asian countries on China and India, which have plans of damming water in the backdrop of the economically and demographically imbalanced status of the region, marked with lack of potential multilateral treaties and denial from international mechanisms, could most possibly create the inter-sate conflicts
that may lead to regional wars.

Even the existing bilateral treaties doesn't seem to carry the potential to stop the race of constructing dams by upstream countries created out of need of water and energy and the fear of dwindling water sources of in future.

All this put together is an alarm call to South Asian countries to bring multilateral arrangements under the guidance of internationally-accepted norms of inter-basin water sharing.
Moreover, they should ratify the UNCIW as the probability of potential conflicts and resultant wars in future in the region could be averted.

Saarc could be the platform for developing multilateral arrangements dealing with co-basin sharing.

"Water crisis in South Asia", 16/07/2012, online at: http://dawn.com/2012/07/16/water-crisis-in-south-asia/

❖ India Issues Third National Water Policy Draft as States Protest

India, with about 17 percent of the world's population, issued a third draft of a National Water Policy after states objected to the division of federal and local legislative powers governing the use of water.

The draft follows efforts in January and May to devise a nationwide legal framework regulating water in a country that has only 4 percent of the world's renewable water resources, India's water resources ministry said.

With a growing population, rising agricultural needs and difficulties with wider access to safe water for drinking and domestic demand, "there is a felt need to evolve a broad overarching national legal framework of general principles on water to lead the way for essential legislation on water governance in every state," the ministry said last month.

The latest draft echoed that statement, focusing on the need to manage water as a community resource amid a national legal framework, Press Trust of India said.

"India Issues Third National Water Policy Draft as States Protest", 18/07/2012, online at: http://www.bloomberg.com/news/2012-07-18/india-issues-third-national-water-policy-draft-as-states-protest.html

BACK TO TOP

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

❖ Nepal Perspective: Politics of Water in South Asia

Indo-Pak Relations and Perceived Threats:

In South Asia, the Indo-Pak issues regarding fresh water problems are like hot cakes. During the last two-three decades, India and Pakistan have had hot disputes regarding the Indian water projects in J&K. It has gained momentum. Pakistani leaders have begun to describe India as their eternal enemy and accuse India of trying to suffocate the Pakistani economy. Pakistani leaders have often been seen as carrying an element of anti-Semitism, blaming India for acting through national and international conspiracies. Pakistanis intellectuals say that India is planning a water bomb, "what it could not achieve through three wars wage over the past decades".

The intellectuals and experts have warned that if India's planning of 52 new dams over the rivers is achieved, Pakistan will face the worst famine and economic disaster it has ever seen till date. Pakistan may soon face a severe water crisis. India's strategic wanting is making Pakistan another Somalia, economically feeble, so that its control over south Asia will be unquestionable. Regarding Baglihar dam, Pakistani General Athar Abbas has described the same as a defense security concern.

Thus India has been using water as a weapon in South Asia. It also has achieved military-economic and political supremacy due to sheer pressure on its weaker and poorer neighbors. Not only Pakistani intellectuals and politicians, but also other throughout the world have warned that the water issues between the two nations may incite a nuclear war: 'Water is as much a nuclear flash point as is Kashmir now. Unfortunately if such a war happens naturally, it will be the direct concern/effects of problems between the neighboring nations and thus it should be the concern of all the members of the UNO.

What I can suggest to India and Pakistan is that the interests of both the countries are so closely linked, that they can be protected only by establishing closer ties on morality based and humanitarian grounds. Failure to do so, will of course, bring more episodes; the episodes on discord of river waters, over toxic dumping in drains, over illegal border crossings and even declaring a war.

India after constructing over 62 dams in the India Occupied Kashmir area alone, has contributed in making the situation critical in the region. For, India considers Pakistan as a great hurdle against its

hegemony against the countries in the region. Even after 131 rounds of talks over the correct implementation of the 1960 Treaty which bore no fruit so far, India has been constructing dams illegally and violating the Treaty. So there is no way out than to go for war. For this reason Pakistan will try to liberate Kashmir first. China may come in support of Pakistan. Bangladesh and Nepal will provide moral support in this effort of Pakistan.

A potential way out of the prevailing water crisis between the two countries is to address all issues that cause all misunderstandings including the Kashmir issue bilaterally, regionally or through the UNO.

Indian Attitude:

India has an attitude of being a big brother/bully in the region, this attitude it seems, it has borrowed from the British, since it was colonized by Britain for hundreds of years. Therefore, it has been unable to resolve any of her boundary disputes with her neighbors. Its northern border is in a state of constant hot and cold war with China. India has fought wars with China. China at present is busy just to upgrade the economic standards of its people. The Indo-Nepal border disputes and the issue of Greater Nepal are in a state of never ending situation. India's disputes with Bangladesh pre-dates the birth of the country. Her attempts to bifurcate Sri Lanka were defeated when its agent was killed. It has already fought three wars with Pakistan and this has not ended the problems, rather they have been added. India aims to turn Pakistan into a desert and Nepal into an entity having no rights upon its own water resources. Moreover India has disputes with Bangladesh over the Farrakha Barrage, with Nepal over the Mahakali River, with Pakistan over the violation of the 1960 Indus Water Treaty. In this way, India has been escalating its water terrorism as in Iran and Afghanistan through the Salma dam on Hari Rud

River, which flows into Iran and which help to appease the USA. After expelling the nationalistic sides from power, it has now become easy for the Indians to handle Nepal through its agents in political power. The upper Karnali, the Arun 3 and the West Seti are its glaring examples.

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

The Asian region has surpassed the rest of the world due to Indian expansionist agenda. India has also persuaded Afghanistan to create a water reservoir on the river Kabul, a tributary of the Indus basin.

The Chinese Scenario:

(a) The massive Three Gorges project is expected to be completed in 2030. This multi-purpose project will produce 18,500 MW of electricity and will contribute to flood control through the construction of a 39 billion cubic meter capacity pond and water transportation facilities. This is an inspiration to all on how to produce cheaper electricity. The NRs 1.9 per unit cost to farmers and NRs 2.25 per unit cost to non-farmers is indeed a great achievement. India's river linking project is also inspired by this project.

(b) Should Nepal become free from corruption, it could sell electricity at a cost not exceeding NRs 3 per unit at the current price index.

The Indian Scenario:

(a) The constant flip-flop policy of India, though justified, is particularly detrimental to Nepal. Its ill-informed reactions to Nepal start since 2007 BS. But the South Block's original flop reaction is understandable: it was naturally reluctant to write-off its political investments made by it in various political party bosses here. Examples include the Mahakali and the Bhutani refugee imbroglio, the trade and transit treaty, the so-called development aid to Nepal, citizenship issues and the 12 point political pact made between the then terrorist Maoist party and the Seven agitating parties in the mediation of India.

(b) The rosy dreams seen by Nepali intellectuals as generating millions of dollars of revenues to Nepal through the export of hydroelectricity, irrigation and potable water to India has been an unfulfilled vision because of India's game of water politics. Instead such Indian tactics have adversely affected Nepal's politics and economics, making Nepal only a ***de jure*** sovereign country. Regrettably, Nepal's water resources appear to be the inherent cause for the country's problems associated with foreign interference.

(c) In early May 2008, the Policy Planning Division of the Indian Ministry of Foreign Affairs organized a meeting in Patna, in which 40 Nepali delegates led by the CPN-Maoist participated. Along the emerging new trends of Indo-Nepal relations, the meeting focused on Nepal's water resources. Some participants voiced that Bihar would only require 10, 000 MW of electricity within the next few years. Nepal could export hydropower and have revenues of around Rs 250 billion annually. This argument was made by a member of the Nepali contingent who also participated in a similar dialogue in Gangtok in April 2008. In his inaugural speech, the Bihar Chief Minister, proclaimed — "... the economy of Nepal will increase manifold as Nepal has the potential of producing 85,000 MW hydro-energy which it could sell to India". Coincidentally, the generation target of the CPN-Maoist is also the same. How the Maoist would mobilize the required funds to achieve this goal is a difficult question, but of no particular importance; the crucial question is how they can get rid of the Indian grip on Nepal's resources. The Karnali project had failed during King Birendra's regime mainly because of Nepal's denial to put the main grid in Indian territory.

(d) On 1 April 1990, at the time Indian Foreign Secretary put a draft proposal to late King Birendra to have similar powers like the king of Bhutan. King Birendra rejected the proposal arguing that it was preferable to be a powerless King of a sovereign and independent country than a powerful King under foreign domination. The main concerns underpinning the Indian proposal were water resources and defense.

Nepali Scenario: a question to the Nepali political leaders:

(a) Whether it was the Mahakali Treaty or the Bhutani refugee imbroglio, the West stood in phalanx behind the South Block. Why would the self-styled paragons of liberal democracy and good governance so unequivocally allow the resumption of power by plutocrats without forcing them to face the popular vote? In the Enron-like Dhabol deals of Bhote Kosi/Khimti, Nepali consumers have been forced to pay double the electricity rates while European and American investors and contractors walk away with the windfall. In the Kali Gandaki scam, Rs 12 billion was doled out for a Rs. 7 billion civil contract, with the major beneficiary being European and American contractors instead of the Nepali electricity consumers. Interestingly, in Middle Marsyangdi, the story has been repeated. In the partnership between Western aid agencies and party-led NGOs in Nepal, the details are normally overlooked. The crucial question is: would Nepali cognoscenti be wrong in explaining

this anomaly to the hypothesis that Europeans and Americans, too, have benefited from the plutocracy of the 1990s."

(b) Nowadays colonialism has taken the form of a virus, changing its shapes according to each situation. The 1950 Treaty of Peace and Friendship and the Koshi and Gandak Agreements signed thereafter represent these forms of colonialism. This attitude is guided by power and money instead of the democratic principle promoting the will of the majority of the people.

(c) The Chinese Three Gorges project reveals that the production cost of electricity can differ up to 10 times due to corruption.

(d) It has been long time since India has shown great interest in Nepal's water resources in order to meet its own demand for potable water, irrigation facilities, and electricity, given that the electricity generated from coal and uranium cannot last India for more than half a century. Moreover, India does not want Nepal to utilize its water resources on its own or with the financial and technical support from other countries and, thus, India plays a big role in sabotaging some major hydro-projects initiated by Nepal. In short, RAW and Indian bureaucrats are planning to grasp Nepal's water resources at any cost.

(e) Nepal's hydropower is the driver of India's development projects. India is also interested in small and medium projects and would like to obtain the Karnali, Upper Tamakosi and Upper Karnali hydro-power projects at the earliest.

(f) As the amount of farmlands that Nepal possesses is limited, India contends that Nepal does not require water for irrigation and that it is only India which needs water for consumption purposes. This argument is also linked to the Bhutan model and India's river-linking project. India has strategic plans to ensure its access to river water in order to meet the needs of the vast, yet not irrigated, agricultural lands in the northern and southern provinces. India purposefully displays ignorance so that it may achieve its goals without fulfilling its commitments made at international forums and towards the South Asian Region. It has also left issues un-discussed relating to climate, environment and natural disasters. Indian still claims that "We still do not fully understand the ecosystem and river systems of the region".

Indian experts have repeatedly argued that India can meet its energy needs from other sources; however, the country has no alternative when it comes to water for irrigation and potable purposes. Nepal is aware of this reality. It wishes to retain on a rational basis its ownership over water resources and subsequent revenues. In contrast, India wishes to obtain ownership through other means, hence the conflict arises due to:

(1) Special agreements; (2) Security measures; (3) Politicizing issues through political parties; (4) Convincing people through the mass media; (5) Patchwork development projects designed through RAW, (6) Limit Nepal's benefits to just 10 percent. (g) The Indian Interlinking of Rivers Project is mainly concerned with the irrigation, potable and power production purposes. The project has two components; the first one includes 14 Himalayan river links in India's northern areas, while the second component is to have 16 peninsular river links in India's southern regions. The Himalayan river links are the Ganga and Brahmaputra components, in which Nepal and the upper riparian country in the Ganga basin are the major contributors. As the perennial providers of water, India cannot ignore or bypass its neighbors.

The project, which is estimated to cost over US $ 118 billion, is primarily expected to provide internal water security to the Indian people living in areas known for water scarcity and water-induced disasters. Additionally, Indian authorities envisage in bringing around 35 to 37 million hectares of farmland under irrigation, to generate 34 billion KW of electricity, control floods in flood-prone states and also enhance the country's navigational efficiency. India appears to have been inspired by China's south-north water diversion project, which is being carried out at a cost of US $ 60 billion.

Some analysts argue that the interlinking of rivers is purely a scheme made to benefit various bureaucrats and politicians. The scheme tempering with the natural river systems can pose a threat to the region. Some Indian sections have particular water interests and favor the "garland canal scheme". Whether India will alter its position and seek a beneficial outcome for all parties concerned, primarily those countries with water resources, is an entirely different matter.

Ever since the commencement of the feasibility studies, India has been in confrontation with environmentalists who oppose the construction of large dams and embankments. As Indian laws

provide for the issue of water to be dealt with by individual states, the process of consultations on this through federal initiative is yet unclear. The Hindu daily, a prominent Indian newspaper, recently wrote, "This is an issue of state government and no state government is ready to take up." If this is the issue of state governments, the neighboring countries will face complications in addressing such issues. However, the task force on the interlinking of rivers may expedite work for the project, which was first mooted in 1982.

The neighboring countries only complain while allowing India to exploit this situation. These include Bangladesh, Nepal, China, Bhutan and Pakistan. They do not think India alone can take a decision on natural resources of other countries but unless they unite and come to a strong conclusion with specific long-term policies, their opposition will only make newspaper headlines.

The Interlinking of Rivers Projects is not in the interest of Nepal and Bangladesh but concentrates only on Indian benefits. In contrast, Nepal proposes the vast water resources to be used for common purposes and to the benefit of regional countries. In order to achieve this goal a solid policy should be formulated with a SAARC team, including China.

(h) Let us ask a question to those who claim to be servers of the nation. "May all Nepalis know Mr. Koiralas, Mr. Dahals, Mr. Khanals, Mr. Yadavs, Mr. Thapas and other leftists, rightists or so called nationalists, do you know much about Nepal, Nepalis and Nepal's water resources? Of course, you people have traveled all over Nepal like late king Birendra used to do. But there is a lot of difference between you and him. Late king Birendra used to travel to localize the developmental activities and accelerate the pace of development projects. But you so called leaders, we realize, travel in the same fashion just to pray tribute in the demise of your local leaders and cover their corpse with the party flag, or if wounded, to rush them to the hospital in Katmandu or activate them in the nonproductive/destructive jobs such as Banda, Gherao and so on and so forth, or train the local workers in the closed door sessions and how to make money out of forests, local development projects, commissions and other business in the name of levy for smooth running of the party.

"You leaders, do you have any vision regarding the holistic approach of development including the proper use of water resources of Nepal'? Have you drawn any plans as how to produce cheaper hydro power than that of the Kingdom of Bhutan and or The Three Gorges Dam of China? If you are pro

Indian, you need to learn from Bhutan, if you are pro Chinese you need to learn from China, if you are a genuine nationalists, you need to present a framed national main policy to the people of Nepal as how you can generate the cheaper electricity through Nepali capital to displace the huge import of the petroleum products; attractions for the revolution of the industrial sectors generating employments In millions and raising the standard of living of the people en masse. Also, how can you use water for agro production and safe drinking water and how you plan to export the remaining water in a well-managed system without destroying the ecological and environmental factors of your own country?"

Failing to manage fresh water right now, sooner or later, a water war will start.

"Nepal Perspective: Politics of Water in South Asia", 21/07/2012, online at: http://www.telegraphnepal.com/national/2012-07-18/nepal-perspective:-politics-of-water-in-south-asia.html

BACK TO TOP

❖ Morsi visits Ethiopia to seek unity in Nile nations over water

CAIRO // Egypt's new president, Mohammed Morsi, was in Addis Ababa yesterday, amid tense relations between the two countries over the Nile river.

Egypt and Sudan, which rely on the Nile river for nearly all their water needs, are in a deadlock with the other Nile Basin countries, including Ethiopia, over rights to use the water.

During the political chaos after Egypt's Hosni Mubarak was forced to resign as president last year, Ethiopia announced it was moving ahead with an enlarged version of its US$4.8 billion (Dh17.6bn) Grand Ethiopian Renaissance Dam - Africa's largest hydroelectricity project.

Egyptian officials believe the dam, under the specifications revealed, would drastically cut the amount of water available and cause economic and humanitarian problems in Egypt.

Ethiopia is home to the source of the Blue Nile, which flows downstream to Sudan and then farther north to Egypt. The Blue Nile contributes the majority of the river's water from the point it meets the White Nile outside Khartoum, the Sudanese capital, and all the way north to Egypt's Mediterranean coast.

The two-day visit of Mr Morsi to Ethiopia was itself a milestone. Mubarak refused to return there after he narrowly escaped an assassination attempt by Islamic extremists in Addis Ababa in 1995.

Mr Morsi began his visit yesterday with a speech at a meeting of the African Union, where he said that Egypt needed the support of African nations to "rebuild" and called for a stronger "African market".

"I would like to officially announce that Egypt has a desire to work towards a common African market," he said. "Egypt will use its human and financial resources to ensure that. We stress our concern with education, health, construction and development."

His diplomatic overtures hinted at Egypt's growing concern that Nile Basin countries were moving ahead with development projects that would cut the flow of water to Egypt and Sudan.

The Grand Ethiopian Renaissance Dam would cause "political, economic and social instability", said Mohamed Nasr El Din Allam, who was Egypt's minister of water and irrigation from 2009 until early last year, in an interview in March. His dire forecast came after Ethiopia announced its dam would be dug to a depth of 150 metres, compared to the earlier specification of 90m, to provide more electrical power and water for irrigation projects on new farms.

Depending on the speed with which Ethiopia could flood its dam, the problems could range from bad to devastating, he said.

Ethiopia, one of the world's poorest countries, is seeking to become a power exporter with a series of dam projects over the next several years.

Disputes over water rights among the 10 countries that form the Nile Basin have been simmering for years.

Egypt receives 55 billion cubic metres and Sudan receives 18.5bn cubic metres per year, under a series of agreements that date back to a 1929 treaty drawn up by Britain when it held power over much of North Africa. But upstream countries, such as Ethiopia, have argued that those agreements, which give Egypt and Sudan veto powers over projects that could be "harmful" to their interests, were signed during the colonial era, and should be rewritten to allow countries to equally share in the river's economic potential.

A framework for discussions, the Nile Basin Initiative, was set up in 1999 to establish an equitable agreement among the countries.

However, the talks have are in limbo because of Egypt and Sudan's unwillingness to negotiate their current share of the water and insistence on keeping veto rights.

Ethiopia, Uganda, Tanzania, Rwanda and Kenya signed an alternative deal, known as the Entebbe Agreement, that said projects could be built as long as they don't "significantly" affect the water flow. Egypt called the agreement a "national security" threat.

Ethiopia in particular has become increasingly confrontational with Egypt. Prime minister Meles Zenawi said in a television interview in 2010 that "some people in Egypt have old-fashioned ideas based on the assumption that the Nile water belongs to Egypt … The circumstances have changed and changed forever".

The dispute between Egypt and Ethiopia calmed somewhat after the two sides agreed last year to create a technical committee to assess the impacts of the dam. A report is not expected until next year.

Egypt's main diplomatic tool in negotiations is its ability to lobby foreign donors and international organisations to withhold financing for the dam because of the adverse impacts on its economy. Ethiopia has issued bonds to raise money for the dam, but cannot finance it alone.

"Morsi visits Ethiopia to seek unity in Nile nations over water", 16/07/2012, online at: http://www.thenational.ae/news/world/morsi-visits-ethiopia-to-seek-unity-in-nile-nations-over-water

BACK TO TOP

❖ Kuwait, Algeria Partner for Desal Projects

ALGIERS, Algeria — Kuwait and Algeria last week announced a strategic partnership to cooperate on desalination projects.

The announcement was made at the Kuwaiti-Algerian Common Technical Committee meeting in Algeria on July 12.

"Kuwait's expertise in desalination is one of the widest in the world. This partnership will involve implementing major desalination projects and deploying state-of-the-art desalination technologies in the two countries," said Mohamed Rashed al Bahou, an official at the Kuwaiti Ministry of Electricity and Water.

Zaidan Mirah of the Algerian Water Resources department added that "Kuwaiti authorities will help us upgrade 12 desalination plants nationwide."

The partnership will also give a boost to research on desalination and encourage cooperation among companies that operate desalination facilities in both countries.

Kuwaiti water agencies will deploy technologies like reverse osmosis in Algerian plants. The aim is to reduce the amount of energy used to operate the plants.

For many years, Algeria has been unable to secure adequate water supply, as residential and industrial demand has significantly surpassed the amount of water available.

The problem has grown as more than 2.5 million rural dwellers have migrated to the capital city, Algiers, over the past five decades, putting increasing strain on the city's water supplies.

The government recently adopted a national plan to build a number of new desalination plants.

The Ministry of Water Resources is currently constructing its 13th desalination plant in the city of Wahran. The plant will produce 2.2 million cubic meters of water per day when it starts operations by the end of this year, according to Algerian officials.

Most Algerian desalination facilities use Spanish, Singaporean or American technologies and operation systems.

The Kuwaiti government has launched a number of desalination projects over the past few years to meet its own increasing demand.

The country's population hit 3 million in 2010 and is expected to reach 5.5 million in 2025.

Per capita water consumption is up to 110 gallons per day.

The country has six operating desalination plants that provide about two-thirds of its drinking water needs.Kuwait's produces 278 million gallons of desalinated water per day.

"Kuwait, Algeria Partner for Desal Projects", 17/07/2012, online at:
https://mail.google.com/mail/?shva=1#inbox/13895963f0437c0b

BACK TO TOP

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

❖ YEMEN: Water fights spark concern over refugee influx

SANA'A, 20 July 2012 (IRIN) - Somali refugee Asmaa Abdullah, 35, and her three children, have been struggling to get water for more than a year in the run-down Safia neighbourhood of the Yemeni capital, Sana'a.

"We arrive at al-Usaimi water tap [supported by a charity] before locals, but are pushed to the end of the queue. Sometimes I queue for three or four hours to fill my container."

But Abdullah says she dares not argue for fear that she might get beaten up.

Water shortages, which have been worsening since serious political unrest began in February 2011, are causing friction between locals and refugees in Sana'a, according to the police.

"Arguments and scuffles between African refugees and local citizens over water have become a daily scene in this slum [Safia]," said Mohammed al-Behish, head of Safia police station, adding that many water disputes go unreported.

"Last week, a Somali woman came to us, bleeding from her nose, claiming she was beaten up by three Yemeni women. In the same week, a local resident reported to us that his daughter was hit by two Ethiopian women at the tap," al-Behish said.

The slum-dwellers queue at the tap to get water free: Most cannot afford trucked-in water, the price of which has doubled in the last 14 months, Yahya al-Sanabani, a long-term adviser to parliament's utilities' committee, told IRIN.

In Safia, where it is estimated a quarter of the 65,000 residents are Africans, the state water supply system gets cut off for more than 10 days at a time, said Khalid al-Kharbi, a local water company official.

Residents receive water for a few hours every 10 days, al-Kharbi told IRIN. "Many women and children are sneaking into mosques at prayer times to fill their containers," he added.

Government concern

The government recently expressed concern about overburdened public services caused by the daily arrival of 160-200 refugees and immigrants from the Horn of Africa.

The Interior Ministry said the number of African immigrants and refugees in Yemen exceeded one million, and that more than 50,000 new arrivals, mostly from Ethiopia and Somalia, entered Yemen in the first half of 2012.

The UN Refugee Agency (UNHCR), however, put the total number of refugees officially recognized by the government at 220,000.

In 2011, some 75,651 Ethiopians, 27,350 Somalis, and 153 persons from other countries arrived in

Yemen by boat, said Edward Leposky, an external relations officer with the UN Refugee Agency (UNHCR) in Yemen. "This trend has continued in 2012," he added.

"The worst thing is that these African refugees or immigrants concentrate in densely populated cities such as Sana'a, which is expected to run out of water in less than a decade," said parliament committee adviser al-Sanabani.

Ame Abdi Shaboo, chairman of the Oromo Refugee Committee, told IRIN that refugees and immigrants from the Horn of Africa have no choice but to head for the cities. "Most of them work as domestic helpers or car cleaners to earn a living; this work cannot be found in rural areas," he said.

Yemen is one of the most water-scarce countries in the world. A 2012 Rural Water Sector Survey showed that 30 percent of water supply systems were not working, said a report by the UN Office for the Coordination of Humanitarian Affairs (OCHA).

"On average, 140 cubic metres of water are available per person per year in Yemen, compared to an average 1,000 cubic metres per person in the Middle East and North Africa region," it said.

Sana'a has been predicted to run out of economically viable water by 2017.

"YEMEN: Water fights spark concern over refugee influx", 20/07/2012, online at:
http://www.irinnews.org/Report/95907/YEMEN-Water-fights-spark-concern-over-refugee-influx

BACK TO TOP

❖ Saudi Development Fund Gives Egypt $80 Million USD for Irrigation

CAIRO, Egypt — The Saudi Fund for Development (SFD) has allocated $80 million USD for irrigation projects in Egypt, Egyptian officials announced on July 17.

The funds will be used to replace and renovate old irrigation and wastewater pumping stations throughout the country, in line with Egypt's national plan to overhaul its aging irrigation infrastructure.

"The projects funded by SFD aim at increasing the efficiency of irrigation facilities and improving their capacity," said Egyptian Minister of Irrigation and Water Resources Hisham Qandil.

They "are also meant to increase productivity and space of agricultural lands nationwide, cut operation and maintenance costs at pumping stations, and cut energy consumption."

Specifically, the funds will be used to renovate old pumping stations serving more than 81,000 hectares of agricultural land and to build a number of new pumping stations in southern Egypt over the next four years.

Earlier this year, German development bank KfW provided the Egyptian water ministry with a soft loan of $100 million USD to finance the Integrated Irrigation Improvement Project, which aims to improve irrigation on some 83,000 hectares of agricultural land in the Delta governorates of Gharbiya, Kafr al Sheikh, and Beheira by building or rehabilitating irrigation and drainage systems as well as improving irrigation canals.

The ministry also signed a protocol with Spanish consulting firm SOCOI back in February to carry out a three-year assessment of old irrigation facilities like reservoirs, pumping stations, barrages and canals.

The results will be used to draft a plan for dealing with old irrigation facilities in the country by 2050.

"Saudi Development Fund Gives Egypt $80 Million USD for Irrigation", 20/07/2012, online at:
http://www.ooskanews.com/daily-water-briefing/saudi-development-fund-gives-egypt-80-million-usd-irrigation_23488

BACK TO TOP

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

❖ China Looks to Increase Efficiency of Large-Scale Conservation, Irrigation Projects

BEIJING, China — Agricultural projects in China that involve water conservancy measures and energy saving may see more government approvals in the second half of the year.

China is drafting a plan for construction of demonstration projects to increase the efficiency of large-scale, water-saving irrigation in the next five years, according to a report this week in the China Securities Journal.

Further details of the plan have not been released yet.

But China's efforts with regard to irrigation development are not confined to its own borders.

Cambodia's Minister of Finance Keat Chhon said on July 17 that China had been the largest provider of financial assistance to Cambodia for agriculture and irrigation development in the last three years.

From 2010 to the present, he said, Cambodia has received total loans of $561 million USD and total grants of $22 million USD from South Korea, India, China, Japan and France.

"Of the amount, China's soft loan to Cambodia is $436 million USD," he told an economic conference at the National Assembly. "We show that China is playing a very important role to promote Cambodia's agricultural development and irrigation system construction."

Chhon said this financial assistance is vital for developing his country's agricultural sector, which has made strides but is still volatile.

Effective irrigation and natural resource management systems are still urgently needed to achieve sustainable agricultural growth and poverty reduction, since the agricultural sector is the main source of income for the country's poorest inhabitants.

Total water use in Cambodia is estimated at approximately 750 million cubic meters per year, and by far the largest portion is used for irrigation.

"China Looks to Increase Efficiency of Large-Scale Conservation, Irrigation Projects", 20/07/2012, online at: **http://www.ooskanews.com/daily-water-briefing/china-looks-increase-efficiency-large-scale-conservation-irrigation-projects_23**

BACK TO TOP

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

❖ 2.3 million affected in central China rainstorms

CHANGSHA, July 18 (Xinhua) -- About 2.3 million residents have been affected and 42,000 evacuated over the past week as China's central Hunan province was battered by the largest rainstorm this summer, local authorities said Wednesday.

Heavy rains also damaged 123,000 hectares of croplands and destroyed 3,921 rooms in 11 cities across Hunan, the provincial flood control and drought relief headquarters said in a statement.

In the 24 hours to 8 a.m. Wednesday, rainstorms mainly lashed four cities and a prefecture in northwestern Hunan, with a town in the city of Jishou receiving the largest rainfall of 236.5 mm.

Due to the rainstorms, water levels in several major reservoirs have been pushed up to 7.3 meters higher than the warning level. Meanwhile, parts of several county seats have been submerged in flood waters.

The local authorities in northwestern Hunan have been urged to brace for further rain-triggered disasters as more rains are forecast on Thursday.

"2.3 million affected in central China rainstorms", 18/07/2012, online at: http://news.xinhuanet.com/english/china/2012-07/18/c_123431076.htm?utm_source=Circle+of+Blue+WaterNews+%26+Alerts&utm_campaign=6b7e014cd1-RSS_EMAIL_CAMPAIGN&utm_medium=email

BACK TO TOP

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

❖ Zimbabwe Kicks off Water Project with Help from China

The national Matagbeleland Zambezi Water Project will be built in Bulawayo, Zimbabwe's second largest city, by an enterprise from China. At the launching ceremony held late this week, Zimbabwean officials say the much-awaited project will benefit the local residents in many ways. CRI's Long Kun has the story.

The Zimbabweans have been planning the national Matagbeleland Zambezi Water Project ever since the 1980s as many areas in the country are faced with drought. But due to political instability and lack of funds, the project has been shelved for a long time

Samuel Nkomo, the Southern African country's Water Resources Development Minister, expresses his excitement over the launch of the project, thanks to the helping hand of an enterprise in northeastern China's coastal city of Dalian. He believes the Chinese company can play a large role in helping upgrade local water conservancy facilities.

"The infrastructure, which was built ages ago, is rotten. The pipes are underground. We need to renew our infrastructure. Dalian will bring new infrastructure. And they are also going to build a large reservoir and plant. So, I am excited about it, and I am thankful."

Chairman of the water project foundation, Dabengwa adds there has been very little rainfall over the past 5 years in Bulawayo, and that this year a drought from Uganda to the bottom of South Africa has left cattle dying and people no food. The official says he is happy to see the project come to fruition.

"It means all the problems that (people) suffer from the climate changes, in this country, particularly in this part of the country, are going to be over in three years. And therefore, that would mean a big change in their lives, at least there would be a reliable income that they will be getting from the crops. They now know that they will always have water. And they will be able to get a crop out of their fields."

Ignatius Chombo is the City and Rural Development Minister. He is looking forward to the economic and social benefits from the project.

"From my own analysis, the national Matabeland Zambezi Water Project will transform the lives of all the people in this country in a positive way. We will be able to plant fruit trees. The people here will have access to water for their cattle. They can also use that water for other development projects."

The project looks to be completed in the next 3 years and will cost around 1.2 billion dollars.

For CRI, I am Long Kun.

"Zimbabwe Kicks off Water Project with Help from China", 16/07/2012, online at: http://english.cri.cn/7146/2012/07/16/2702s711940.htm

BACK TO TOP

❖ Chinese Exim Bank Lends Angola $500 Million USD for Water Treatment

ANGOLA, LUANDA — Angola last week signed a $500 million USD loan agreement with the Exim Bank of China that will fund construction of at least eight new drinking water treatment plants and rehabilitation of several dilapidated ones, as well as other post-war reconstruction projects in health and energy, according to Angolan Finance Minister Carlos Alberto Lopes.

Angola gets at least 60 percent of its water and sanitation sector budget support from commercial credits, extended mainly from China and Brazil.

The financial support is linked to future petroleum purchases by the two countries; Angola has been a major supplier of crude oil to China since the end of the 27-year Angolan civil war in 2002.

The country produces an estimated 1,784 barrels per day of crude oil, equivalent to 2.28 percent of the world's total. Earnings from oil account for 80 percent of Angola's total annual budget.

"The signing of these agreements with the Angolan government reflects China's interest in supporting Angola in its reconstruction and economic development, thanks to the political and economic stability that Angola has enjoyed after the end of civil war," Chinese Exim Bank Vice President Liu Chen was quoted as saying after the loan was signed.

Even though Angola's economy is growing at an annual rate of 11.1 percent, a recent report by the World Bank's Water and Sanitation Program (WSP) warned that "contaminated water, inadequate stormwater drainage, and lack of even minimal sanitation facilities have resulted in high, and steadily increasing, rates of water and excreta-related diseases" in the country.

"Angola's water supply and sanitation sector has until recently remained the least developed in Africa due to four decades of persistent civil conflict. For example, some of the worst sanitation in Angola can be found in its capital, Luanda, as well as in the hillside refugee camps surrounding the city, where more than a million internally displaced persons still reside," the report said.

The new Chinese financing gives a major boost to the administration of President Jose Eduardo dos Santos in implementing its 2003-2016 Water Strategy. The two-phase strategy focuses primarily on urban areas across the nation.

It involves rehabilitation of the existing water and sanitation systems in provincial capitals and other large urban areas, and long-term interventions to meet the UN Millennium Development Goals (MDGs) and national water targets.

"Angola's urban centers are struggling with aging infrastructure built to support much smaller populations," the WSP report said.

"The systems have deteriorated during the war years from lack of maintenance, and as a result, continuity of service is a major problem in the water sub-sector. The government's priority, therefore, is to [put] as much new investment into the system as possible to expand coverage."

International agencies estimate Angola's annual water sector budget needs at $151 million USD. The oil-rich country has budgeted more than twice this amount -- $358 million USD. But previous expenditure estimates in the national budget have not always been met.

"Chinese Exim Bank Lends Angola $500 Million USD for Water Treatment", 16/07/2012, online at: http://www.ooskanews.com/daily-water-briefing/chinese-exim-bank-lends-angola-500-million-usd-water-treatment_23405

BACK TO TOP

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

❖ BEWG Signs Five Water Contracts in June

HONG KONG (Beijing Enterprises Water Group Limited) — Through the efforts of the group company's business divisions and local management teams, Beijing Enterprises Water Group Limited (BEWG) has successfully signed some of the water service projects in June 2012, including: Kuandian Lvyuan sewage treatment plant TOT&BOT Project agreement has been formally signed.The plant total daily design capacity is 50,000 tons per day. The project will be divided into two phases, the 1st phase is 30,000 tons per day using TOT model with 30-year concession period. The 2nd Phase is 20,000 tons per day using BOT model with the 27-year concession period (including the construction period); BEWG and Inner Mongolia Yellow River Western Water Industry Co., Ltd. capital injection project has been formally signed on 15 June 2012. BEWG will conduct capital injection to the company after signing the agreement, and BEWG will hold 67% shares of Inner Mongolia Yellow River Western Water Industry Co., Ltd by this injection; BEWG formally signed Hunan Xiangtan Shunye Sewage treatment Ltd share purchase contract on 20th June 2012 and obtained the sewage treatment concession for xiangtan sewage treatment plant. Xiangtan Shunye Sewage treatment Ltd has invested for the Xiangtan sewage treatment plant which has daily designed capacity of 50,000 tons per day and that divide into two phases. The 1st phase uses BOT model with 25,000 tons per day and it is already under formal business operation. The concession period is 25 years for the 1st phase starting from the formal business operation; BEWG formally signed Dongguan Houjie Haiqing Sewage treatment Ltd share purchase contract on 21st June 2012, obtained the sewage treatment concession for Houjie sewage treatment plant; BEWG formally signed Dongguan Zhongtang Yiyuan Sewage treatment Ltd share purchase contract on 21st June 2012, obtained the sewage treatment concession for Dongguan Zhongtang Yiyuan Sewage Treatment plant

"BEWG Signs Five Water Contracts in June", 17/07/2012, online at: http://www.ooskanews.com/daily-water-briefing/bewg-signs-five-water-contracts-june_23436

BACK TO TOP

❖ Ningxia Transferring Water Rights to Fight Shortages

YINCHUAN (China Daily) — Authorities in the Ningxia Hui autonomous region say they have hit on a solution: transferring water rights for a price. The plan consists of giving enterprises that need water the chance to invest in projects to improve irrigation channels that reduce water waste. The enterprises are then entitled to use the water saved for industrial production. Mineral-rich Ningxia, in arid Northwest China, is surrounded on three sides by desert. Annual precipitation is usually under 300 millimeters, less than half the national average. The Yellow River, which flows south to north through the region, gave residents hope for many years and made the region one of the four earliest irrigated areas in China during the Qin Dynasty (221-206 BC). However, unlimited use of water from the Yellow River came to an end in 1987 when the State Council released a plan to allocate the river's exploitable water resources. Ningxia was given a quota of 4 billion cubic meters from a total of 37 billion cubic meters. Today, agriculture accounts for more than 91 percent of the region's water consumption, yet only 44 percent is used effectively. Energy and chemical companies have invested more than $23.58 million USD to update shabby irrigation channels, and so far 54 million cu m of water has been saved and transferred. By the end of the second phase of the project in 2015, the regional government expects to see 494 million cu m of water saved. "Although companies have to lay out large sums before they see any water, the abundant mineral resources in this region are an incentive," said Chen Ming, deputy head of the Water Resources Department at the Ministry of Water Resources.

"Ningxia Transferring Water Rights to Fight Shortages", 18/07/2012, online at: http://www.ooskanews.com/daily-water-briefing/ningxia-transferring-water-rights-fight-shortages_23450

BACK TO TOP

❖ Laos Delays Xayaburi Dam, But Allows Sitework, Resettlements to Continue

Bangkok, thailand — Laotian Foreign Minister Thongloun Sisoulith has announced that construction of the controversial Xayaburi Dam has been supended, pending completion of further environmental studies. But the government still plans to let the dam's builder, Thai builder Ch. Karnchang, pursue planned work at the dam site, including the resettlement of impacted villages.

"Laos' promise to suspend the Xayaburi Dam is welcomed," said Kirk Herbertson, Southeast Asia Policy Coordinator for environmental group International Rivers.

"However, Laos has been saying for months that it has agreed to suspend the dam, while at the same time allowing Ch. Karnchang to continue to move forward with construction activities on everything but the dam itself.

"Actions speak louder than words. We expect the Lao government to order Ch. Karnchang to immediately stop all construction-related activities at the Xayaburi site and cancel plans to resettle more villages until a regional agreement has been reached."

U.S. Secretary of State Hillary Clinton, who was in Cambodia last week for the Fifth Lower Mekong Initiative Ministerial Meeting, pressed the Laotian government to carry out more studies on the contentious dam project.

Although the Xayaburi Dam site lies in Laos, halting the project depends on the government of Thailand's agreement as well.

Thai construction giant Ch. Karnchang is building the dam and Thai banks including state-owned Krung Thai Bank are funding the project.

Already, the Electricity Generating Authority of Thailand (EGAT) has signed a power purchase agreement that binds the project to a timeline.

On July 13, Thai residents alongside the Mekong River vowed that they would sue EGAT for signing the agreement to buy power from the Xayaburi Dam, which they say is a violation of their constitutional rights and national laws.

"Until the Thai government and Ch. Karnchang agree to cooperate with the regional decision-making process, and until construction on all activities definitively stops, we cannot be assured that Xayaburi is really suspended," said Thailand Campaign Coordinator for International Rivers Pianporn Deetes.

"The postponement of Xayaburi is an empty promise, until Thailand also cancels the dam's illegal power purchase agreement."

"Laos Delays Xayaburi Dam, But Allows Sitework, Resettlements to Continue", 18/07/2012, online at: http://www.ooskanews.com/daily-water-briefing/laos-delays-xayaburi-dam-allows-sitework-resettlements-continue_23442

❖ Experts seek ways to avert water crisis in Dhaka

DHAKA, Bangladesh (AlertNet) – Bangladesh's water experts are forecasting a water crisis in the country's capital, due to its rapidly rising population and overdependence on underground water which is being depleted at an alarming rate.

According to the World Bank, Dhaka is fast becoming one of the world's largest cities, with its population of nearly 14 million expected to rise to 22-25 million by 2020.

"Every day new buildings are rising up and people from the countryside are pouring (in) here, but no new water sources are created," said Hasin Jahan, programme director of WaterAid Bangladesh, a development organisation.

According to Jahan, the area of Dhaka city has doubled in size since the 1990s and the population has increased by 1.5 times. Water for drinking is only part of the issue, she said. Large quantities are also consumed by everything from flushing lavatories to gardening, and washing cars to construction work.

At present Dhaka is dependent on underground sources for 87 percent of the 2.2 billion litres of water consumed every day. The balance is collected from surface sources.

The Dhaka Water Supply and Sewerage Authority (WASA) extracts groundwater using 620 deep tube wells. In addition, more than 2,200 private wells also draw water to serve high-rise buildings and various institutions.

FALLING WATER LEVELS

But the overdependence on groundwater is causing the water table to fall by about one meter (three feet) per year in the metropolitan area. According to Eftekharul Alam of the Bangladesh Agricultural Development Corporation, by 2011 Dhaka's groundwater level had dropped to 52 metres (169 feet) below mean sea level, compared with 46 metres (150 feet) in 2004.

"The excessive extraction of water by the Dhaka WASA is causing the water level (to) drop," he said.

Alam, an agricultural, water and environmental engineer, said that the underground water supply used to be recharged with water from nearby Gazipur and Mymensingh districts. But this is no longer happening as the water level in those districts has itself dropped.

Worse, Alam anticipates a serious water crisis in the capital because the aquifers are now being recharged with seawater, he said.

"Saline water is intruding to fill up the space, posing a threat to getting fresh drinking water in the future," he said.

The only effective way to recharge the aquifers, he said, is by injecting rainwater and river water – but that would first have to be treated to ensure the aquifers don't become polluted.

Alam said the Dhaka WASA emits 1,000 tonnes of untreated human waste into the rivers adjacent to the city every day, which means river water is unfit for human consumption.

PLENTY OF RAIN

However, WaterAid's Jahan said the average rainfall in Dhaka is more than 2,100 millimetres per year, and that a significant amount of this could be used to meet water demand and recharge aquifers if it were captured.

The organisation has constructed four rainwater harvesting systems in Dhaka. The water gathered is used partly for flushing lavatories and partly for groundwater recharging.

The Institute of Water Modelling (IWM), a government organisation, estimates that if 60 percent of rainfall falling on the existing concrete rooftops in Dhaka were harvested, it would provide nearly 200 million litres of water to residents each day.

Managing director of Dhaka WASA Taqsem A. Khan said that steps are being taken to gradually reduce the city's dependence on groundwater because of the declining water table. According to Khan, it is difficult for groundwater to recharge adequately in the city because of the increasing lack of open space for it to collect.

"Artificial recharge of the underground aquifers through injecting harvested rainwater is the only solution," Khan said.

WASA is constructing four surface water treatment plants in Dhaka at a cost of $1.8 billion, with the aim of supplying 70 percent of the city's water demand from surface sources.

Water for the plants will be drawn from less polluted rivers 60 km (38 miles) from the city. The plants are expected to produce about 1.6 billion litres of clean water per day.

Conservation of water will be equally important to dealing with growing demand, Khan said.

He thinks that the city's daily demand for water will not exceed 2.3 billion litres in 2021 if individual consumption can be cut down to 80 litres per day.

"Presently Dhaka (residents) consume 120 litres of water per person per day, which is not usual for people of a less-developed country," he said.

He said most water waste was the result of a general lack of awareness of the need for water conservation and irresponsible water use by middle-income and rich residents.

"Experts seek ways to avert water crisis in Dhaka", 16/07/2012, online at: http://www.trust.org/alertnet/news/experts-seek-ways-to-avert-water-crisis-in-dhaka/?utm_source=Circle+of+Blue+WaterNews+%26+Alerts&utm_campaign=4104562d7f-RSS_EMAIL_CAMPAIGN&utm_medium=email

BACK TO TOP

❖ Slum Upgrades Bring East African Countries Closer to Water, Sanitation MDGs

NairoBi, Kenya — East African countries are working to meet the Millennium Development Goal (MDG) targets on water and sanitation by upgrading infrastructure in slums.

Experts attending the East African Regional Conference on Slum Upgrading in Nairobi on July 12 estimated that 65 percent of the population in East African cities live in these informal settlements. They called on countries in the region to seek innovative financing mechanisms and to develop affordable housing, infrastructure and basic amenities for slum-dwellers.

At the conference, Kenyan government officials described the steps they have taken to halt expansion of slums and ensure that the urban poor have access to shelter and other crucial amenities, including piped water and safe modes of waste disposal.

"We have embarked on systematic improvement of slums nationwide through two flagship projects, the Kenya Slum Upgrading Project and the Kenya Informal Settlements Improvement Project," said Tirop Kosgey, permanent secretary at Kenya's Housing Ministry.

The programs address poverty reduction, infrastructure development and health and environmental issues.

"Countries in the region have increasingly focused on phasing out slums as part of poverty eradication and achievement of sustainable development. These initiatives are succeeding due to greater resource allocation from governments and partners," Sam Mabala, Uganda's Urban Development commissioner, told OOSKAnews.

James Nyoro, director of the Rockefeller Foundation in Kenya, said progressive policies are needed to encourage private sector investment in slum upgrades.

"Communities living in slums should also be encouraged to form cooperatives and pool resources to develop shelter, water and sanitation infrastructure and social amenities like schools and hospitals," he said.

Paul Chege, a program officer with UK-based development charity Practical Action, told OOSKAnews that structured public-private partnerships are scaling up investments in housing, water and sanitation infrastructure in urban slums.

"We are linking [with] private banks for sanitation financing and establishment of water kiosks in slums. Private financiers have also seen a business opportunity in sludge and wastewater management," said Chege.

"Slum Upgrades Bring East African Countries Closer to Water, Sanitation MDGs ", 16/07/2012, online at: http://www.ooskanews.com/daily-water-briefing/slum-upgrades-bring-east-african-countries-closer-water-sanitation-mdgs_23406

BACK TO TOP

❖ Contract Award at Zimbabwe's Mtshabezi Dam Challenged in Court

ZIMBABWE, BULAWAYO — The contract award for electricity supply to the Mtshabezi Dam pipeline faces a legal challenge from another bidder. The case filed in the country's Administrative Court is likely to further delay the project, which has already faced a number of setbacks.

A.C Controls, a company based in the capital, Harare, won the contract for electrification of the dam pipeline's pumps. But competing applicant United Associates (Pvt) Ltd. of Bulawayo, the country's second largest city and the site of the dam, is claiming gross irregularities and violation of procedure by the State Procurement Board, the statutory body responsible for processing government tenders.

United Associates claims the adjudication process for the tender was not carried out in an aboveboard manner. It offered a complaint that has become fairly common in the country -- that major government projects in the city of Bulawayo continue to be awarded to firms from the capital city, even though local contractors are equally qualified.

The legal challenge means the procurement board has to call a halt to work at the project site, but sources say importation and installation of pumps for the pipeline are continuing. United Associates may therefore seek other legal avenues to stall completion of the project.

"It is one of those cases that has the government in a fix, because the Water Ministry wants this project finished as soon as possible, while at the same time, observers would want to see the rule of law being upheld and due legal process followed if United Associates is to see justice served," a Bulawayo lawyer told OOSKAnews.

Lawyers say A.C Controls could still launch its own counter-challenge, in what could become a long-drawn-out legal battle, particularly because Zimbabwe's courts are not known for their speedy handling of cases.

Water Resources Minister Sam Sipepa Nkomo had previously said completion of the Mtshabezi Dam project was being delayed by a flawed tendering process for electrification of the pumping system.

The national power utility's load-shedding regime has also been blamed for delays in finishing the project.

The 42-kilometer pipeline will bring water from Mtshabezi Dam to Bulawayo, which has been facing severe water shortages. The pipeline will cost an estimated $25 million USD.

"Contract Award at Zimbabwe's Mtshabezi Dam Challenged in Court", 19/07/2012, online at: http://www.ooskanews.com/daily-water-briefing/contract-award-zimbabwe-s-mtshabezi-dam-challenged-court_23472

BACK TO TOP

❖ U.S. concerned about effects of Xayaburi Dam

The United States has pledged US$ 50 million for environmental and social development projects among the lower Mekong countries, following the conclusion of the Asean foreign ministers meeting in Cambodia, and other related meetings regional meetings.

US Secretary of State Hillary Clinton, who attended the fifth Lower Mekong Initiative Ministerial Meeting in Cambodia, said the funds would aid social networking and environmental groups in Burma, Thailand, Cambodia, Laos and Vietnam.

In a US statement, Clinton said the US was concerned about the planned construction of the Xayaburi Dam on the Mekong River in Laos, as it would likely have a major impact on fishing, agriculture, the environment and people's livelihoods and health in Southeast Asia.

She said the US will give funds to support the Mekong River Commission's (MRC) study on sustainable management and development of the Mekong River. It will also contribute $2 million to the MRC's fisheries programme.

The Xayaburi Dam is a proposed hydroelectric dam on the Lower Mekong River approximately 30 kilometres (19 mi) east of Xayaburi in northern Laos. The dam would produce hydroelectric power to be sold to Thailand.

Construction was suspended in early 2012 after complaints that the dam's feasibility studies were incomplete and countries downriver wanted more information.

Construction on the dam began in March 2012 after Ch.Karnchang, the Thai builder, announced it had signed a $2 billion contract with the Xayaburi Power Company.

Cambodia's government quickly reacted to the announcement, threatening to take Laos to international court if it chose to build the dam unilaterally.

Laos announced a halt to construction on May 11, 2012, following complaints from neighbors and environmental groups.

The Xayaburi Dam has been proposed on a site located 350 kilometres upstream of Vientiane and 770 kilometres downstream of Jinhong, China, the last dam among seven Chinese dams, including four existing dams and three planned dams. In terms of mean energy supply, it would be the third largest project among those dams considered for development on the mainstream in the Lower Mekong Basin.

If the final investment decision is made, the dam's construction would take eight years to complete and it would cost approximately $3.5 billion. A Strategic Environmental Assessment commissioned by the Mekong River Commission recommended a 10-year deferral of all Mekong mainstream dams in Cambodia, Laos, Thailand, and Vietnam, and called for further studies. The MRC warned that if Xayaburi and subsequent schemes went ahead, it would "fundamentally undermine the abundance, productivity and diversity of the Mekong fish resources."

Studies say that fish are a staple of the diet in Laos and Cambodia, with around 80 per cent of the Cambodian population's annual protein intake coming from fish caught in the Mekong River system, with no alternative source to replace them. The dam would also restrict the flow of water over agricultural areas linked to the river, according to environmentalists.

"U.S. concerned about effects of Xayaburi Dam", 16/07/2012, online at: http://www.mizzima.com/news/regional/7526-us-concerned-about-effects-of-xayaburi-dam.html

BACK TO TOP

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

❖ Xayaburi dam project commits 100 million dollars to redesign

Vientiane - The Xayaburi dam will spend 100 million dollars to revamp its much-criticised project to mitigate its possible impact on the Mekong River, a media report said Thursday.

But a green group specializing in river ecology disputes claims that the redesign can achieve its intended environmental benefits.

"We have redesigned the dam and we expect an increase to the investment cost," Xayaburi Power Company Limited deputy managing director Rewat Suwanakiti told the Vientiane Times.

The 3.5-billion-dollar project is expected to spend the extra funds on a revamp to aid fish migration and sediment flows in the Mekong in line with recommendations from consultancies Poyry of Finland and the French Compagnie Nationale du Rhone, the state-run daily said, citing unnamed sources.

The project's investors Tuesday for the first time invited technicians from the Mekong River Commission, donors including the Asian Development Bank and World Bank, and staff from the embassies of Cambodia, Thailand and Vietnam to visit the proposed dam site in Xayaburi, northern Laos.//DPA

"Xayaburi dam project commits 100 million dollars to redesign", 19/07/2012, online at: http://www.nationmultimedia.com/breakingnews/Xayaburi-dam-project-commits-100-million-dollars-t-30186538.html

BACK TO TOP

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

❖ Mekong Legal Network explores regional strategies for hydropower, human rights and business

The 5th Mekong Legal Network (MLN) meeting was held from June 28th to July 1st in Chiang Mai, Thailand. The MLN is an independent network of public interest legal professionals from the six Mekong countries: China, Myanmar/Burma, Laos, Thailand, Cambodia and Vietnam. The main themes of the meeting were hydropower development on the mainstream of the lower Mekong River, sustainable finance, business and human rights in ASEAN, and the challenges and opportunities for lawyers and campaigners working in Myanmar/Burma. In addition to MLN members, the meeting was attended by academics, experts, campaigners and civil society leaders from the Mekong region and beyond. EarthRights International's role, in this meeting and in general, is to support the MLN and facilitate MLN meetings.

Dams on the lower mainstream Mekong River

A number of groups have been working to oppose or at least improve decision-making regarding dam construction along the Mekong River's mainstream below China. Over the last two and a half years, the MLN has supplemented these campaigns with legal strategies at the national and regional levels. An MLN participant from Thailand outlined arguments for a potential lawsuit against the Thai energy authorities for breaching Thai Laws and the 1995 Mekong Agreement in approving the Power Purchase Agreement (PPA) for the Xayaburi Dam in Laos. The Xayaburi Dam is the first proposed lower Mekong River dam.

In addition, friends from Cambodia and Vietnam outlined their government's position on hydropower development, as they will bear the heaviest impacts from the proposed cascade of 11 dams below China.

Sustainable finance, business and human rights

Following the global financial and economic crisis, sustainable practices in the banking sector are a hot topic. International financial institutions like the World Bank are reducing financing of hydropower projects in the Mekong, in favor of banks from the region, so Thai and Vietnamese banks have a growing opportunity and responsibility to take the lead in implementing international best practices. The MLN meeting included presentations examining whether the Vietnamese banking sector is implementing these best practices, and exploring how the Thai banks involved in financing the Xayaburi dam can and should adopt international best practice in managing social and environmental risk, such as the International Finance Corporation's Environmental and Social standards and the Equator Principles.

Participants also discussed policy recommendations inside Thailand and in ASEAN. ASEAN is currently drafting the ASEAN Declaration on Human Rights (ADHR) and a policy framework for Corporate Social Responsibility and Human Rights, and these two frameworks were an important part of the MLN discussions. There have been very limited opportunities for public consultation on the AHRD, and a draft has not yet been publicly released, so MLN has filed a joint submission with

EarthRights International and Sydney University to acknowledge the flawed consultation and, hopefully, influence the content of the AHRD.

EarthRights International has also been working on a Joint Thematic Study on Business and Human Rights in ASEAN with researchers from Mahidol University in Thailand and the Carr Center at the Harvard Kennedy School. The joint study analyzes human rights *protection* through six case studies from across ASEAN: three environmental and three on labour protections. This joint study aims to complement the analysis of the ASEAN Intergovernmental Commission on Human Rights' baseline study into the *promotion* of business and human rights in ASEAN.

Emerging opportunities in Myanmar/Burma

The last topic the members have raised in the last day is the challenges and the opportunities for lawyers and campaigners working in Myanmar/Burma. Lawyers from inside and outside the country reflected on the changing political landscape, and the challenges and opportunities for reforming the legal system and investment practices there. MLN members from Cambodia in particular were able to share experiences and insights.

"Mekong Legal Network explores regional strategies for hydropower, human rights and business", 17/07/2012, online at: http://www.earthrights.org/legal/mekong-legal-network-explores-regional-strategies-hydropower-human-rights-and-business

BACK TO TOP

❖ Tibetan glaciers shrinking rapidly

Comprehensive survey reveals influence of prevailing winds.

The majority of glaciers on the Tibetan plateau and in the surrounding region are retreating rapidly, according to a study based on 30 years of satellite and field measurements.

The research by Yao Tandong, a glaciologist at the Chinese Academy of Sciences' Institute of Tibetan Research in Beijing, and his colleagues is published today in *Nature Climate Change*[1]. It "is the most comprehensive survey to date in the region", says Tobias Bolch, a glaciologist in the University of Zurich, Switzerland.

The Tibetan plateau and the bordering mountain ranges, including the Himalayas, the Karakoram, the Pamir and the Qilian make up a vast region known as the Third Pole, home to 100,000 square kilometres of glaciers that supply water to about 1.4 billion people in Asia.

The status of the glaciers has been a point of contention. Earlier this year, an analysis of 7 years' worth of measurements taken by the Gravity Recovery and Climate Experiment (GRACE) satellite mission suggested[2] that high-altitude Asian glaciers on the whole are losing ice only one-tenth as fast as previously estimated, and that glaciers on the Tibetan plateau are actually growing.

Yao and his colleagues analysed satellite measurements of the lengths and surface areas of about 7,100 glaciers. They also studied changes in the mass balance — the difference between accumulation and loss of ice — of 15 glaciers that they have painstakingly measured for decades.

"The majority of the glaciers have been shrinking rapidly across the studied area in the past 30 years," says Yao. And the rate of retreat has been accelerating.

But embedded in this general trend, says Yao, is a large variation in different parts of the Third Pole. For instance, glaciers in the Himalayas are retreating faster on average than those in the Karakoram and the Pamir.

The way the wind blows

To unravel the mechanisms underlying this variation, the researchers turned to climate records of the entire region. They found that changes in the glaciers, especially in their mass balance, depend in large part on whether the ice is under the influence of the Indian monsoon or the westerlies, the prevailing winds from Europe.

"Temperature rise is important," says Yao. "But its effects on glaciers also depend on climate regimes." In places dominated by the westerlies, such as the Karakoram and the Pamir plateau, glaciers gain their mass mostly from winter snow, and so are less affected by warming because temperatures in winter are still below zero. In the eastern and central Himalayas, however, it snows mainly during monsoon season, and a slight increase in summer temperatures can affect glaciers drastically.

In the past few decades, the Indian monsoon has been getting weaker. By contrast, the westerlies are getting stronger. "This explains why most glaciers that are either stable or advancing are in the Karakoram or the Pamir plateau," says Yao.

The study raises serious issues with assessments based on GRACE measurements. Some climate scientists say that the measurements were taken over too short a time to capture the impact of climate change. Others question whether the satellite is suited to studying ice changes in the Third Pole.

The Tibetan plateau contains closed catchments where glacier melts can be stored in lakes, the soil and underground. A survey by Yao and his colleagues found that the area of glacial lakes on the plateau has increased by about 26% since the 1970s. "As the GRACE satellites can only feel the gravitational pull and can't tell the difference between ice and liquid water, they may have mistaken expanding glacial lakes for increases in glacier mass," says Yao.

John Wahr, a remote-sensing expert at the University of Colorado Boulder and lead author of the GRACE study, concedes that the criticism is valid. "This is an important weakness of GRACE for any non-polar glacier study," he says.

"The study highlights the complexity of glacier responses in the region and the importance of ground truth for making accurate assessments," says Lonnie Thompson, a glaciologist at Ohio State University in Columbus, and a co-author of the latest paper. "Mass-balance studies are extremely labour intensive and can often be dangerous, but there is never a substitute for boots on the ground."

Tibetan glaciers shrinking rapidly, Jane Qiu, 15/ 07/2012, online at: http://www.nature.com/news/tibetan-glaciers-shrinking-rapidly-1.11010?utm_source=Circle+of+Blue+WaterNews+%26+Alerts&utm_campaign=4104562d7f-RSS_EMAIL_CAMPAIGN&utm_medium=email

BACK TO TOP

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

❖ Ancient Maya Dam Found In Guatemala

In the archeological town of Tikal, Guatemala, where water was once scarce, researchers have discovered a large, intricate dam that may have been built hundreds of years ago.

According to Sci-News.com, the dam included viaducts and a reservoir that stretched 260 feet in length, stood about 33 feet high and could have held about 20 million gallons of water.

The finding have provided further clues into daily life of the ancient inhabitants.

"The overall goal of the research is to better understand how the ancient Maya supported a population at Tikal of perhaps 60,000 to 80,000 inhabitants and an estimated population of five million in the overall Maya lowlands by AD 700," lead author Vernon Scarborough, a professor of anthropology at the University of Cincinnati, said in a study published in the *Proceedings of the National Academy of Sciences*.

"That is a much higher number than is supported by the current environment," he said. "So, they managed to sustain a populous, highly complex society for well over 1,500 years in a tropical ecology. Their resource needs were great, but they used only stone-age tools and technology to develop a sophisticated, long-lasting management system in order to thrive."

The dams, which were constructed out of cut stone, rubble and earth, provided the water source to the region's population in an area where rainfall was often scarce. The team believes that the Mayans constructed an intricate system of roadways, buildings and canals in order to lead water into man-made reservoirs to keep over the periods of drought.

These recent findings are a great window into the life of the ancient civilization. Not only is the dam lined with paved and plastered walls, but the ancient construction was built with specific water filters. It is believed Mayans placed "sand boxes" in the canals and water gates leading to the reservoir that served to purify the water.

"These filtration beds consisted of quartz sand, which is not naturally found in the greater Tikal area. The Maya of Tikal traveled at least 20 miles (about 30 km) to obtain the quartz sand to create their water filters. It was a fairly laborious transportation effort. That speaks to the value they placed on water and water management," co-author Nicholas Dunning, a professor of geography at the University of Cincinnati, said in the study.

"Ancient Maya Dam Found In Guatemala", 18/07/2012, online at:
http://latino.foxnews.com/latino/lifestyle/2012/07/18/ancient-dam-found-in-guatemala/

BACK TO TOP

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

❖ SIWI's New Director Seeks to Bridge Gaps Between Civil Society, Governments, Private Sector

Sweden, STOCKHOLM — The new executive director of the Stockholm International Water Institute (SIWI) will work to build bridges among that various sectors involved in sustainable development around the world.

"My plans are first and foremost to build on the world-leading role that SIWI has established in the area of international water issues, to continue to bridge research and policy-making and to broaden the scope of water and development to other policy areas. Any growth within the institution will depend on the future developments in those fields but it is not an objective of its own," Torgny Holmgren told OOSKAnews via email.

"Development can only take place when actors from different sectors cooperate," he said. "Such cooperation has also been a main task in my current work with development policy in Sweden and internationally."

Holmgren said his extensive background in government and the public sector will be an "asset in the task of bridging civil society, the private sector and policy-makers in the governments and international institutions."

He said the ideas "presented and discussed" by both the civil society and the private sector were what "inspired" him most about last month's Rio+20 sustainable development conference.

"Coalitions of forward looking actors in governments, civil society and the private sector can, and already do, make things happen and will be the driving force in achieving sustainable development," he said.

SIWI may also branch out to other regions of the world, according to Holmgren, although he said it was "too early to tell" if the organization would establish subsidiaries outside of Sweden.

But "I will not, at this stage, rule out the possibility to have SIWI staff placed abroad," he added.

SIWI announced the selection of Holmgren as its new director on July 4, although he will not officially take over until September 15.

He currently serves as Ambassador and Head of the Department for Development Policy at the Swedish Ministry for Foreign Affairs. He has also served at the United Nations Secretary General's High-level Panel on Global Sustainability, the Swedish Ministry of Finance, the World Bank and the Swedish Embassy in Nairobi, Kenya.

Holmgren replaces Anders Berntell, who served as SIWI's Executive Director for the last decade. Berntell accepted a new post as the executive director of the 2030 Water Resources Group at the International Finance Corporation within the World Bank Group.

Under Berntell's leadership, SIWI grew from 10 to 50 employees, and its flagstaff conference World Water Week grew from 1,000 participants in 2002 to nearly 3,000 in 2011.

"We are confident that Mr. Holmgren's proven leadership talents, strong international network and extensive knowledge on water, sustainability and development issues will be a tremendous asset to the future success of the organization," Peter Forssman, SIWI board chairman, said in a statement issued last week.

"SIWI's New Director Seeks to Bridge Gaps Between Civil Society, Governments, Private Sector", 16/07/2012, online at: **http://www.ooskanews.com/daily-water-briefing/siwi-s-new-director-seeks-bridge-gaps-between-civil-society-governments-private**

BACK TO TOP

❖ When National Disasters Go Global: Drought in the U.S., Food and Global Insecurity

The national Drought Monitor recently declared a drought for almost 80% of the contiguous United States, ranging in intensity from "abnormally dry" to "drought-exceptional." Five days ago, the U.S. Department of Agriculture followed by declaring disasters in 26 U.S. states. This is the largest national disaster area ever declared. But while the drought is obviously a serious concern for the U.S. (historically, droughts are the nation's most costly natural disaster), it also has worrying implications for other countries that are tied to the U.S. through the global food market. Coupled with other recent extreme weather events across the globe, the U.S. drought could have a globally destabilizing influence. And while it is too early to tell exactly why these events are happening, in the way that they are happening, recent reports show that climatic changes are a part of the story.

Record-breaking droughts, and an uncertain climate future

The conditions of this drought are abnormal. The drought happened suddenly - what is called a "flash drought" – because it has occurred over a matter of months, rather than seasons or years. It is associated with record-breaking temperatures, and has been labeled among the worst droughts in U.S. history. Climate change projections are set to make matters worse. According to NOAA and the Met Office, last year's drought in Texas was 20 times more likely because of climate change. Furthermore, as temperatures are set to continue increasing, these conditions will become more frequent.

Impact on the global food market

In lieu of the recent drought, the U.S. Department of Agriculture adjusted its prediction for corn yields, the country's largest export crop, down by 12%. This, and any subsequent adjustments, will likely impact global corn prices, but also meat and dairy prices, as corn is used for animal feed. Meanwhile, beef prices are still high from last year's drought in Texas. As a leading exporter of corn and soy, the U.S. is intricately linked to the global food market. Drought and crop failure in the U.S. could spike world food prices and have serious implications for places like Mexico, China, Central America and India, who rely heavily on imports of these crops, as well as animal feed. But this is not the first time that droughts have caused a spike in world food prices. If this drought does lead to a price spike, it will be the fifth such spike in six years.

The security implications of food price spikes

What we've also seen is that spikes in world food prices have increased the likelihood of instability and riots. In some instances, crop failure in one part of the world associated with instability halfway around the globe, can contribute to serious diplomatic crises between the U.S. and its allies, as occurred with Egypt, and could conceivably result in U.S. military involvement. This is part of a larger phenomenon Dr. Troy Sternberg calls "the globalization of hazards," where natural hazards in one region can have a significant impact on regions halfway across the globe. This is not to say that the current U.S. drought will necessarily lead to unrest. However, it is not unprecedented for droughts, and other climatic events that damage crop production, to do so.

Collective impact of crop failure across the globe

It is also important to consider that the drought and crop failures in the U.S. are not happening in isolation. In recent years, extreme hot and dry weather has forced Russia, Ukraine and Kazakhstan to reduce their harvest forecasts (andtwo studies explicitly link the devastating Russian heat wave of 2010 to climate change). European Union wheat yields this year will be smaller, in part, because Spain is suffering from the second worst drought in fifty years. North and South Korea are facing the worst drought in a century. Shifts in glacial melt and rainfall are threatening crops in Pakistan. The proliferation of locuststhroughout West Africa is threatening household food security. Recent floods in Japan, India and Bangladesh are threatening rice crops. Argentina's soy crops were severely depleted because of a shortage of rain. And in Mali, drought combined with other factorsled to a major humanitarian disaster in the region. The list goes on.Many of these conditions are record-setting, or the worst of their kind in decades and sometimes centuries. And climate projections threaten to make matters worse. What this means is that it is possible that the global food market is about to witness an unusual amount of stress. It is not entirely clear if the market is prepared for it, or even if nations have the capacity to adequately respond.

Impact on U.S. assistance and diplomacy

Food, for better or worse, is also used as a form of diplomacy. For example, the U.S. Agency for International Development's Food for Peace program has sent 106 million metric tons to the hungry of the world, feeding billions of people and saving countless lives. The program depends on the unparalleled productivity of American farmers and the American agricultural system. Without this vast system there would be no Food for Peace program, or any of the other food assistance programs either run by the U.S. government, or heavily supported by the U.S. such as the UN's World Food Program. On average, American food aid provides 60 percent of the world's food

aid, feeding millions of desperately hungry people every year. This means that in addition to facing an increasing risk from lower crop and animal stock yields and global food market shocks, the U.S. may also be limiting its ability to respond rapidly to global disasters, including global food crises. This is bad news for the global poor, and for U.S. diplomacy.

Climate insecurity is a global security threat

In short, climate insecurity is a global security threat. Unprecedented droughts in the U.S., which according to many climate projections are expected to occur more and more often in the future, threaten both national health and global food security, which could lead to significant instability in key strategic regions of the world. The pattern of extreme weather events across the globe compound the problem. The worrying thing is that these conditions could be the new normal.

"When National Disasters Go Global: Drought in the U.S., Food and Global Insecurity", 17/07/2012, online at: **http://climateandsecurity.org/2012/07/17/when-national-disasters-go-global-drought-in-the-u-s-food-and-global-insecurity/**

BACK TO TOP

❖ GCC Governments invest US$100 billion In Water Sectors To Combat Water Scarcity In The Region

Leading European company to highlight most recent water treatment developments at Power + Water Middle East Exhibition

Population growth and deterioration of water quality has prompted GCC governments to embark on major spending to combat water scarcity and ensure sustainable resources for the future.

According to a recent report by Ventures Middle East, GCC governments have earmarked more than US$100 billion in their water sectors between 2011 and 2016 to improve desalination technologies involving solar energy, and maximise on waste water treatments and recycling.

In response, a renowned European company specialising in water and wastewater treatment technologies has introduced a series of new product lines tailored to suit the water quality and operating environment in the Middle East.

Toray Membrane Europe will showcase its latest water treatment technologies including reverse osmosis, nano-filtration, micro-filtration and ultra-filtration technology at the upcoming Power + Water Middle East exhibition, taking place from 8-10 October at the Abu Dhabi National Exhibition Centre.

Held in partnership with Abu Dhabi Water & Electricity Authority (ADWEA), with Abu Dhabi Chamber of Commerce and Industry (ADCCI) as a strategic partner, Power + Water Middle East is the region's premier event for showcasing power and water related products and services.

"The main focus of our water and wastewater treatment technologies is on energy saving, plant efficiency and performance," said Rolf Richard Keil, Deputy General Manager of the Middle East branch at Toray Membrane Europe, one of the few companies with expertise across the entire spectrum of high performance water treatment membranes.

According to joint research by the Euro Arab Organisation for Environment, Water and Desert Ranches and the University of Jordan, the Arab world is likely to witness a water crisis around 2025 unless effective steering mechanisms for sustainable water management and measures to reduce the agricultural consumption of water are applied.

The UAE has planned several wastewater treatment and recycling projects to improve water management practices in order to meet rising demand of this scarce and costly resource. Abu Dhabi will add more than 30 million gallons per day of desalination capacity to its water network following a green light for a power and water plant extension at Mirfa.

His Excellency Abdulla Saif Al Nuaimi, Director General of Abu Dhabi Water and Electricity Authority (ADWEA) said: "It is a well known fact that water is one of the scarcest resources in the MENA region and that Gulf countries are among the world's top ten producers of desalinated water."

"Desalination currently provides two-thirds of the water requirements in MENA, and the new urgency and high priority assigned by governments to investments across the water desalination sector in the region is therefore not a surprise."

Elsewhere in the UAE, FEWA, the electricity and water authority for Ajman, Ras Al Khaima, Umm Al Quwain and Fujairah, will implement ultra-filtration as a pre-treatment step for the first time at its Al Zawrah seawater reverse osmosis plant in Ajman to produce 115 million litres per day of pre-treated seawater to feed the reverse osmosis membrane system.

Qatar is also looking to increase its capacity in both the wastewater and water areas. In doing so it is considering new technological processes through independent water and power projects, the largest being the Ras Girtas project, currently under construction in the Ras Laffan industrial complex.

Meanwhile the Public Authority of Electricity & Water in Oman plans to build strategic water storage reservoirs in Muscat in order to overcome a crisis situation if desalination plants are disrupted, while the Kuwait Ministry of Electricity and Water will construct two reverse osmosis desalination plants in Doha, Kuwait that will produce nearly 50 million gallons of water per day.

"The water sector is a major challenge for GCC states which are among the most water scarce countries in the world," said Anita Mathews, Exhibition Director for Power + Water Middle East. "The problems of water shortage and water security are now being addressed and the relevant factors which influence the water resources identified."

Now in its 5th year, Power + Water Middle East 2012 brings together developers, manufacturers, buyers and service providers from a range of sectors in power and water to meet, discuss and invest in the current products and technologies in the related industries.

The exhibition has so far attracted more than 100 exhibitors from 25 countries wishing to network and offer solutions to regional power generation, water and nuclear energy industries.

"GCC Governments invest US$100 billion In Water Sectors To Combat Water Scarcity In The Region", 22/07/2012, online at: http://www.middleeastevents.com/site/pres_dtls.asp?pid=15732

BACK TO TOP

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

❖ Thirsty South Asia's river rifts threaten "water wars"

KANZALWAN, India-Pakistan Line of Control, July 23 (AlertNet) - A s the silver waters of the Kishanganga rush through this north Kashmir valley, Indian labourers are hard at work on a hydropower project that will dam the river just before it flows across one of the world's most heavily militarised borders into Pakistan.

The hum of excavators echoes through the pine-covered valley, clearing masses of soil and boulders, while army trucks crawl through the steep Himalayan mountain passes.

The 330-MW dam is a symbol of India's growing focus on hydropower but also highlights how water is a growing source of tension with downstream Pakistan, which depends on the snow-fed Himalayan rivers for everything from drinking water to agriculture.

Islamabad has complained to an international court that the dam in the Gurez valley, one of dozens planned by India, will affect river flows and is illegal. The court has halted any permanent work on the river for the moment, although India can still continue tunneling and other associated projects.

In the years since their partition from British India in 1947, land disputes have led the two nuclear-armed neighbours to two of their three wars. Water could well be the next flashpoint.

"There is definitely potential for conflict based on water, particularly if we are looking to the year 2050, when there could be considerable water scarcity in India and Pakistan," says Michael Kugelman, South Asia Associate at the Woodrow Wilson International Center for Scholars in Washington.

"Populations will continue to grow. There will be more pressure on supply. Factor in climate change and faster glacial melt ... That means much more will be at stake. So you could have a perfect storm which conceivably could be some sort of trigger."

It's not just South Asia -- water disputes are a global phenomenon, sparked by growing populations, rapid urbanisation, increased irrigation and a rising demand for alternative power such as hydroelectricity.

Turkey, Syria, Iran and Iraq quarrel over the waters of the Tigris and Euphrates. The Jordan river divides Israel, Jordan, Lebanon and the West Bank. Ten African countries begrudgingly share the Nile.

In Southeast Asia, China and Laos are building dams over the mighty Mekong, raising tensions with downstream nations.

A U.S. intelligence report in February warned fresh water supplies are unlikely to keep up with global demand by 2040, increasing political instability, hobbling economic growth and endangering world food markets.

A "water war" is unlikely in the next decade, it said, but beyond that rising demand and scarcities due to climate change and poor management will increase the risk of conflict.

MAJOR THREAT

That threat is possibly nowhere more apparent than in South Asia, home to a fifth of humanity and rife with historical tensions, mistrust and regional rivalries.

The region's three major river systems - the Indus, the Ganges and the Brahmaputra - sustain India and Pakistan's breadbasket states and many of their major cities including New Delhi and Islamabad, as well as Bangladesh.

"South Asia is symbolic of what we are seeing in terms of water stress and tensions across the world," says B.G. Verghese, author and analyst at New Delhi's Centre for Policy Research.

The region is one of the world's most water-stressed, yet the population is adding an extra 25 million people a year - South Asia's per capita water availability has dropped by 70 percent since 1950, says the Asian Development Bank.

The effect of climate change on glaciers and rainfall patterns may be crucial.

"Most of the water that is used in Pakistan comes from glacial melt or the monsoon," says Rafay Alam, an environmental lawyer and coordinator of the water programme at Lahore University of Management Sciences.

The dry months of June-July offer a snapshot of the extreme water crisis in the region.

Hospitals in New Delhi this year cancelled surgeries because they had no water to sterilise instruments, clean operating theatres or even wash hands. Swanky malls selling luxury brands were forced to switch off air conditioners and shut toilets.

In Pakistan, the port town of Gwadar ran out of water entirely, forcing the government to send two naval water tankers. Some government flats in the garrison city of Rawalpindi have not had water for weeks, said the local press.

India, as both an upper and lower riparian nation, finds itself at the centre of water disputes with its eastern and western downstream neighbours -- Bangladesh and Pakistan -- which accuse New Delhi of monopolising water flows.

To the north and northeast, India fears the same of upstream China, with which it fought a brief border war in 1962. Beijing plans a series of dams over the Tsangpo river, called the Brahmaputra as it flows into eastern India.

DAM DISPUTES

For India, damming its Himalayan rivers is key to generating electricity, as well as managing irrigation and flood control. Hydropower is a critical part of India's energy security strategy and New Delhi plans to use part of it to reach about 40 percent of people who are currently off the grid.

A severe power shortage is hitting factory output and rolling outages are routine, further stifling an economy which is growing at its slowest in years.

India's plans have riled Bangladesh, which it helped gain freedom from Pakistan in 1971. Relations cooled partly over the construction of the Farakka Barrage (dam) on the Ganges River which Dhaka complained to the United Nations about in 1976. The issue remains a sore point even now.

More recently, Bangladesh has opposed India's plans to dam the Teesta and Barak rivers in its remote northeast.

But India's hydropower plans are most worrying for Pakistan.

Water has long been a source of stress between the two countries. The line that divided them in 1947 also cleaved the province of Punjab, literally the land of five rivers - the Sutlej, Beas, Ravi, Chenab and Jhelum, all tributaries of the Indus - breaking up millenniums-old irrigation systems.

India's latest hydro plans have fanned new tensions.

"Pakistan is extremely worried that India is planning to build a whole sequence of projects on both the Chenab and Jhelum rivers ... and the extent to which India then becomes capable of controlling water flows," says Feisal Naqvi, a lawyer who works on water issues.

In recent years, political rhetoric over water has been on the rise in Islamabad, and militant groups such as the Lashkar-e-Taiba have sought to use the issue to whip up anti-India sentiments - accusing New Delhi of "stealing water".

India brushes off such fears as paranoia and argues the dams won't consume or store water but just delay flows, in line with a 1960 treaty that governs the sharing of Indus waters between the two countries.

SINK OR SWIM

South Asia's water woes may have little to do with cross-border disputes, however. Shortages appear to be rooted in wasteful and inefficient water management practices, with India and Pakistan the worst culprits, experts say.

"All these countries are badly managing their water resources, yet they are experts in blaming other countries outside," says Sundeep Waslekar, president of Strategic Foresight Group, a Mumbai-based think-tank.

"It would be more constructive if they looked at what they are doing at home, than across their borders."

Their water infrastructure systems, such as canals and pipes used to irrigate farm lands, are falling apart from neglect. Millions of gallons of water are lost to leakages every day.

The strain on groundwater is the most disturbing. In India, more than 60 percent of irrigated agriculture and 85 percent of drinking water depend on it, says the World Bank. Yet in 20 years, most of its aquifers will be in a critical condition.

Countries must improve water management, say experts, and share information such as river flows as well as joint ventures on dam projects such as those India is doing with Bhutan.

"Populations are growing, demand is increasing, climate change is taking its toll and we are getting into deeper and deeper waters," says Verghese, author of 'Waters of Hope: Himalayan-Ganga cooperation for a billion people'.

"You can't wait and watch. You have to get savvy and do something about it. Why get locked into rhetoric? We need to cooperate. Unless you learn to swim, you are dead."

“FEATURE-Thirsty South Asia's river rifts threaten "water wars"”, 23/07/2012, online at: http://www.reuters.com/article/2012/07/23/water-southasia-idUSL3E8I42PW20120723

BACK TO TOP

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