



ORSAM WATER BULLETIN

Weekly Bulletin by ORSAM Water Research Programme

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



Agri-experts for using efficient irrigation techniques to conserve water

Agriculture experts gathered here from 30 countries of the world asked for using efficient irrigation technologies to conserve water and to produce more crops for tackling the increasing food demands.

Addressing the 3rd day of the 75th Plenary meeting of the International Cotton Advisory Committee (ICAC), they said that inefficient use of water was reducing the ground water level and available water resources were facing immense pressure due to increasing population across the globe.

The event was organized by the Ministry of Textile Industry which was attended by the 400 delegates from 30 members' states, besides Director General ICAC Jose Sethi also attended the meeting.

Speaking on the occasion, WWF Pakistan Representative, Arif H. Makhdum said that agri-sector and cotton crop was consuming about 95 percent of fresh water in the country. He said that the cotton sector was a source of livelihood for over 1.4 million farming families and accommodating skilled labors in the country.

He informed that about 56 million cubic feet water was diverted in Punjab irrigation system and about 11 million feet water in canals wasted due to inefficiencies.

He said that WWF has initiated programmes for the capacity building of farmers and about 92,350 cotton farmers across the country and trained them on better management practices, pest attack management.

It had reduced 24.7 percent of water waste, where the use of pesticides were also reduced by 31.5 percent in the targeted areas which had help in environment degradation, he added.

WWF head informed that 27 percent net profit was gained by reducing the 24 percent use of

syndic fertilizers where as 115,336 metric tons of clean and better cotton produced.

Speaking on the occasion, Secretary Agriculture Department Sind, Abdul Raheem Soomro said that the event has an great opportunity to promote local textile and cotton industry in the world.

He said it would also help in policy making to produce best cotton by sharing the international best practices and innovative techniques.

He said the event would also help in capacity building of other stakeholders including growers, ginner and spinners besides introducing the local products in international markets.

1/11/2016 online at: <http://www.app.com.pk/agri-experts-for-using-efficient-irrigation-techniques-to-serve-water/>?

Water expert warns against drinking yellow Nile water after floods

Water resources expert Ahmed al-Shenawi has warned against drinking Nile water that has turned yellow after recent floods, saying the change in color means it is unsafe for human consumption.

He explained that the flooding has resulted in Nile water being mixed with flood waters that have passed over limestone, as contained in many Egyptian mountains. Such water often turns yellow and has a high salt concentration, he said.

"Ataka Mountain is one of the most famous limestone mountains in Egypt, and this water when deposited turns agricultural land salty due to the amount of lime in it," Shenawi said in an interview with satellite channel Rotana Masriya on Monday.

He warned citizens against drinking such water, saying "Water changing to a yellow color is a disaster, and a ban is needed until the lime can be removed and the water passed through a refining process."

Since Saturday, much of the water taken from the River Nile has been yellow, due largely to flooding from heavy rains last week.

Some water treatment stations have stopped working while they wait for flood waters to recede.

1/11/2016 online at: <http://www.egyptindependent.com/news/water-expert-warns-against-drinking-yellow-nile-water-after-floods>

35 water stations halted after floods leave Nile with high levels of turbidity

The Holding Company for Water and Wastewater released a statement on Tuesday, announcing that it has halted operations in 35 water stations in five governorates due to the high levels of turbidity which were caused by floods, local media reported. Stations have been stopped in Giza, Qena, Sohag, Fayoum, and Beni Suef.

The general manager of the Holding Company for Water and Wastewater was not available for comment.

Following heavy rainfall and flooding that hit Upper Egypt over the weekend, on Monday the Nile river turned brown and murky, causing citizens to question the reason for this change in the waters and the effect it may have on the populace.

The Ministry of Water Resources and Irrigation spokesperson, Waleed Hakiki, told Daily News Egypt that the turbidity does not have any effect on drinking and tap water. “The state of emergency announced is just a preparation measure,” he said.

“If the reason behind this colour is the top soil coming from Ethiopia then it’s for the best, as it is going to wash out all impurities and insects, and it will also feed the silt,” the senior adviser to the minister of environment, Dr Hussein Abaza, explained to Daily News Egypt. He stated that before the dam was built in Aswan, “the colour of the river was just like how we see it now during this time of the year. When you’d ask the farmers when he’ll pick his harvest, he’d tell you after the flood, which tells you how important this turbidity is for agriculture.”

However, urban activist Atef Amin told Daily News Egypt that this turbidity is due to water pollution and denying this fact is considered a disregard of people’s intelligence. Amin, who is also the founder of the Egyptian Coalition for Urban Development, said that there are

underprivileged areas that are endangered due to their location near the mountains. Manshiat Nasr, El-Ma'ssara, and Wadi Hof are areas lacking the appropriate infrastructure to deal with such circumstances, he said.

Latest reports from the Ministry of Health said that 26 people died and 72 were injured following heavy floods in different governorates across Egypt since Friday.

1/11/2016 online at: <http://www.dailynewsegypt.com/2016/11/01/35-water-stations-halted-floods-leave-nile-high-levels-turbidity/>?

Device developed to detect lead levels in grey water

A teacher-student team of researchers from the UAE University (UAEU) has researched and developed a cheap, portable device to detect heavy metal levels in grey water mainly used for agriculture around the world.

The device, if patented successfully as they believe, could revolutionise the agriculture and food sector around the world, especially in developing agro-based countries like India and African nations which use grey water for farming. It is also helpful for arid countries in the Middle East which use treated sewage water for plants and roadside greenery.

The research was part of the UAEU Summer Undergraduate Research Experiences (SURE) programme of four female students and their supervising professors who spent six weeks developing the device. The device allows one to accurately measure concentrations of lead in water at the source rather than transport the sample to a lab. The heavy metal like lead is heavily found in grey water if not in drinking water which is generally tested and purified.

Currently, heavy metals in water are measured using instruments such as inductively coupled plasma (ICP). However, they are costly, high maintenance and require scientists and researchers to bring their water samples to the lab for analysing, explains Thies Thiemann, Professor of Chemistry at UAEU.

Prof. Thiemann says cost and the need to transport the sample was the other determining factor for the team which included Prof. Thiemann, Dr Saber Abdel Baki and undergraduate

students Shefaa Abou Namous, Amna Al Neyadi, Zeinab Saeed and Salma Abubaker.

Dr Abdel Baki added: “The project included the preparation of a new plastic electrode to measure and estimate concentrations of lead ions at ppb level in the traditional way and a recently developed way.”

If the device makes its way to the market, which Prof. Thiemann says is wholly possible, it could transform the agricultural industry at home and abroad. The companies who would benefit the most from using the device include agricultural associations, says the professor.

“Ultimately associations provide help to the farmers and this sort of device would be quite helpful Prof. Thiemann and Dr. Abdel Baki are hoping to patent the device. “The UAEU has a dedicated office that manages intellectual property and patents.

“Ultimately, UAEU is actively pursuing patents at the moment and quite successfully so. But for that there will need to be some more research here; the students will continue to do research over the semester and most likely we will refine certain things and afterwards it will then be looked at by the IP Office.”

1/11/ 2016 online at: <http://gulftoday.ae/portal/7183d718-b812-4be4-825d-98c3efead94f.aspx?>

Israel 'to increase water supply' to Gaza

Israel says it will increase its water supplies to the besieged Gaza Strip, where 70 percent of households have only sporadic access to running water.

The construction of a new water reservoir was finished a few days ago, Israel's Coordination and Liaison Administration for Gaza said in a statement, which will provide drinking water to 200,000 residents of the Palestinian territory. "We welcome the completion of construction as part of the efforts to improve the lives of residents in the Gaza Strip," the CLA said.

The new reservoir will be connected to a water pipeline in the Nahal Oz kibbutz in southern Israel, along the border with Gaza.

The reservoir can retain around 5,000 cubic metres of water, which is set to lead to an annual increased transfer of between 1.5 to three million cubic metres of water to Gaza.

Currently Israel provides five million cubic metres a year.

CLA added in its statement that it was continuing efforts "to help carry out the reconstruction process in Gaza and to coordinate hundreds of international projects to develop and reconstruct the Gaza Strip".

Since the 2014 war, Gaza has had little chance to recover – 95 percent of drinking water available from coastal aquifers became unsafe to drink, and 72 percent of households relied on UN-supplied rations in May 2015, according to a UN report which said the enclave could be uninhabitable by 2020.

Earlier this month, the UN's top humanitarian chief Stephen O'Brien said Israel had tightened its decade-long siege of the Strip, where 70 percent of its two million population has running water for only a few hours every two to four days – most of which is not drinkable.

Israel also unilaterally adds high interest rates and deducts non-payment from the Palestinian Authority tax revenues for delays or inability to pay for sewage services, water and electricity that the territories import from Israeli facilities.

1/11/2016 online at: <https://www.alaraby.co.uk/english/news/2016/11/1/israel-to-increase-water-supply-to-gaza?>

Oman to build new water plant to meet domestic demand

The plant will be sited in Musandam, a northern enclave of Oman. The project will have a desalination capacity of 16,000 cubic metres of water per day and will to be developed as a private company, the Times of Oman reported.

Tender documents can be purchased until November 13 with the final submission date being December 11.

Oman is currently developing independent water projects in Salalah, Sharqiyah and Duqm, which will together increase capacity to 52.8 million imperial gallons per day.

Demand for potable water in the country's northern region, which includes the Muscat governorate, is projected to grow by 6 percent per annum in the next five years from 238 million cubic metres in 2013 to 349 million cubic metres by 2020.

2/11/2016 online at: <http://www.arabianbusiness.com/oman-build-new-water-plant-meet-domestic-demand-651028.html?>

Water Summit 2017 to support MENA water sustainability and innovation

The GCC's successful record of overcoming extreme water scarcity in one of the driest parts of the world will be a cornerstone of the fifth International Water Summit (IWS), to be held in Abu Dhabi in on 5th January 2017.

All 21 countries in the Middle East and North Africa (MENA) are expected to fall below the World Health Organisation's "water poverty line" of 1,000 annual cubic metres per person by 2030, according to a recent report by the World Resources Institute and GE.

Federal Electricity and Water Authority data shows that UAE per capita consumption is around 500 litres per day, around 82 percent above the global average. According to the Environment Agency – Abu Dhabi, consumption is around 26 times the natural supply.

However, the GCC region has consistently used innovative technology – particularly in its pioneering use of desalination – to ensure secure urban water supplies despite high levels of demand. As a result, the region has amassed a wealth of knowledge and experience in this vital area, at a time when water scarcity is recognised as one of the world's biggest challenges. According to United Nations statistics, by 2025 two-thirds of the world's population could be living under water stressed conditions.

As demand for domestic, agricultural and industrial uses continues to grow, the UAE and other GCC states continue to offer a prime market for innovations that can increase supply and reduce waste, while also considering broader sustainability issues. These include more efficient desalination of seawater such as using solar energy to power desalination plants, reducing losses in the distribution network, improved irrigation methods for agriculture, and better treatment and use of recycled waste water.

IWS will support MENA water sustainability and business deals, running under the theme of "Promoting Sustainable Water in Arid Regions", as a signature event of Abu Dhabi Sustainability Week 2017. IWS is hosted by Masdar in strategic partnership with the Abu Dhabi Water and Electricity Authority.

"Demand for energy and the pressing need for sustainable supplies of water are inseparable challenges," said Mohamed Al Ramahi, Chief Executive Officer of Masdar. "This is particularly true in the Middle East, where substantial and increasing power capacity is required for seawater desalination.

"Masdar is at the forefront of innovation in clean energy and water, both as a founding member of the Global Clean Water Desalination Alliance, and through our direct investment

in R&D such as the Ghantoot Desalination pilot project here in the UAE, which is testing energy-efficient, renewables-based technologies. We believe industry collaboration and knowledge sharing are vital in order to drive progress and support widespread adoption of sustainable solutions. The International Water Summit has established itself as an outstanding platform for achieving this, and we're looking forward to its fifth year in 2017," he added.

At the event, attendees can experience the latest solutions and industry insights in water efficiency and desalination, wastewater treatment, and managing the water demand in a largely arid environment among exhibitors, investors, contractors, and government agencies.

IWS 2016 hosted over 10,000 attendees and 185 exhibiting companies from 111 countries.

2/11/2016 online at: <http://www.wam.ae/en/news/emirates/1395302499546.html?>

Preference of Power over Water

Water resources have taken a backseat on Prime Minister Nawaz Sharif's agenda. Time and again, people have written about the lack of water in our reservoirs, but the government fails to take notice. The WAPDA, which has always shown priority to water over power, has also taken a U-turn. People can live without power, but cannot survive without food and water.

The inaction regarding water reservoirs can lead to a serious water crisis, if not managed properly and quickly.

The chairman of WAPDA also saw no other option but to resign, for supporting the Kalabagh project. The government, as usual, remained oblivious to the water problem.

Kalabagh remains an unrealised yet crucial project, which has never seen completion due to the fear of provincial disharmony. Without putting our resources to proper use for the benefit of all, what will we do with provincial harmony? Now that India has also threatened to stop water supply to Pakistan, the government must realise the urgency of this problem.

2/11/2016 online at: <http://tribune.com.pk/story/1218878/preference-power-water/?>

Residents Demand Clean Drinking Water to Prevent Water-Borne Diseases

Residents have called upon the Tehsil Municipal Administration (TMA) to take concrete measures for ensuring safe drinking water to prevent water-borne diseases in the area.

It is to be noted that Peshawar High Court in its detailed judgment has already directed Khyber Pakhtunkwa government to ensure supply of clean drinking water to the residents of provincial capital as well as of other cities of the province.

People of our area are fetching water from far-off and that is too contaminated, but the TMA was in fast slumber exposing residents to water-borne diseases, so Council for Scientific and Industrial Research (PCRSIR) should also take sample and conduct test on that water to determine its quality to raise awareness among people, Akhtar a citizen observed.

He was of the view that besides TMA, an action should also be taken against Municipal Committee Tank for supplying unhygienic water to citizens. The court observed that it must be ensured that potable water is made free from all types of contamination and fit for human consumption.

Moreover the judgment also suggested a task force comprising secretaries for local government, irrigation, public health engineering departments to complete the task within six months at the most.

But it is quite odd that despite the elapse of several months the matter is yet to be addressed by the district management and the TMA. According to the local there are complaints about increasing cases of abdominal diseases across the area. The matter of grave concern is that despite number of reports and indications by the media neither the local nor the provincial government bothered to take into account the core issue of 100 percent polluted water for which residents pay Rs.100 per month. Adnan Yousaf Barki Advocate and Chairman Daman Citizens Front deplored.

He said TMA should replace the decade-old main water pipelines which are rusty and water gets filthy, causing chances of diseases. He said the supply-line was lying either choked with sediment or broken which further aggravate problems.—APP

2/11/2016 online at: <http://pakobserver.net/residents-demand-clean-drinking-water-to-prevent-water-borne-diseases/>?

NDU Delegation Briefed on Water and Power Projects

A delegation of the National Defence University (NDU's) National Security and War Course visited WAPDA House on Tuesday.

The delegation, headed by Brigadier Hammad Qadir, was briefed about the water and power sector issues. Water and Power Development Authority Member Badrul Munir Murtiza and other senior officers were also present.

WAPDA's Adviser on Diamer-Bhasha Dam project Dr Izharul Haq and Pakistan Electric Power Company (PEPCO) General Manager (Revenue and Commercial Operation) Muhammad Saleem briefed the delegation about water and power sectors, respectively.

During the presentation, the delegation was told that the WAPDA was working for optimum development of water and hydropower resources in the country. Currently, the WAPDA is constructing six hydropower projects with cumulative generation capacity of 4,792 MW. These projects include 969MW Neelum Jhelum, 1,410MW Tarbela 4th Extension, 106MW

Golen Gol, 128MW Keyal Khwar, 2,160-MW Dasu (Stage-I) and 18.9MW Kurram Tangi Dam project.

It was told that three projects having generation capacity of 2,485MW would be completed by 2018. The delegation was also informed about under-construction water sector projects including Kachhi Canal (Phase-I), Nai Gaj Dam, Right Bank Outfall Drain (RBOD)-I and III, and lining of Muzaffargarh and Taunsa Panjnad link canals.

The delegation was told that seven other projects in water and hydropower sectors are ready for construction.

The delegation was also briefed about annual water flows and storage capacity, per capita availability of water, impact of climate change on water resources, water management challenges, water conservation and hydropower potential of the country.

In another briefing, the delegation was briefed about power sector reforms, electricity crisis and issues relating to power sector. Following the briefings, a question-answer session was also held, wherein the queries about water and power sectors raised by the participants were responded to. Later, the WAPDA member and the NDU delegation head exchanged souvenirs as a memento of the visit.

3/11/2016 online at: <http://dailytimes.com.pk/punjab/02-Nov-16/ndu-delegation-briefed-on-water-and-power-projects?>

Scientists Honored for Tackling Water Scarcity

Saudi Arabia awarded eight scientists the Prince Sultan Bin Abdulaziz International Prize for Water at a ceremony at United Nations headquarters in New York on Wednesday.

The ceremony was hosted by UN Friends of Water and presided over by Secretary-General Ban Ki-moon along with the prize committee chairman Prince Khalid Bin Sultan Bin Abdulaziz.

The bi-annual prize, established in 2002, aims to provide recognition to scientists and others whose work creatively addresses the problem of water scarcity.

Prince Khalid hailed the prize as a way “to help the whole world overcome the problem of the scarcity of water.”

He declined, however, to link the water issue with his country’s on-going military campaign in Yemen, where a number of experts say water resources are one of the issues fueling the conflict.

“The prize has nothing to do with politics, it has nothing to do with wars. It is there to prevent wars,” Prince Khalid said.

Dr. Rita Colwell of University of Maryland at College Park and Dr. Shafiqul Islam of Tufts University took home the “Creativity Prize” for their work using satellite data to predict cholera outbreaks. Dr. Peter J. Webster of the Georgia Institute of Technology also shared the Creativity Prize for his work on predicting monsoonal floods.

The “Surface Water Prize” went to Dr. Gary Parker of University of Illinois Urbana-Champaign for his work on meandering rivers.

Dr. Tissa H. Illangasekare, of the Colorado School of Mines, was awarded the “Ground Water Prize” for his work on predicting the long-term fate of pollutants in the water table.

3/11/2016 online at: <http://gulftoday.ae/portal/6fd368c0-efdb-4ba7-bf14-f3bbb1a90858.aspx?>

Khirbet Humsah, the Jordan Valley, living with no running water: Summer 2016

Kh. Humsah is one of dozens of small shepherding and farming communities scattered throughout the Jordan Valley. It is comprised of about 20 families and located northeast of the Hamra checkpoint. Like other communities in the Jordan Valley and throughout Area C, Kh. Humsah is not recognized by the Israeli authorities, which repeatedly demolish homes, prevent the community from connecting to the water network and work toward expelling its residents, who struggle to survive in the extreme heat of the Jordan Valley, making a meager living off farming and shepherding, while facing a constant water shortage. Dina and ‘Abdallah Abu Qabash, parents of four and residents of Kh. Humsah, speak about the difficulties of living with a water shortage, and harassment by the Israeli authorities.

3/11/2016 online at: http://www.btselem.org/video/201609_water_humsah?

India to use more water from Indus basin, but within terms of treaty with Pak

The Indian government has decided to use more water from the Indus basin rivers, but within the limitations of the Indus Waters Treaty with Pakistan.

Prime Minister Narendra Modi’s office set a December deadline for the country’s Central Electricity Authority to complete the techno-economic appraisal, pending for over a year – to check the viability of about six hydroelectric projects on the Chenab, after consulting the Central Water Commission, Hindustan Times reported.

The projects include the proposed 1,856MW Sawalkote hydel project near the Line of Control (LoC).

The decision came after Modi in September reviewed the Indus Waters Treaty, a 56-year-old pact between the neighbouring countries that has survived three wars and numerous bilateral bickering. In a meeting, the Indian premier reportedly zeroed in on adopting an aggressive strategy to raise pressure on Pakistan. The move came days after he threatened the nation with global ‘isolation’ following the Uri attack in September.

India had been deliberating on the pros and cons of action on the 1960s water treaty between the two nations as a strong response to the separatist attack in Indian-occupied Kashmir which left 18 Indian soldiers dead, according to NDTV. India accused Pakistan of being involved in the attack, a charge the latter denied.

Referring to the government's recent decision, a senior water resources ministry official said, "This will be the first step towards ensuring speedy implementation of these projects, which can produce more than 5,000MW."

"It generally takes anywhere between one and two years to get the techno-economic appraisal. After that the projects will have to get a host of clearances, including environment and forest." The government stated that India would use only its share of water for power and agriculture purposes.

According to reports, concerned authorities have been directed to coordinate with IoK government to resolve issues which hindered the work of power projects started earlier, as well as identify areas where irrigation canals can be set up.

4/11/2016 online at: <http://www.pakistantoday.com.pk/2016/11/04/national/india-to-use-more-water-from-indus-basin-but-within-terms-of-treaty-with-pak/>

Excitement builds around Dubai Water Canal opening

The 3.2km Canal runs from the Business Bay up to the Arabian Gulf via the Shaikh Zayed Road, Al Wasl and Jumeirah Road.

If you are travelling along Shaikh Zayed Road and spot water cascading from under one of its bridges (beside the W Hotel, The St. Regis and Westin in Al Habtoor City), then you should know that this is part of the in-progress Dubai Water Canal project. Authorities have started filling up the canal a few days ago and now the testing phase of the waterfall is in progress. It is reportedly said that the scenic waterfall is made up of 80 water pumps, and is sensor based so that it can turn off when boats pass under the bridge.

The 3.2km Dubai Water Canal, being built at a cost of Dh2 billion, runs from the Business Bay up to the Arabian Gulf via the Shaikh Zayed Road, Al Wasl and Jumeirah Road. It will be six metres deep and will be crossed by eight-metre high bridges.

Although parks, hotels, restaurants, luxury housing and facilities - including walkways, cycle paths, private marinas for boats and a trade centre at the entrance of the project - are yet to be built, residents have no doubt that the project will add "another attraction to the vibrant city of Dubai".

Unveiled on October 2, 2013, the canal will be lined with retail and restaurants, parks, greenery, and eco-friendly lighting. The canal spans a total area of 80,000 square metres with private marinas for boats and a trade centre at the entrance of the project. There will also be a shopping centre, four hotels, 450 restaurants, luxury housing, walkways and cycle paths.

Modern water transport means will serve the water front, resulting in improved quality of water in the Dubai Creek.

"When it was announced three years ago, this ambitious undertaking seemed almost impossible and yet today, Shaikh Zayed Road rises 8.5 metres above the ground, water flows through Jumeirah, and Downtown to Bur Dubai is now its own island," Lukman Hajje, group CCO at propertyfinder.com, wrote to Khaleej Times.

"With this project, and others like it, Dubai is demonstrating that it is a city that not only embraces innovation and growth, but that it is also not afraid to drastically alter its landscape in order to rise to the heights of possibility. Where there was once only sand, there is now award-winning architecture, towering skyscrapers, record-breaking feats of engineering and the latest smart technology," he added. Dubai Water Canal is also expected to boost the status of the emirate as a global leisure destination.

Erwin Bamps, CEO of Gulf Craft, said: "We believe the Dubai Canal will play a pivotal role in establishing the UAE as a global leisure marine hub. Projects like Marasi Business Bay, the region's first purpose-built yachting destination, will give yacht owners more room to enjoy their craft in Dubai, and encourage other aspiring yacht owners to follow suit."

"However, ease of access and a user-friendly infrastructure is central to attracting both tourism and investment. This can be achieved by deploying an effective water transport strategy, such as 'hop-on and hop-off' boats, allowing visitors to explore the many lifestyle attractions along the canal while enjoying stunning views of the Dubai skyline," Bamps added

4/11/2016 online at: <http://www.khaleejtimes.com/nation/general/excitement-builds-around-dubai-water-canal-opening?>

As water dries up, West Bank village thirsts for a less precarious supply

Following a three-year-long drought, Palestinian villages in the West Bank share the same issue as their Jewish neighbors—water and access to it; however, as many Palestinian West Bank structures are illegal, they are unable to fully be connected to the Israeli water grid.

A mountainous Palestinian community in the West Bank, Al Jab'a differs in many ways from surrounding Israeli settlements but it shares one worry with its neighbors - a shortage of water.

In the last few decades the West Bank has seen rainfall decrease and groundwater levels fall with drought expected to become "more frequent (and) more intense", according to a 2012 United Nations Environment Program (UNEP) report.

Residents of Al Jab'a, who once had to walk for hours daily to fetch water, do have limited access to Israeli water supplies in their concrete homes due to a reservoir, pipeline and a pump built in 2013 by an Italian non-governmental organization.

But the water provided is not enough, according to families in Al Jab'a, a village of about 150 houses 12 km (7 miles) southwest of Bethlehem. They also fear their system could be demolished as it was not officially approved.

"Before, we had to walk many times a day to the nearby springs to fill our bottles and buckets," said Omar Musa, 18, who lives with his parents and five siblings near the reservoir in a house atop a hill.

"I was happy when I knew I would have water at home."

He estimated that his family saves about six hours a day by not having to fetch water for their use, crops and livestock.

Water Restrictions

But numerous rural and Bedouin communities in the West Bank are not connected to a network run by Israel's national water company, Mekorot, which is responsible for supplying water to Palestinians in the Israeli-occupied territory.

In Al Jab'a, only 10 percent of homes were part of the Mekorot distribution system until the pipes and reservoir completed in 2013 extended the network to the remaining households. Water piped by Mekorot is pumped up the hill to be stored in the reservoir.

But this has not completely resolved the community's water problems. Residents say the Mekorot system supplies water only intermittently and at low pressure. When supplies flow, families must hurry to store as much as they can.

In addition, residents like Musa and his family fear the reservoir could be demolished by the Israeli authorities because, like many of their homes, the structure was built without an official permit.

Construction by Palestinians is forbidden in Area C, a designation covering about 60 percent of the West Bank, including Al Jab'a.

Between 2010 and 2014 only 1.5 percent of requests for building permits in Area C were approved, according to the UN Office for the Coordination of Humanitarian Affairs (OCHA).

An application for a permit for the Al Jab'a reservoir by GVC, the Italian development organization that built it in partnership with UNICEF, was turned down, GVC said. According to Israeli authorities, issuing demolition orders for structures built without permission is a legitimate measure, a 2015 OCHA report notes.

An assessment by UNICEF in 2015 showed that 400,000 Palestinians from 1.7 million living in the West Bank were in need of improved water, sanitation and hygiene services. Israel points out that it provides the Palestinians with double the 30 million cubic meters of water annually that was agreed to in the 1995 Oslo accords.

Bring Back Cisterns

Gregor von Medeazza, chief of the water, sanitation and hygiene programme at UNICEF in East Jerusalem, said water remains a persistent sore point between Israel and Palestinian communities in the West Bank. "Water should be a source of collaboration and should bring people together," he said. "At the end of the day, they all share the same water resources."

Von Medeazza said that UNICEF is concerned about ensuring measures are in place to use water carefully and help communities adapt in the face of growing scarcity. "It means having rational use of (the) water available and making sure there is no wasting of water," he said. With climate change bringing more variable rainfall, "it is also important to emphasize that there is a question of accessibility and human right to a minimum amount of water", he said.

Apart from building reservoirs, Von Medeazza suggests rehabilitating around 300 ancient cisterns - underground storage tanks dating from Roman times that once collected water in the rainy season. These have the potential to be used today and would be a cost-effective measure, he said.

Around 80 such cisterns have been restored so far by a coalition of non-governmental organizations.

"The long-term vision is to increase the current access (to water) of people living in remote places," Von Medeazza said. "We have the technical solutions to extend services and connect communities. What we need is further support from all parties (Israelis and Palestinians) for this to happen."

For his part, Musa in Al Jab'a remains worried but resolute.

"We are really afraid of losing our reservoir," he said. But "we are not leaving our house nor our community".

5/11/2016 online at: <http://www.ynetnews.com/articles/0,7340,L-4874678,00.html?>

Dry weather triggers water shortage in Lower Dir

The long dry spell has created serious water shortage in Lower Dir district and caused an increase in the number of respiratory diseases-related patients at an alarming level.

Though it rained briefly after the four months long dry weather on Friday morning, it could not break the dry spell. In a survey conducted by The News, it was found that various areas in Lower Dir including Jandool, Maidan, Balambat, Timergara, Chakdara, Talash, Adenzai, Khall and Rabat faced acute water shortage as springs, wells and streams had run dry.

The water table has depleted due to the continuous dry weather. The residents were forced to bring water in tankers for daily use. Bahramand Said, a resident of Danwa village, said the price for a single water tanker has risen to Rs1,200 due to increase in water demand in the area. Danwa village is situated just eight kilometers away from Timergara, the headquarters of Lower Dir district.

“An upsurge in the number of patients suffering from typhoid, malaria, allergy, skin, nose, throat and other respiratory diseases has been noticed due to the long dry weather,” said Dr Saeed Shah.

He advised the people to adopt precautionary measures and wear masks, particularly in the morning and evening to avoid inhaling the moisture in the air.

The agriculture sector was affected the most by the dry weather as the farmers could not sow wheat crop due to the lack of moisture in the soil. The farmers have no alternative means to irrigate their land and sow the wheat seeds.

“Earlier we were unable to sow the mustard and barley crops at the right time due to the four months long dry weather,” said a farmer Taj Muhammad Khan. He was worried that the wheat crop would be severely affected if there was no rain in the next one month. The people have been offering special prayers, Nimaz-i-Istisqa to seek blessings of Allah Almighty for rain.

5/11/2016 online at: <https://www.thenews.com.pk/print/162561-Dry-weather-triggers-water-shortage-in-Lower-Dir?>

Efforts urged to develop water, energy resources

A delegation of National Security and War Course of National Defence University (NDU) Islamabad, headed by NDU Chief Instructor Maj-Gen Muhammad Naeem Ashraf Friday visited Wapda House and attended briefings on water and power sector of country.

Addressing the delegation, Wapda chairman Lt-Gen Muzammil Hussain (R) said energy and water are the two cardinal sectors of national security; therefore, concerted efforts are needed to develop water and energy resources in the country.

He said Wapda was constructing a number of projects in water and hydropower sectors, including Neelum Jhelum, Tarbela 4th extension, Golen Gol, Dasu (stage-I), Kurram Tangi Dam and Nai Gaj Dam etc. He said three of the under-construction hydropower projects with cumulative generation capacity of 2,485 MW would be completed in 2018. Besides the under-construction projects, Bunji Hydropower Project with generation capacity of 7,100 MW and Diamer Basha Dam with generation capacity of 4,500 MW and gross water storage capacity of 8.1 MAF are among the projects which are ready for construction. He said Diamer Basha Dam was the most essential project for Pakistan, being a multi-purpose project to store water and generate electricity. He said Wapda enjoyed a very good credit rating for raising funds for its hydropower projects.

The chairman said apart from its services for water and power sectors, Wapda could take pride for its contribution towards promotion of sports in Pakistan and its patronage of engineering discipline in country.

Wapda Adviser (Diamer Basha Dam Project) Dr Izhar-ul-Haq and Pepco General Manager (Revenue and Commercial Operation) Muhammad Saleem briefed the delegation about water

and power sectors respectively. In the briefing about water and hydropower sector, the delegation was briefed about annual water flows and storage capacity, per capita availability of water, impact of climate change on water resources, water management challenges, water conservation and hydropower potential of the country.

In another briefing about power sector, the delegation was apprised about power sector reforms, electricity crisis and issues relating to power sector. The delegation was also informed about the government's efforts to overcome the electricity shortages in the country.

Following the briefings, a question-answer session was also held, wherein the queries about water and power sectors raised by the participants were responded to.

Later, Wapda chairman and NDU delegation head exchanged the souvenirs as memento to the visit.

5/11/2016 online at: <https://www.thenews.com.pk/print/162447-Efforts-urged-to-develop-water-energy-resources?>

A visionary solution for the water issue

Egyptian Foreign Minister Sameh Shoukry recently paid an official visit to Israel and met with Prime Minister Benjamin Netanyahu. Of the issues discussed between the two, the most important was that Egypt might consider appointing Netanyahu as its mediator to resolve its water dispute with Ethiopia. A point overlooked by local media, which focused on what they claimed was the betrayal of the Palestinians the meeting represented.

Also overlooked was the fact that Israel will manage the electricity output from the Renaissance Dam and is in general becoming a strong presence on the continent. Water is a matter of national security for all nations, and particularly so for Egypt.

According to the 1959 agreement on the distribution of the Nile River water, Egypt's share is 55.5 billion cu.m. What was enough in 1959, however, is not enough in 2016.

While Egypt has ambitious economic plans, the country's pressing population increase is not making matters easier for the Egyptian government. The end justifies the means and so Egypt appointed Netanyahu to resolve water issues with Ethiopia as part of a two-phase project. In the first phase, a pipeline is to be constructed from Tana Lake in Ethiopia which will pass through Eretria (where Dahlak and Fatma islands host the Israeli naval forces that are strategically overseeing Bab al-Mandab), then through Sudan and finally Egypt. Afterwards, in phase two, the pipeline can be extended to take Nile River water to Israel.

The mutual benefits are obvious: for Egypt a higher share of cleaner Nile water for irrigation, industrial and commercial usage. We can build pipelines or construct canals to reach the western desert regions depending on site surveys and cost-benefit analyses. Israeli innovations and technology in agriculture will be an added assist.

For Israel, the plan will guarantee a continuous flow of Nile water to meet its current and future needs. It will be then be in a position to sell water to both Jordan and Palestinians in

return of securing peace for its people. Israeli companies will profit from the rapidly growing Egyptian market – with approximately 2.6 million children added each year.

Once Israeli technology is adapted in Egypt, together the two countries will gain entrance to African markets with signed bilateral trade agreements such as COMESA and others. The Alexandria to Cape Town highway and new tunnels under the Suez Canal – projects under construction – will facilitate the movement of products from Egypt and Israel.

Ethiopia will generate cash by selling the water. This cash can be utilized to meet its industrial and agricultural needs. I am a strong believer that peace and prosperity can be brought about through economic cooperation. This vision, once accepted by the three leaders, will require building an advocacy team with members from each country which has strategic vision to carry out an action plan. The Egyptian public is beginning to feel the impact of water shortages, in agriculture and in the home. It is appropriate to take action now while the political and economic circumstances permit.

6/11/2016 online at: <http://www.jpost.com/Opinion/A-visionary-solution-for-the-water-issue-471856?>

People drinking toxic water, says Aijaz Shah

Aijaz Shah has said that people of Badin are using toxin water for drinking as the drainage of many cities and towns is being flowed into the supply canals of drinking water.

Aijaz Shah was addressing the participants of a ceremony of a project titled "Enhancing Water and Sanitation Governance, Access in two Union councils of district Badin" organized by Indus Consortium in collaboration with USAID.

The Exin of the Irrigation Department further said that water for agricultural purpose is being forcibly stolen by the influential which hampers the provision of due share of water to the farmers of the tail-end.

Nazir Essani Memon, GM Transition, Sindh Irrigation Drainage Authority, on the occasion said unfortunately in Sindh the people of the coastal belt are compelled to face hardships due to political negligence.

Mohammad Ismail Kumbhar, Director University and financial Assistant, Agricultural University Tando Jam, said a big number of poor people live in Badin as compare to other districts. "Majority people of the coastal belt are using arsenic contaminated ground water through hand-pumps which increases the disease burden in the area," Kumbhar further noted.

6/11/2016 online at: <http://dailytimes.com.pk/pakistan/06-Nov-16/people-drinking-toxic-water-says-aijaz-shah?>

Nazim says Mardan deprived of its water share

District Nazim Himayatullah Mayar on Sunday criticised the government and Irrigation Department for reducing discharge of irrigation water to Mardan district.

Talking to The News, Himayatullah Mayar said that Pakistan Tehreek-e-Insaf (PTI) leaders were staging sit-in and protest rallies in the country against the federal government while on the other hand its government had started injustice with the district.

He claimed that sub-divisional office of Irrigation Department in Mardan had written a letter to provincial authorities stating that the discharge of water had been curtailed at Munda Headwork's far below the district share.

Himayatullah Mayar asked the provincial government to stop the injustice. He vowed to raise the issue at all forums. The nazim also asked the Minister for Education Muhammad Atif Khan and other lawmakers of PTI from Mardan district to raise voice for the rights of the district.

7/11/2016 online at: <https://www.thenews.com.pk/print/162899-Nazim-says-Mardan-deprived-of-its-water-share?>

CM orders no compromise on quality in clean water Project

Punjab Chief Minister Shahbaz Sharif on Sunday presided over a high level meeting to review the progress of different matters pertaining to provision of clean drinking water to the masses.

Addressing the meeting, the chief minister said that potable water is not only the basic right of citizens, but is also their need as well, adding that billions of rupees have been allocated for the implementation of Khadim-e-Punjab Saaf Pani Programme. He said that this programme is directly linked to human health and with the provision of clean drinking water people would get rid of diseases spreading due to polluted water. He said that work would have to be carried out in a professional manner to forward this public welfare programme speedily, adding that resources are a trust of the nation and clean drinking water programme is a project of spending resources on the masses. The CM directed that agreements with selected companies should be given a final shape at the earliest in a transparent manner for the programme while training should be imparted to newly appointed technical and other staff in Saaf Pani Company. The chief minister said that a comprehensive system should be evolved with the help of information technology for implementing and monitoring the programme. He said that no compromise would be made on quality and speed, adding that pre and post shipment inspection would be compulsory for ensuring quality.

German Consultant Franz De Carne gave a briefing regarding important matters of implementation of the programme. Provincial Housing Minister Tanvir Aslam Malik, Punjab Saaf Pani Company (South) Chairman MPA Muhammad Kashif, chief secretary, planning & development chairman, housing secretary, PSP chief executive and concerned officials attended the meeting.

7/11/2016 onlie at: <http://dailytimes.com.pk/punjab/07-Nov-16/cm-orders-no-compromise-on-quality-in-clean-water-project?>