



ORSAM WATER BULLETIN

Weekly Bulletin by ORSAM Water Research Programme

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



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27 August 2016 – 2 September 2016

- **Rain, hailstorm in Ras Al Khaimah; humidity to rise**

Heavy rains and a hailstorm was recorded in Ras Al Khaimah on Friday, with residents experiencing reporting a significant drop in temperatures.

The rains were recorded in Shawka and the surrounding areas, south of Ras Al Khaimah, with the cooler weather drawing in large number of off-roaders in the wadis and mountainous region of the emirate.

Salem Saeed Al-Kaidi, a resident of Shawka told Al Bayan newspaper a deluge of rain was experienced, which was further accompanied by hailstones and water levels rising at Shawka Dam.

Al-Kaidi stressed that the rainfall would have a positive impact on local crop due to the level of underground water rising.

Meanwhile, people also expressed their wishes stating they hoped the rainfall continued in the coming days, which will help ranchers and livestock.

The UAE's National Centre of Meteorology and Seismology (NCMS) confirmed that Sunday's weather will be generally hot and breezy and dusty at times in certain areas with a high probability of forming cumulus clouds across the eastern and southern areas in the afternoon.

The NCMS further stated there will be an increase in the relative humidity during the night and early morning across the UAE's coastal areas.

27/08/2016, online at: <http://www.emirates247.com/news/emirates/rain-hailstorm-in-ras-al-khaimah-humidity-to-rise-2016-08-27-1.639966>

- **German Public TV demonizes Israel's water policy report, unleashes storm of criticism**

A German public television broadcast that accused Israel of failing to provide adequate water to Palestinians in the West Bank is now embroiled in a row over allegations it demonized the Jewish state.

Since the show from ARD's studio in Tel Aviv aired on August 14, the program and its journalists have faced sharp criticism from politicians, viewers and media experts.

"Why did Tagesschau broadcast a badly researched – or even not researched report – quote a questionable 'expert' and convey falsehoods?" asked Social Democratic Bundestag deputy Michaela Engelmeier on her Facebook page, saying she expects the supervisory board of the public station will address the report and issue a correction.

The water expert Engelmeier referenced is Clemens Messerschmid, a German national who lives in the West Bank and has contributed articles to pro-boycott Israel and anti-Semitic websites, including the German-language Muslim-Markt website, which supports Iran's regime. Germany's intelligence agency has monitored Muslim-Markt and said it propagates "anti-Zionist and anti-Israel propaganda."

Avraham Nir-Feldklein, the deputy chief of Israel's embassy in Berlin, told the Bild newspaper the ARD report contained "one-sided and false accusations against Israel and did not ask for Israel's position."

ARD reporters Susanne Glass and Markus Rosch wrote on the station's website that they could not find Israeli experts because of the "Jewish holiday." They did not specify to what "holiday" they were referring. In any case, critics said there was no time-sensitive requirement for the report and that the journalists should have waited to secure comments from Israeli hydrology experts.

Two days after the ARD report, BILD journalist Antje Schippmann spoke with two Israeli water experts – Uri Schor, spokesman of the Israeli Water Authority, and Haim Gvirtzman of the Hebrew University's Earth Science Institute, widely considered one of Israel's top hydrologists. Both experts rejected Messerschmid's assertions in the highly detailed BILD report on the politics of water in Israel and the disputed territories.

Glass and Rosch, however, defended Messerschmid, who has worked for 20 years as a hydrologist for international organizations.

Rosch and Glass cast doubt on the existence of Engelmeier's Facebook post, which readers and journalists located on her Facebook page, and it is unclear why Rosch and Glass could not find the MP's FB post.

German tax payers fund the ARD and its Tagesschau program, which broadcast the water report, is viewed by some 5 million people.

In a Friday article on the website of Mena- Watch alleging Rosch "demonized" Israel, the German journalist and expert in modern anti-Semitism, Alex Feuerherdt, said Rosch's "unwillingness to research" is not merely "sloppy" journalism but "politically motivated...to damage the Jewish state."

28/08/2016, online at: <http://www.jpost.com/Arab-Israeli-Conflict/German-Public-TV-demonizes-Israelis-water-policy-report-unleashes-storm-of-criticism-466259>

- **Palestinian water wars boiling over in Sa'ir**

The Palestinian Water Authority and the Sa'ir Municipality are at odds over the disappearance of large amounts of water from Sa'ir, a town of 25,000 northeast of Hebron, as the region experiences water shortages.

The PWA, which coordinates and regulates the distribution of water in the Palestinian territories, said in an August 12 statement that it had uncovered an ongoing water-theft operation in the village.

A number of Sa'ir residents have long made illegal openings in the village's pipes, diverting water without the knowledge of the water authority. However, in this case, the authority accused the Sa'ir Municipality of being behind the theft and, in coordination with the Palestinian Customs Authority, arrested 13 municipal employees, including Mayor Kayed Jaradat.

“The Palestinian Water Authority seized an illegal attachment to the main water pipes in the Hebron governorate... which has affected the amount of water provided to other areas in the Hebron region,” the August 12 statement read.

In response to the arrests, on August 18, hundreds of Sa’ir residents demonstrated outside the municipality and blocked the Nabi Yunis road, the main passageway from Sa’ir and other villages into Hebron.

Following the demonstrations, PA Prime Minister Rami Hamdallah intervened and ordered Hebron’s prosecutor-general to release the mayor and other municipal employees.

Jaradat, a top Fatah leader and former Palestinian ambassador to two African countries, on Thursday denied the charges to The Jerusalem Post in his office in the Sa’ir Municipality.

“The accusation that the municipality has stolen water is completely false. Members of the municipality’s water department have never illegally diverted water,” he said.

The mayor admitted, however, that some residents do divert water illegally.

“I know that there are cases of theft, but none of them has involved municipal employees and, as a mayor, I do not have the tools to monitor them,” he said, calling on PA Hebron Governor Kamal Hamid to open an investigation to examine the facts about what is taking place.

Jaradat added that recent punitive measures taken against Sa’ir by the Water Authority are contributing to the water shortage.

“The Water Authority has lowered the water pressure in Sa’ir since the start of the most recent crisis, making it impossible to pump water to the more elevated parts of our village,” he said.

Sa’ir sits between a number of hills, and a majority of its residents live in elevated areas.

The water authority, which maintains that the Sa’ir Municipality is responsible for the water theft, did not respond to multiple requests by the Post for comment. Meanwhile, Sa’ir residents, such as Ramzi Adnan, who works at a nearby quarry, just hope the two sides will overcome their differences and focus on resolving the crisis.

“I have no water in my house. I thought about showering with the water in the water tank near the quarry, but I was embarrassed to take a shower in front of my colleagues there,” said Adnan who told the Post he had not showered for three days.

Others have resorted to purchasing potable water from trucks from Hebron, while farmers have begun filling mobile water tanks with water from a spring in the village center.

The PA has called on Israel to increase the amount of water it allocates to local Palestinians, while Israel has said it provides double the amount of water stipulated in the Oslo Accords.

28/08/2016, online at: <http://www.jpost.com/Arab-Israeli-Conflict/Palestinian-town-Sair-at-odds-with-PA-Water-Authority-over-water-theft-466210>

- **Iran-Australia joint water research center planned**

Sharif University of Technology officials and a number of Australian scientists reached an agreement on setting up joint water research center.

Iran-Australia joint water research center planned

A seven-member team from Melbourne University comprising specialists and scientists arrived in Tehran to explore avenues for cooperation with Sharif University of Technology on Iranian water crisis.

Joint meeting between Australian scientists and chancellor and instructors of the Iranian university took place on Sunday.

Both sides reviewed cooperation on water by the water research center and cooperation on other areas.

Meanwhile, a workshop was held in Tehran prior to the visit of the Australian academic team is to Orumiyeh lake.

Establishment of Australia-China Science and Research Fund (ACSRF) is among the areas of cooperation with the visiting delegation.

ACSRF supports strategic sciences, technology and modern cooperation between the two countries.

The entity is involved in setting up joint research centers, academic symposiums and exchange of young scientists between the two countries.

28/08/2016, online at: <http://www.irna.ir/en/News/82207698/>

- **Nebraska focuses on drought in the Middle East and Africa: BTN LiveBIG**

The Middle East and North Africa are already among the most water scarce regions in the world. When a drought occurs, the lack of water becomes especially problematic.

To address these problems, the National Drought Mitigation Center (NDMC) at the University of Nebraska-Lincoln and the Robert B. Daugherty Water for Food Global Institute (WFGI) at the University of Nebraska are teaming up to lead a \$4-million research effort to balance water consumption and increase agricultural productivity with an overall focus on drought management.

“Droughts tend to exacerbate existing issues, especially in areas with limited resources such as the typically semi-arid and arid MENA region,” notes Michael Hayes, director at the NDMC. “This is why droughts can create such significant impacts.”

“It’s a water limited environment from the beginning, so being able to monitor the onset of drought and mitigate its impact on the population is an important thing,” adds Christopher Neale, director of research for the WFGI.

The NDMC produces a drought monitor which is relied upon by federal and state level government, as well as news agencies, to gauge droughts and signal whether or not there is a drought calamity. It also helps countries and states develop policy and preparedness to deal with droughts.

“The NDMC has a long-term legacy of working around the world,” explains Hayes. “Although droughts may look differently and create impacts that are unique to each locality, many of the lessons learned are transferable.

“Often, managers dealing with drought impacts can feel like they are alone trying to identify solutions. We can bring these managers together so that they can share their experiences with others who have gone through similar situations,” adds Hayes.

The WFGI focuses on water productivity and, for this particular project, will develop a satellite-based evapotranspiration product that will feature a map of all the countries in the region and show how much water the different plants, services and vegetation use on a daily basis. It will also serve as an early warning system when rain is absent and an indication of a drought is present.

That effort will begin with a focus on five countries: Lebanon, Jordan, Morocco, Tunisia and Egypt.

“However, we’re developing the evapotranspiration product for the whole region and when we launch it next January, we want people to download the product and use it but then come back to us and say they want to participate,” explains Neale.

While the NDMC and the WFGI are leading the efforts, the groups are collaborating and partnering with several other organizations, including the Food and Agriculture Organization of the United Nations (FAO), based in Egypt, and Dubai’s International Center for Biosaline Agriculture, as well as colleagues at the University of Maryland and at the Agricultural Research Service’s Hydrology and Remote Sensing Laboratory. In total, dozens at the university level, hundreds at the country level between governmental, regional and local agencies and thousands of farmers on the ground will contribute to the effort.

The groups will also look at crop production and work to identify areas of high and low productivity then partner with local and regional governments to identify the reasons for it and help them draft policies to deal with the problems and increase productivity. As part of that effort, they will seek out what Neale describes as “champion farmers.”

“What we want to do is find the local champions, the farmers who are doing everything right despite the difficult conditions,” Neale explains. “Then we want to try and bring everyone else to the same level. It could be depleted soils, lack of infrastructure, poor quality of seed or lack of fertilizer... there are a variety of reasons that productivity could be low in a particular region.

Once they’ve identified the most successful farmers, they’ll work on correcting the problems that are causing the low yields or high water use.

“Improving drought management in the region, as in anywhere, is a process,” notes Hayes. “We are hoping that the officials and stakeholders working on the project will begin working toward this process of improving long-term drought resiliency.”

Both the NDMC and WFGI are optimistic they will be able to make an impact on those in the MENA region. For Hayes, measuring the success of the effort comes down to a willingness of those affected to take part in the longer-term process of identifying successful drought management strategies.

“Droughts in the region are not new—their impacts go way back,” Hayes explains. “However, new drought monitoring and drought management strategies provide opportunities for the region to

assess and understand droughts in ways not available before. Hopefully these strategies can help build resiliency and reduce some of the potential impacts to stakeholders resulting from droughts in the future.”

28/08/2016, online at: <http://btn.com/2016/08/28/nebraska-focuses-on-drought-in-the-middle-east-and-africa-btn-livebig/>

- **Iran inks water deal with France, Sweden**

The Iranian Energy Minister Chitchian has reported on signing of new water consumption management contracts with Swedish and French firms.

Hamid Chitchian, on the sidelines of a meeting with the visiting French Environment Minister Ségolène Royal, pointed to capacities and potentials of Iran in power and water industries saying “at the present time, the country’s electricity production capacity reaches more than 75,000 megawatts.”

“About 12 thousand megawatts of the existing capacity pertains to hydroelectric plants and renewable energies and one thousand to nuclear generators while the rest is supplied by thermal power houses,” said the official asserting “versatile venues exist for Tehran-Paris cooperation as well as that Iran’s remains committed to its obligations defined by the 2015 Paris Climate Conference which called for zero net anthropogenic greenhouse gas emissions to be reached during the second half of the 21st century.”

Energy Minister Chitchian went on to add that plans have been made to build 7,500 megawatts of renewable energy power houses by 2030 inside the country 5,000 megawatts of which will be constructed within the next five years.

The first agreement has been sealed with the French side to build a geothermal power plant with a capacity of 5 thousand megawatts, noted the official voicing Iran’s readiness to launch collaborations with the French through investment or the use of modern manufacturing systems.

Hamid Chitchian, while recalling Iran’s earlier close-knit ties with a French firm over water consumption management, referred to poor conditions of water resources resulting from climate change and emphasized “Iran remains as one of the victims of climate change in the world which has exerted its adverse effects in the form of drought.”

“Iran has entered into fruitful contracts with France and Sweden on the issue of water consumption management while the possibility exists for further cooperation in several other areas including deep water exploration, restoration and balance of groundwater as well as use of new technologies in the field of desalination,” he underscored.

The Iranian official outlined banking issues as a major obstacle to cooperation with European countries expressing hope that effective measures will be taken to remove existing barriers in order to expedite and expand collaborations between Tehran and Paris.

The 2015 United Nations Climate Change Conference, COP 21 or CMP 11 was held in Paris, France, from 30 November to 12 December 2015. It was the 21st yearly session of the Conference of the Parties (COP) to the 1992 United Nations Framework Convention on Climate Change (UNFCCC) and the 11th session of the Meeting of the Parties to the 1997 Kyoto Protocol.

29/08/2016, online at: <http://en.mehrnews.com/news/119315/Iran-inks-water-deal-with-France-Sweden>

- **Syrian Authorities Open 200 Water Distribution Points in Western Aleppo**

The Syrian government with the help of the international organizations opened some 200 distribution points in Western Aleppo, according to the head of water distribution, Abdul Aziz Bein.

The Syrian authorities have opened some 200 drinking water distribution points in the western part of the city of Aleppo from which water is being delivered to homes, hospitals, humanitarian centers, the head of water distribution, Abdul Aziz Bein, said Monday. Aleppo has been under siege by militant groups, including Jaish al-Islam, Ahrar ash-Sham and Jabhat Fatah al Sham, formerly known as Nusra Front, classified as terrorist organization in Russia. The city has seen intense fighting over the past few months, with the Syrian army and local militia forces managing to encircle large groups of militants in the eastern districts of the city. "Since the terrorists cut the water supply from Euphrates and Damascus region, the Syrian government with the help of the international organizations opened some 200 distribution points in Western Aleppo. Only 120 are currently being used, others will be engaged if necessary," Bein said.

He added that a total of 1,000 wells were drilled in Aleppo, thus heading off drinking water shortages. Several dozens humanitarian organizations are providing residents of Aleppo with food and other necessities. One of the largest centers was opened by the Ihsan Relief and Development which prepares food for thousands. Every family has a fingerprint-based ration book to get a monthly supply of essentials like food and blankets. Syria has been mired in civil war since 2011, with government forces loyal to President Bashar Assad fighting numerous opposition factions and extremist groups.

29/08/2016, online at: <http://sputniknews.com/middleeast/20160829/1044735365/syria-aleppo-water.html>

- **Balochistan: Did rattled Pakistan army poison water supply with chemicals after PM Modi's I-Day speech?**

Baloch activists have alleged that Pakistan Army have intensified their military operations against the Baloch people. They alleged that the Army is using chemicals to poison their water supply and punish them.

Rattled by Prime Minister Narendra Modi's mention of Balochistan in his Independence Day speech, Pakistan seems to have resorted to take revenge from its own citizens.

The Pakistan Army have intensified their military operations against Baloch nationalists and freedom fighters.

According to Balochistan's activist ground report, the Pakistan Army has resorted to snatch, kill and dump tactics for Baloch freedom fighters and civilians. The activists are alleging that the Army is also using certain chemicals to poison their water supply and punish them.

Baloch activists told India Today that the Pakistan Army intensified their operations after Prime Minister Modi's Independence Day speech from the ramparts of the Red Fort.

"Their aim is to break the morale of the Baloch activists, enthused about the world talking about their plight for the first time," a Baloch activist told India Today.

Activists also claim the the Army has gouged out the eyes of some of the activists to teach them a lesson.

The Bolan area of Balochistan reportedly bore the brunt of Pakistan Army's anger.

29/08/2016, online at: <http://indiatoday.intoday.in/story/balochistan-pakistan-chemical-weapons-pm-modi-human-rights/1/751611.html>

- **10 water plants resume output after SFDA action**

The Saudi Food and Drug Authority (SFDA) has given permission to 10 water-bottling factories to resume operations after they had been shut down for various violations, Makkah newspaper reported on Sunday.

An SFDA source said the 10 factories are in Jeddah and Makkah and were shut down for raising prices without permission from the authority.

"The factories paid their fines and have rectified their status with the authority. The factories had previously increased the cost price of water, which in turn will increase the retail price of water for the consumer," said the source.

The source also said the increase in prices was reported to the authority and it shut down and slapped fines on the factories involved. "The authority is now strict and less lenient about implementing punishments against pricing violations. It plans to organize even stricter inspection campaigns. The authority cares about maintaining quality in the production process in all water-bottling factories," said the source.

Siraj Sind, director of a water factory in Jeddah, said the intensive and strict inspection campaigns by the Food and Drug Authority and the Consumer's Protection Committee have led many factories to update their equipment and production line.

"Many of the factories used to operate on outdated machinery and inefficient tools. They had no incentive to give a better service with higher quality. The strict implementation of regulations by the authority forced factories to spend more money on their production equipment and on serving a product of better quality," said Sind.

He added the factories have become more health conscious by replacing the plastic water bottles with better quality ones of different sizes.

"People complained in the past that some of the factories were distributing contaminated water. The contamination is not always the fault of the factories but of refilling stations, who refill water into contaminated and sometimes used water bottles," said Sind.

He added that the distribution companies then expose the water bottles to sunlight, which contaminates the water even further.

29/08/2016, online at: <http://saudigazette.com.sa/saudi-arabia/10-water-plants-resume-output-sfda-action/>

- **Iran, France to cooperate on methods to prevent waste of water**

French Minister of Environment, Energy and the Sea Segolene Royal said on Tuesday that she reviewed methods to prevent waste of water with Iranian environment officials.

She made the remarks in meeting with Isfahan Governor General Rasoul Zargar. Concerning shortage of water in Isfahan, the French minister said that because of distance from sea, Isfahan can not use the system of desalination water. Ms. Royal said that the sole way to produce rainfall is cultivation of tree, especially the trees which do not need much water. She said that she shared views with Iranian environment officials about the typical trees which have capability to produce rainfall. 'I will come back to Iran in February to consider progress of the plans,' Segolene Royal said. The French minister visited Orumiyeh Lake and is currently on a visit to Isfahan.

30/08/2016, online at: <http://www.irna.ir/en/News/82210989/>

- **Haya Water's sea outfall project on track**

Spanish-based general contractor Technicas Reunidas said its joint venture with Oman's Sarooj Construction Company has completed around 85 per cent of the work related to Haya Water's two sea outfall projects - Darsait and Al Athaiba sewage treatment plants (STP) - in the sultanate.

The project is aimed at ensuring that the discharges cause no environmental damages of the coastal region and that the outfalls provide a future-proof solution and help avoid an adverse impact on beaches and desalination plants that are nearby, reported the Oman Observer.

The JV firm had successfully completed the construction of Al Seeb outfall last year, it stated.

Before the construction began, Haya Water had obtained 23 approvals from different authorities to execute the project, said the report.

In 2010, Haya water appointed Halcrow to carry out feasibility studies and develop designs for emergency marine outfalls at two prime locations, from Darsait STP, the third largest treatment plant in Muscat, and from Al Athaiba Central Pumping Station (CPS) which pumps all the collected sewage from Bausher catchment to Al Ansab STP.

The Darsait sewage treatment building coincides with the establishing of the two outfalls in Darsait and Al Athaiba, it stated.

This project is considered to be of significant importance as it discharges surplus treated effluent. Both projects will greatly help to discharge mixed raw sewage and storm water during storms and cyclones, it added.

30/08/2016, online at: http://www.tradearabia.com/news/CONS_312683.html

- **QC project provides water in Bangladesh**

Qatar Charity (QC) has established a desalination plant in Bangladesh for the benefit of more than 20,000 people.

“Paigasa Desalination Plant” costing QR20,000 produces around 80,000 litres of water for drinking and home use.

Engineer Khalid Al Yaf'i, Director of Operations Management at QC's Executive Management, said, “The water plants QC implements in countries that suffer from shortages in and lack of water are vitally important since they help save the lives of people, animals and plants. Through such projects, QC aims at contributing to lessening the negative impacts of drought and use of polluted water which helps enhance public health, mainly for children and women, since the use of polluted water helps cause diseases that spread”.

He said that QC owns a number of excavators that are used for drilling deep artesian wells in Sudan, Burkina Faso and Niger.

“Qatar Charity has recently signed a cooperation agreement with the German company ‘Buhak’ to improve the technologies used in extracting water in Africa. QC implemented a project for manufacturing and importing two excavators for Somalia and Mauritania at a cost of QR3,378,612,” he added.

Dr Mohammed Amine Hafith, Director of QC's office in Bangladesh, said, “Although in the south west of Bangladesh there is plenty of water, the water is extremely salty. As a result, the people of these areas find it difficult to have drinking water and water for home use”.

He also said that QC has already tried to resolve the problem and took the drilling of thousands of deep artesian wells as a first step. Those wells were more than 300 metres deep.

“That was not enough, however, for responding to all demands. Some areas lacked drinking water even after digging thousands of metres in the ground.

After a careful study, Qatar Charity was able to find other alternatives to meet the needs of these areas. It had two options: either to bring water from tens of kilometres away through pipes, or to establish water desalination plants.

It was agreed that QC would establish the plants because the other option was very expensive and required long time to reach the lands,” he added.

30/08/2016, online at: <http://thepeninsulaqatar.com/news/qatar/390439/qc-project-provides-water-in-bangladesh>

- **Syria: Solar Energy System Installed in Deir Ezzor**

The Syrian Arab Red Crescent, in cooperation with the United Nations Children's Fund (UNICEF) have completed the installation of a solar energy system in a neighborhood of the northern city of Deir Ezzor.

The project also consisted of moving water pumps from Al Muwazafin, 462 kilometers north of Damascus, which is surrounded by terrorist groups.

Anas Ashawi, representative of the Red Crescent in Syria, said the installation of the pumps would benefit 6,500 settlers in the area, and that the solar energy system would permit them to save fuel, which is quite scarce in this region.

The project, in cooperation with the International Red Cross and the UN, will allow the treatment and desalination of water in the area.

30/08/2016, online at: <http://www.plenglish.com/index.php?o=rn&id=3124&SEO=syria-solar-energy-system-installed-in-deir-ezzor>

- **PMD warns India's water release may cause flooding**

The Pakistan Meteorological Department on Monday issued an alert informing about the chances of riverine flood in Pakistan because India is likely to release rainwater from its main rivers after September 1.

Also, Pakistan has received 25% above average rain since the onset of the monsoon season, according to the PMD.

PMD Director-General Dr Ghulam Rasul told The Express Tribune normal to heavy showers are expected in the catchment areas near India from August 31 to September 1.

“Currently, all water reservoirs in India have reached the maximum conservation level and it is expected that the showers that are expected on Wednesday and Thursday would prompt India to release extra water in the rivers which would likely generate riverine flood in Pakistan,” he said.

He added that though India, before releasing water, issues alerts to Pakistan, still to be on a safe side it is the responsibility of the Pakistan Meteorological Department to inform the authorities concerned ahead of time.

“The PMD issues alerts as a precautionary measure; however, it does not mean that things would happen as predicted,” he said.

“However, till date all rivers are flowing normally, and at a few places there are low-level floods. The situation is fully under control and there are no threats of riverine floods till now,” he said.

“This year Pakistan has experienced only urban flooding so far — not riverine flooding till date,” he said.

According to the National Disaster Management Authority (NDMA), monsoon rains have claimed 138 lives across the country this year. Of them, 52 were children, 63 men and 23 were women.

The highest number of deaths was reported from Khyber-Pakhtunkhwa where 52 people were killed followed by Fata with 27 deaths. Next comes Punjab with 22 deaths, Sindh (21), Balochistan (10), AJK (5) and Islamabad (1).

However, 63 people were reportedly injured across the country since the onset of the monsoon season this year and six are still missing in Chitral, according to the NDMA.

Ghulam said that during the monsoon season lives of people and property near catchment areas are at major risk. "It is necessary to take extra precautionary measures in order to decrease human and property loss as much as possible," he said.

He revealed that though the Met Office had predicted 10-20% above average rain during monsoon, after the recent spell of rains the average has reached 25%. "Pakistan has received a good amount of rain during the last week of August which helped the country to have above average rainfall as forecast earlier," he said.

30/08/2016, online at: <http://tribune.com.pk/story/1172262/pmd-warns-indias-water-release-may-cause-flooding/>

- **Pakistan, Bangladesh, India & Turkmenistan: groundwater level continues to drop, ADB report claims**

There is a major concern whether the present practice of groundwater use can be sustained as the depth of the groundwater level continues to drop in Bangladesh, India, Pakistan, and Turkmenistan. This was stated in Asian Development Bank (ADB) report titled "Asian Water Development Outlook (AWDO) 2016". Water security in Asia and Pacific has progressed overall in the past five years, but major challenges remain, including overexploited groundwater, demand from rising populations, and climate variability, says the report.

Overall water security is already low in Pakistan, India and Bangladesh, the report notes. Up to 3.4 billion people could be living in water-stressed areas of Asia by 2050. Further, Afghanistan, the PRC, India, Singapore and Pakistan will have the lowest per capita water availability.

More than a third of the world's irrigated area is served by groundwater. Of this, a staggering 70% is in Asia, with India and the People's Republic of China (PRC) being the biggest consumers of this fragile resource, followed by Pakistan. The rate of groundwater use remains largely unmonitored, as does its quality and the impacts of over utilisation on irrigated agriculture and urban and industrial users. Bangladesh, India, Nepal, and Pakistan use about 23 million pumps with an annual energy bill of \$3.78 billion for lifting water, maintains the report.

Preliminary projections to 2050 by the International Institute for Applied Systems Analysis suggest that groundwater use will increase by 30%, with the PRC, India, and Pakistan accounting for 86% of total groundwater abstraction in the region. Such rampant expansion in use and its impact on declining water tables, water quality, and the continued demand for energy will become more pressing as climate variability impacts further on surface water resources. This sounds alarm bells that we are on the verge of a water crisis, with limited knowledge on when we tip the balance.

A recent study on energy use on large-scale irrigation projects in Punjab, Pakistan, provides an estimate of the interdependencies of energy, irrigation, and agricultural production for a key agricultural region. It highlights that while total crop production in the province increased by 31% over the past 18 years (since 1998), direct energy intensity for agriculture has increased by 80%.

Direct energy use is driven mainly by groundwater pumping (61% of energy used in agriculture) and about 20% of the province's energy (electricity and petroleum products) is used in the agriculture

sector. The study reinforces an Asia-wide message that energy use in conjunctive water management remains unmeasured and poorly monitored. Despite decades of recognition, conjunctive use of water for irrigation remains a neglected area, one that has not been reflected in policy and development interventions and an aspect overlooked in designing solutions.

Low water security in all key dimensions imposes economic damages and foregone opportunities. The GWP/ OECD study states that the greatest economic losses come from inadequate drinking water supply and sanitation, estimated by the WHO to be \$260 billion per year, more than double the damage of floods (\$120 billion per year) and drought (\$94 billion per year) (footnote 6). A large portion of this water, sanitation, and hygiene (WASH) - related damage is in the PRC, India, and Indonesia. The economic losses as a percentage of GDP range from 0% to 2% in the PRC, Indonesia, the Republic of Korea, Malaysia, the Philippines, and Viet Nam; from 2% to 4% in Bangladesh, India, and Pakistan; and up to more than 8% in Afghanistan, the report stated.

31/08/2016, online at: <http://www.brecorder.com/money-a-banking/198/81178/>

- **Egypt, Sudan, Ethiopia irrigation ministers to finalize GERD consultation offices agreement**

Irrigation and water resources ministers of Egypt, Sudan, and Ethiopia are set to meet in Sudan's capital Khartoum next week to sign the consultation offices' agreements of the Grand Ethiopian Renaissance Dam (GERD), according to the spokesperson of Egypt's Irrigation and Water Resources Ministry Waleed Haqiq.

African expert on Sudan and Nile basin countries at Ahram Center Hany Raslan told Daily News Egypt that the two main studies that will be conducted by these consultation offices are the dam's implications on the water's hydraulic head to Egypt and Sudan, and the economic and social implications of GERD.

Raslan added that these contracts were supposed to be signed in August 2014, and that the results of these studies will take about 11 months to be issued. However, the three countries kept postponing the measure.

Raslan said: "Ethiopia has announced its stance more than once. It said that the studies of these consultation offices will be respected, but that they are not obligatory. Also, it said that these studies will help in the operation process of GERD, but will have no effect whatsoever on the construction process."

Former minister of foreign affairs Nabil Fahmy said on Tuesday in an interview with a privately owned TV channel that the Egyptian government has to disclose everything pertaining to GERD to the public. He further expressed his concerns over GERD due to the lack of guarantees provided by Ethiopia to Egypt and Sudan. He concluded that it is about time the Egyptian government discloses all the facts of the GERD issue.

Professor of water resources Nader Nour Al-Din previously told Daily News Egypt that the consultation offices will take up to 12 months to study the side effects of GERD on Egypt, and that by then, Ethiopia will have completed the construction of the dam. He also said that Ethiopia brought up the consultation offices issue to win time.

Despite the tension that erupted between Egypt and Ethiopia over the past few years since Ethiopia started to construct the GERD, spokesperson of the Foreign Affairs Ministry Ahmed Abou Zaid previously told Daily News Egypt that it had no effect on the bilateral relations between the two countries.

Sudan, Egypt, and Ethiopia signed a declaration of principles in March 2015, in which they agreed on the construction of the GERD. The government is claiming that the consultation offices will guarantee that the water share of each country will not be affected.

31/08/2016, online at: <http://www.dailynewsegypt.com/2016/08/31/egypt-sudan-ethiopia-irrigation-ministers-finalise-gerd-consultation-offices-agreement/>

- **Water tanks and waste collection vehicles delivered to Hadramout**

The Emirates Red Crescent Authority (ERC) today handed over waste collection and water tank vehicles to 11 districts in Hadramout, in the presence of its Governor Major General Ahmed Saeed bin Braik and the Head of UAE Relief Team Matar Al Ketbi.

The Hadramout Governor commended the UAE's efforts in support of the province, following its liberation last April. He said the vehicles will contribute in improving the services offered to the people of Hadramout.

Al Ketbi said the delivery of vehicles was part of the UAE's initiatives to enhance the infrastructure facilities and services in the province.

01/09/2016, online at: <http://www.wam.ae/en/news/emirates-arab/1395299445923.html>

- **Israel to transfer 30m cubic meters of water to Palestinians**

Egypt, Jordan and Saudi Arabia praise water-sharing deal included in mammoth Red Sea-Dead Sea canal project.

Israel's ambitious project to construct a canal linking the Red Sea to the shrinking Dead Sea will also see the transfer of 30 million cubic meters of water to the Palestinian Authority, under an agreement signed Wednesday at a global water conference in Stockholm.

The agreement, signed at the annual The World Water Week, was backed by Jordan, Egypt, Saudi Arabia and the other Gulf states, but sparked an angry outburst by the Palestinian representative against Israel's water policies.

Likud MK Ayoub Kara, who represented Israel at the annual conference, said the transfer would begin within the next month.

"We brought up the creative idea for the transfer of 30 million cubic meters of water to the Palestinians next month within the framework of the canal project, and the initiative was praised by members of the council," he told Israel Radio on Thursday.

“This praise for the initiative pressured the Palestinian representative, who took to the stage and was shouting like you’ve never seen, prompting security to remove him from the stage,” Kara added.

The ambitious Red Sea-Dead Sea canal project has been in the works for more than a decade and aims to provide much-needed water to parts of Jordan, Israel and the Palestinian territories.

A desalination plant in the Jordanian city of Aqaba, across the gulf from the Israeli resort town of Eilat, will produce the drinking water. Israel will receive around 30-50 million cubic meters of potable water, which will go to Eilat and communities in the arid Arava region, while Jordan will use 30 million cubic meters for its own southern areas.

One hundred million cubic meters of the highly saline byproduct of the process will be piped north to the Dead Sea — the lowest point on earth at some 427 meters (1,400 feet) below sea level — to replenish the lake, whose level has dipped precariously in recent decades. Experts have warned that the Dead Sea, the lowest and saltiest body of water in the world, is on course to dry out by 2050. Environmentalists have warned, however, that pumping the water into the Dead Sea will endanger the ecology of the region.

The project will be funded and supported by the World Bank, the US and several European countries. Last month, Jordan said 17 international firms have launched tenders for the construction of the canal.

01/09/2016, online at: <http://www.timesofisrael.com/israel-to-transfer-30m-cubic-meters-of-water-to-palestinians/>

- **Electricity and water bills in Kuwait to reach \$3.3bn in 2017**

Kuwait’s government will collect a total of \$3.3 billion (KD1 billion) in electricity and water bills in early 2017, Minister of Electricity and Water Ahmad Al-Jassar said on Wednesday.

So far, the ministry collected \$2.8 billion (KD 850 million) worth of bills, the official told press during a tour of water pipelines connecting Doha in Qatar to Al-Mutlaa in Kuwait, reported state news agency KUNA.

Al-Jassar said the total production rate of water in Kuwait is 550 million gallons while reserve rate is four billion gallons.

He said the Doha station is set to produce 60 million gallons of distilled water daily. Four of the pipelines will transfer water to Al-Mutlaa while others will transfer to nearby areas such as Jaber Al Ahmad.

The \$75 million (KD 22.6 million) project is likely to be completed in September 2018.

01/09/2016, online at: <http://www.arabianbusiness.com/electricity-water-bills-in-kuwait-reach-3-3bn-in-2017-644252.html?#.V8k5RvmLTIU>

- **Why We Need To Stay Below 1.5°C Threshold To Fight Water Crisis in Pakistan**

Different researches and real time experiences confirm that climate change has direct impact on access to and management of water for drinking and agriculture purpose in Pakistan. The country is hit hard due to recurring climate catastrophes. Women are at the center of these impacts due to their inequitable access to water and land rights and decision making.

Climate Scientists recommend the world take serious actions to limit emission of greenhouse gases and keep the average global temperature below 1.5°C. This is vital to prevent humanity from climate crisis. In case of Pakistan, even before reaching this threshold, water crisis in the region is already at alarming level. Pakistan by no means can afford the world cross the safe limit of 1.5°C and increase its vulnerabilities manifold.

Declining water as a serious threat to human life in Pakistan: In December 2013, the World Resources Institute ranked Pakistan among the 36 most water-stressed countries in the world. Data from the Water and Power Development Authority of Pakistan indicates in 1951 per capita water availability was 5,650 cubic meters. By 2010, that figure shrank to 1,000 cubic meters and it is set to fall to 800 cubic meters by 2025, when Pakistan's population rises to 221 million. Alarming, groundwater levels in the country are dropping by a meter a year. With this rate, Pakistan is heading towards widespread water poverty in next few years.

According to Water Aid, 16 million people in Pakistan have no choice but to collect unsafe water from unsafe sources. 68 million people don't have access to adequate sanitation in Pakistan. Around 39,000 children under five die every year from diarrhoea caused by unsafe water and poor sanitation in Pakistan.

Water-stressed agriculture: Nearly 70% of Pakistan's 291 millimeters of annual rainwater gets wasted because of poor storage facilities. Agriculture accounts for 24% of the total GDP of Pakistan. 68% of its geographical area has annual rainfall of 250mm whereas only 8% of the areas have annual rainfall of 500mm. To meet the food production need, the country thus requires supplemental water for better crops production. The contribution of Agriculture in GDP growth rate has significantly declines from 50% in 1929-50 to about 24% in 196-97. By the year 2050, the urban population of Pakistan is expected to reach 63.7% as compared to only 36 percent in 2010. Rapid increase in population will lead to overwhelming pressure on water supply both for households and agriculture needs.

Women, the most vulnerable: Women face the brunt of climate crisis more than anyone else in the society. Inequitable power relationship, lack of access to different resources like water and land rights, information and training keep women more vulnerable in the face of growing impacts of climate change. Women are often at receiving end by the policy makers and strategists rather than being empowered to find their own solutions and actions to find sustainable water solutions.

Women faces numerous challenges, however natural disasters and conflicts in Pakistan doubles the risks that women face. They have limited access to assets, income and information and their limited mobility restrict them respond to disasters, unlike men. In the agriculture sector, women are disproportionately employed. When disasters hit like flooding, large number of population gets displaced which triggers case of gender based violence and other abuses. In addition, living in displaced settings, women have to travel more to fetch water and collect food and woods as distance between their settlements and source of water increased. Studies from the Asian Development Bank shows that targeted interventions in rural development projects have significantly contributed in

women's empowerment. Another study found that if water is available at household level in some rural communities, families can save as much as 1,200 hours per year.

This analysis simply tells a straightforward story - keep the world under 1.5 Degree threshold as this is the utmost need of countries like Pakistan and its citizens who would otherwise fight for their dignity and search of water to drink and survive.

01/09/2016, online at: http://www.huffingtonpost.com/entry/why-we-need-to-stay-below-15-degree-c-threshold-to_us_57c7e818e4b06c750dd8c76b

- **DCO visits city to inspect rain water disposal**

DCO Lahore Capt. (R) Muhammad Usman on Thursday visited various city areas after rains and inspected the arrangements by WASA, Lahore Waste Management Company (LWMC) and town administration for speedy disposal of rain water.

The DCO inspected arrangements by the WASA and LWMC for rain emergency and monitored the performance of officials to redress the public complaints.

He visited Lakshmi Chowk, Empress Road and Railway Station areas and observed the roads inundated in rain water.

The DCO instructed WASA authorities to continuously monitor the performance of disposal stations across the city and keep them in order to deal with any emergency during rains. He also directed them to ensure the standby arrangements of fuel for generators during power loadshedding so that the working of pumps could be continued uninterrupted. The DCO said that strict action would be initiated against the officials for any negligence.

02/09/2016, online at: <http://pakobserver.net/dco-visits-city-to-inspect-rain-water-disposal/>

- **Tunisia: rainfall shortage stands at 28%, says UTAP**

This year's rainfall deficiency stands at 28%, the Tunisian Union of Agriculture and Fisheries (UTAP) said at a news conference Thursday in Tunis.

Water reserves reached 760.8 million m³ by late August against 1,212.5 million m³ during the same period over the last three years.

There is a shortage of 451 million m³ in comparison with an average of 1,500 million m³, UTAP officials indicated.

The deficit affected dry farming (92% of agricultural land in Tunis). Likewise, irrigation was interrupted and fodder products posted a 30% drop. The UTAP Vice-President said about 2 billion m³ of water are lost in northwestern dams out of a total of 4.8 billion m³.

These water resources would have solved the deficit if they were transferred to dams in the centre and the south, he said. He was also critical of using dam water in tourism at the expense of the agricultural sector.

02/09/2016, online at: http://africanmanager.com/site_eng/tunisia-rainfall-shortage-stands-at-28-says-utap/?v=947d7d61cd9a

- **Additional US\$18 Million to Support Improved Wastewater Management in Tunisia**

The World Bank Group's Board of Executive Directors approved on September 1 US\$18 million (euros 16.2 million) in additional financing to complete an environmentally safe wastewater disposal system considered critical for the protection of sensitive marine ecosystems off the coast of Tunisia.

Part of the Northern Tunis Wastewater Project, the new financing is for the construction of a 6km submarine outfall, an underwater pipeline that will transport treated wastewater away from the shore for improved dispersal and dilution.

Tunisia's coastal and marine ecosystems are under threat from sometimes untreated wastewater discharges and pollution from agricultural drainage. Reducing nutrient discharges into the Gulf of Tunis is a national priority, and the government has developed a national program for improved management of wastewater with Tunisia's sanitation utility, the Office National de l'Assainissement (ONAS).

"The Bank has supported the development of ONAS since its creation in 1974, and the safer discharge of wastewater will greatly help wider, transnational efforts to reduce pollution in the Mediterranean, as well as improving the environment for Tunisians through improved waste management control on the ground in Tunisia itself," said Eileen Murray, World Bank Country Manager for Tunisia.

Tunisia is relatively well served in terms of water management, with developed utility companies and systems. Almost all its urban populations—and 90% of its rural populations—have access to potable drinking water, and 85% of its urban population has access to improved sanitation as well. But only a limited number of submarine outfalls have been built in Tunisia to date, making the safe disposal of effluents difficult, according to the World Bank.

"While the additional financing will help complete the complete the transfer system for the safer disposal of treated wastewater, the project will also foster its reuse in agriculture and other sectors. Using treated wastewater as a non-conventional source of water for agriculture will help Tunisia cope with the increasing challenge of water scarcity," said Richard Abdulnour, World Bank Sanitation and Water Specialist and Task Team Leader for the project.

The sanitation sector in Tunisia has come under increasing strain in recent years. Delayed investments and low tariff increases have constrained the ability of ONAS to modernize its services and keep up with increasing urban demand. Along with the construction of critical infrastructure, the additional financing will support institutional capacity building, environmental and water quality monitoring systems, and the design of future projects for the ongoing national project of improving wastewater management.

02/09/2016, online at: <http://www.finchchannel.com/index.php/business/59507-additional-us-18-million-to-support-improved-wastewater-management-in-tunisia>

