



ORSAM WATER BULLETIN

Weekly Bulletin by ORSAM Water Research Programme

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



ORSAM WATER BULLETIN
17 January 2017 – 23 January 2017

Damascus goes dry as Syria's grim water wars intensify

Days before Christmas, Damascus went dry due to an aerial attack on the Ain al-Fijah spring 11 miles northwest of the Syrian capital, which feeds the Barada River that supplies 70 percent of the water for the city and its environs.

It was initially reported by pro-regime websites on Dec. 22 that the rebels who have held Wadi Barada since mid-2012 had deliberately polluted the waters of Ain al-Fijah, which forced the authorities to cut off the water supply.

The sabotage story was used as a pretext to launch a major ground offensive against militants at the spring to seize control of the water supply despite a nationwide cease-fire proclaimed on Dec. 30.

Hours later, the armed opposition in Wadi Barada produced a video on social media networks, showing heavy damage to the water infrastructure at the spring, clearly caused by exploding missiles.

They explained that damage on that scale could only be caused by air attacks — and the only planes operating over the Damascus countryside were Russian and Syrian.

The regime had attacked the spring, they claimed, to force the rebels to surrender, which they did not.

This fell in line with similar tactics used by the regime since 2011 in a continuing battle for resources that has become a central aspect of the nearly 6-year-old Syrian war, all part of its starve or surrender strategy in which it imposes sieges on rebel-held towns and cities.

The water crisis spread panic and anger among the war-swollen population of about 9 million people in Damascus and its surrounding countryside.

This is by far the worst humanitarian disaster to befall the Syrian capital in recent years, given that the ancient city has been relatively immune to the violence that has swept the country.

Even when the war began in March 2011, when the greater Damascus population was closer to 5 million, water was scarce. Now the populace has reached critical mass because of the huge numbers of refugees and displaced people from all over the war-wrecked country who have thronged the capital seeking safety and succor.

Private water vendors are selling water at black market prices of 2,500 Syrian pounds — \$5 a barrel — a crippling price because the average Damascus household consumes about 100-150 barrels of water per month, for drinking, washing and sanitation. Water costs ordinary Syrians \$500-\$750 a month, devastating for a city in which a senior post in the public sector, which employs millions of Syrians, pays no more than \$150 monthly.

The nationwide cease-fire declared by Turkey and Russia prevented re-gime forces from marching on Wadi Barada. The armed opposition tried negotiating a deal with government troops, saying that they would allow technicians to enter the Barada valley to repair the damage if the regime stopped bombarding the Damascus countryside.

On Jan. 9t this deal went into effect but it may be temporary. The regime insists on retaking Wadi Barada, regardless of the cease-fire, claiming that the estimated 1,500 fighters there are members of Jab-hat Fateh al-Sham (JFS), al-Qaida's rebranded branch in Syria, which, along with the Islamic State, was the only rebel group excluded from the cease-fire.

Despite the agreement, the crisis is far from over as it will take time and money to repair the damaged pumps, signaling difficult times ahead for the people of Damascus.

Similar crises are emerging else-where in Syria, with equally disastrous outcomes and with jihadist forces employing the grim and brutal tactics of the regime.

The Euphrates Dam, about 25 miles up-stream from Raqqa, de facto capital of the IS caliphate, was built by the Soviets in the 1970s. It has been held by the jihadists for two years.

IS recently shut down a major water flow into the battered city of Aleppo, a significant battlefield since mid-2016, from the Euphrates — an old tactic used by Zionist militias that blew up the main water pipelines to the port city of Haifa before the creation of the state of Israel in 1948.

If Kurdish forces get too close to the Euphrates Dam, IS has threatened to destroy the huge structure. That would flood the entire region and inundate the nearby town of Tabqa to add to Syria's already massive human catastrophe.

In neighboring Iraq, the same applies in Mosul, where the caliphate was proclaimed in June 2014. U.S.-backed Iraqi state forces are battling to retake the city from IS and red flags are already high about the fate of a 2 mile-long dam 37 miles north of Mosul on the Tigris river.

Built on unsuitable foundations as a prestige project by Saddam Hussein in the early 1980s, the dam has required regular repair and maintenance, something IS failed to provide for two years.

If the dam collapses, up to 11.11 billion cubic meters of water, known as Lake Dahuk, will submerge Mosul and lay waste to all the downstream towns and cities, shattering the lives of up to 7 million people.

17/01/2017 online at: http://www.upi.com/Top_News/Voices/2017/01/17/Damascus-goes-dry-as-Syrias-grim-water-wars-intensify/9351484658985/

Syrian Govt Addresses Water Crisis after Rebels Contaminate Key Reservoirs

While much of the world's population was busy celebrating winter holidays and the end of the calendar year, Syrians living in Damascus found themselves without running water. For much of the past month, Damascus residents have been in the midst of an intense water crisis,

leading to long lines at wells and a dearth of resources in the city. Though some other notable droughts abroad have been caused by severe droughts or other climactic factors, Damascus' water crisis is just another casualty of Syria's nearly six-year internal conflict that has seen it become a battleground for rival "proxy" factions of the United States and Russia.

However, Damascus' water crisis did not come about solely due to in-fighting between pro-government and anti-government groups. Evidence suggests that the crisis was deliberately engineered by rebel groups as a last-ditch attempt to gain leverage as recent and impressive advances by the Syrian Army had significantly reduced rebel holdings throughout the country. Rebels located in the Barada valley, which historically supplies most of Damascus with water, allegedly contaminated the key reservoir in the area with diesel fuel, which led to the initial shut off of the capital's water supply. Following this initial contamination, each side traded accusations that the other had also damaged the infrastructure of the reservoir. Though many Western newspapers were quick to imply that the Syrian government was to blame for cutting off the water supply to its own headquarters, they overlooked the fact that rebel forces had repeatedly threatened to target the Wadi Barada reservoir. A video released during the crisis showed rebel groups threatening to detonate explosives in a tunnel used to bring water to Damascus as a means to physically deprive the population of water. Depriving a civilian population of its water access constitutes a war crime, which the United Nations has admitted, though they have stopped short of placing blame.

Yet, finally, another recent military victory has finally put the nearly month-long water crisis to an end. The Syrian military were afforded another key victory last week when they reclaimed the Wadi Barada valley from rebel hands. A successful operation to seize a nearby village allows the Syrian Army to cut rebels off from the Al-Fijah Springs, which left rebels with the unpleasant options of either starving to death or surrendering. Since the area has been reclaimed, technicians and engineers have entered the area in order to begin the re-building key infrastructure that brings clean water to the Syrian capital. However, much of the Wadi Barada region remains in rebel hands, though an upcoming reconciliation agreement is set to lead to its full surrender to Syrian forces.

As True Activist reported recently, the Syrian government is well on its way to reclaiming its land, resources, and infrastructure from anti-government and foreign-funded factions. However, that will only remain the case as long as the US government or its allies don't directly intervene. Interestingly, last Friday – the same day that the Syrian government reclaimed the Wadi Barada reservoir – Israel bombed a major military airport near Damascus in close proximity to Assad's personal residence. This bombing – and any others that may occur before Obama officially leaves office on Friday – are a clear attempt to provoke Assad into attacking a foreign power, thereby justifying a foreign invasion of Syria. Western powers, which have invested so much in their attempts to depose Assad, are unlikely to sit idly by as their rebels become increasingly irrelevant. At least, for the moment, some semblance of normalcy is starting to return to Damascus with the restoration of its water supply.

17/01/2017 online at: <http://www.mintpressnews.com/syrian-govt-addresses-water-crisis-after-rebels-contaminate-key-reservoirs/224125/>

Water scarcity solutions to be awarded with \$1 million

Within the next two months, \$1 million (Dh3.67 million) will be handed out to three projects that provide innovative and cost-effective solutions to combating water poverty around the world, a top official said in the capital on Wednesday.

The first edition of the Mohammad Bin Rashid Al Maktoum Global Water Awards will be given out for innovation among youth, organization and among commercial entities, Mohammad Al Shamsi, acting executive director of the UAE Water Aid Foundation (Suqia), told Gulf News. Suqia is in charge of administering the awards.

“According to the World Health Organization, an estimated one out of five people worldwide still don’t have access to clean drinking water, and about 502,000 people die each year from diarrhea brought about by drinking contaminated water. This is why combating water poverty is so very important, and it is why we are looking for sustainable, solar-powered solutions,” Al Shamsi said.

He was speaking on the sidelines of the International Water Summit, a conference held as part of Abu Dhabi Sustainability Week 2017 to address challenges in global water supply.

The seeds of the Suqia were first laid by His Highness Shaikh Mohammad Bin Rashid Al Maktoum, Vice-President and Prime Minister of the UAE and Ruler of Dubai, in Ramadan 2014. He announced a personal donation to an initiative that would provide clean water to five million needy people. The target was later raised to seven million people after a whopping \$180 million (Dh661 million) was raised by UAE residents over an 18-day period.

Suqia was then created in 2015 to manage the efforts, and through it, 3.5 million people in 20 countries, including Mauritania, Mali, Tanzania and Bangladesh, have already received water aid. The remaining funds are also being allocated to communities with the greatest need.

The upcoming water awards are a further step towards resolving water scarcity, and this first round has received 137 applications from around the world. Al Shamsi said the foundation will carefully select the winning projects.

“We also focus on research and development and currently, we have a project with the Dubai Water and Electricity Authority (Dewa) that desalinates 50,000 litres of water daily using solar power alone. Another portable unit can desalinate 7,700 litres every day, and it is being fine-tuned for future deployment in water-scarce regions,” Al Shamsi said.

Later this year, the foundation, which works closely with the Dewa and a number of UAE-based universities, hopes to allocate a budget for additional charitable projects. Beneficiary communities will be selected in collaboration with the Emirates Red Crescent and the UAE Ministry of Foreign Affairs and International Cooperation.

“Often, we seek to establish artesian wells in a cost-effective manner for populated communities,” Al Shamshi explained.

Following the fund-raising of the initial campaign, Suqia has not actively sought donations again. Still, interested residents can donate funds through dedicated bank accounts, or by texting the foundation with the relevant codes.

18/01/2017 online at: <http://gulfnews.com/news/uae/environment/water-scarcity-solutions-to-be-awarded-with-1-million-1.1964192>

Alexandria: locals adapt to floods as coastal waters inch closer

“Before we were flooded a couple of years ago, we didn’t imagine the water could reach this level,” said cafe manager Samir Gaber, gesturing at a cluster of tables overlooking the Mediterranean.

Gaber has managed the Latino cafe in Alexandria for six years, during which time the business has had to adapt to increasingly dramatic winter storms. With the storms come the floods, crashing waves engulfing large chunks of the many cafes nestled on the coastline.

“There was another wall here before the flooding, but the steel bars [supporting it] were destroyed,” explained Gaber. “Now we’ve constructed a drain to absorb floodwater,” he said, gesturing below the new stone wall running along the outside edge of the cafe.

Many of the cafes and businesses on the Alexandria coast have begun adjusting to extreme weather without making the link to climate change.

On the southern tip of the Mediterranean, the coastal waters are inching closer to buildings and flooded ancient structures, including the Greco-Roman tombs at Anfushi. Seawater seeping into the groundwater has also made the fragile ground more unstable, resulting in the alarming collapse of some of the city’s buildings.

The UN estimates that global sea levels will rise between 13cm and 68cm by 2050, and say that the Mediterranean is particularly vulnerable – by 2080, up to 120,000 people living near the sea could be affected by rising waters if no action is taken to protect them.

Rising sea levels and seawater temperatures will also increase the salinity of the Nile, Egypt’s primary water source, and increasingly salty water sources could destroy farmland across the Nile Delta. In 2007, the World Bank estimated that 10.5% of Egypt’s population could be displaced by rising waters caused by climate change.

An hour to the east from Alexandria, the quiet of the town of Rosetta ignores the urgency of the lapping waters. Life in the town, famed for the discovery of the Rosetta stone, is at one with the sea.

“You have to do what you have to do, and don’t think about the bad weather – the good weather comes from God,” said fisherman Ahmed Mohamed Gowayed, reciting a local saying.

Storms annually disrupt the calm of this low-lying town where houses sit at sea level, many only separated from the coast by a winding coast road. But in recent years the weather has been more violent.

“Last year the storm destroyed palm trees, buildings, cars – older people in their seventies said they’d never seen anything like it in their lives,” said Gowayed. The storm also destroyed barges and kiosks that local fishermen rely on for their livelihoods.

“If the weather continues like this I will build a stronger kiosk,” smiled Gowayed, undeterred by the prospect of the next storm.

Alexandria, Egypt’s second-largest city, is also one of the cities in the Middle East most at risk from rising sea levels due to global warming.

Mohamed El Raey, professor of environmental studies at Alexandria University, believes that climate change is contributing to an increase in “extreme events”, across Egypt. “The government needs to increase awareness among the population,” he said.

They also need to be more stringent about urban planning, he added. “If people don’t find places to live that they like, they build houses wherever they find an area.”

In 2011, the government released a report detailing how the country must adapt to climate change, estimating that about 13% of Egypt’s northern coastline was at risk.

Political and economic upheavals have since diverted their attention elsewhere, but in Alexandria and Rosetta the impact of climate change is becoming increasingly hard to ignore.

19/01/2017 online at: <https://www.theguardian.com/environment/2017/jan/19/alexandria-egypt-locals-adapt-storms-floods-coastal-waters-rise>

Egyptian activists challenge govt. deal on Ethiopia’s Nile dam

A group of Egyptian lawyers and political activists are preparing a lawsuit to challenge President Abdel Fatah al-Sisi’s preliminary agreement on Ethiopia’s Nile dam project.

The agreement which asserted Ethiopia’s right to build the Grand Ethiopian Renaissance Dam (GERD) has caused grave concern in Egypt over the prospect of the country’s water and electricity supply.

The deal was inked by Sisi, Ethiopian Prime Minister Hailemariam Desalegn and Sudanese President Omar al-Bashir in March 2015.

The group of lawyers and activists who seek to overturn Sisi’s decision argue that the agreement runs counter to the interests of Egypt.

The activists accuse the Ethiopian negotiators of taking advantage of the agreement and collecting international funding for the project.

The 2015 deal is aimed at setting principles which ensure that the construction of the dam would not harm the other countries and will compensate them in case of any damage. Many Egyptians – and Sudanese are concerned that their towns and villages will be swept away if the dam collapses.

The Nile supplies the bulk of Egypt's drinking water, irrigates the Nile Delta and generates nearly half of the country's electricity through the operation of the Aswan High Dam.

During the era of former Egyptian dictator Hosni Mubarak, Ethiopia made several attempts to build the dam, but Mubarak asserted that Egyptian access to its share of the Nile's waters was out of question.

Following the overthrow of Mubarak, Ethiopia began building the GERD in April 2011 at a cost of \$4.7bn and the project is expected to be completed in July.

The news comes as Sisi already faces calls to be prosecuted for treason after the Supreme Administrative Court ruled against the government on Monday over the proposed transfer of the Red Sea islands of Tiran and Sanafir to Saudi Arabia under a deal that provoked outrage among Egyptians.

The hash tags "One million signatures to prosecute Sisi" and "Sisi is a traitor by verdict of the court" are on top of Egypt's trending hash tags.

Court ruling against transfer of islands to Saudi Arabia

Celebrations erupted over the ruling outside the court in Cairo, with human rights lawyer Khaled Ali who along with Malek Adly led the legal challenge to the government's plan leading them.

Sisi announced on April 9, 2016 that the two islands fall within the territorial waters of Saudi Arabia as stipulated in a border accord signed between Cairo and Riyadh the previous day.

The deal triggered unprecedented mass demonstrations, with protesters slamming the arrangement as unconstitutional. A number of lawyers meanwhile filed a lawsuit in the administrative court to block the deal.

Demonstrators have accused Sisi of surrendering Egyptian territory in return for Saudi money amid reports that Cairo was receiving \$20 billion in aid from Riyadh to relinquish sovereignty of the islands. Egyptian courts have given jail terms to hundreds of protesters.

Back in June 2016, a lower administrative court rejected the agreement, prompting the country's State Lawsuits Authority, representing the Sisi government in legal cases, to lodge an appeal.

Late last month, the Cairo government endorsed the contentious maritime border agreement in defiance of the June 2016 ruling and sent it to the parliament for ratification. The Monday's ruling is final and could not be appealed again.

19/01/2017 online at: <http://www.presstv.ir/Detail/2017/01/19/506856/Egypt-Ethiopia-Nile-dam-Sisi>

New plant opens in bid to head off Gaza water crisis

The largest desalination plant in the Gaza Strip partially opened Thursday with international help as the impoverished and blockaded Palestinian enclave seeks to prevent a water crisis.

The first phase of the plant opened in Deir el-Balah in central Gaza and will provide around 75,000 people with safe water, Michael Kohler from the European Commission said.

The European Union has financed two phases of the project with two grants of 10 million euros (\$10.6 million).

The second phase will eventually leave the plant able to provide 12,000 cubic metres of safe drinking water per day.

That will be able to help a total of 150,000 people, said Robert Piper, United Nations humanitarian coordinator for the Palestinian territories.

A 2012 UN report warned that over-extraction of groundwater from the Gaza Strip's sole aquifer could cause irreversible damage by 2020.

"Today, 96 percent of (Gaza's) water is unfit for human consumption," Piper said.

More than two million people live in Gaza, largely sealed off by a decade-long Israeli blockade and closed Egyptian border.

Israel argues the restrictions are necessary to keep its enemy Hamas, the Islamist movement which runs Gaza, from obtaining weapons or materials used to make them.

Palestinian militants in Gaza and Israel have fought three wars since 2008.

Kohler said the plant would help but wider changes were needed to find a lasting solution.

"Fundamental change to the political, economic and security situation in Gaza" requires the borders being open, he said.

UN officials have repeatedly called for the blockade to be lifted to allow for improved humanitarian conditions in the Gaza Strip.

19/01/2017 online at: <http://www.middleeasteye.net/news/new-plant-opens-bid-head-gaza-water-crisis-1294223821>

Kinneret water level rises slowly

The Kinneret's (Sea of Galilee) water level rose an additional centimeter in the past week, and now stands at 213 meters and 46.5 centimeters below sea level.

The current level is 46.5 centimeters below the lower red line, and 4.665 meters below the upper red line. The upper red line signals the Kinneret is full, and the lower red line signals it is too empty.

Monday's weather is expected to be pleasant, with rising temperatures. The morning will see strong winds in the north and in mountainous regions. Monday night will be partly cloudy or cloudy.

Tuesday will be mostly cloudy and temperatures will rise slightly in the lowlands and along the coast, becoming warmer than usual for the season. There will be strong eastern winds in the north and in mountainous regions.

Wednesday will be cloudy with warmer temperatures than usual. Light rains may fall in various areas around the country.

Winter is expected to return on Thursday, with cloudy weather and a significant drop in temperatures. Local rains are expected to fall from the north of Israel to the northern Negev. Thursday night will see rain and thunderstorms, and snow will fall in the Hermon.

23/01/2017 online at: <http://www.israelnationalnews.com/News/News.aspx/223693>

MPs' panel asks WB to arbitrate on Indus Waters Treaty

In the face of the India's threat to Indus Water Treaty 1960 (IWT), Pakistani parliamentarians in a special combine standing committee on foreign affairs and water and power has asked the World Bank (WB) to constitute Court of Arbitration without further delay to adjudicate on issues Islamabad has raised against New Delhi's ongoing construction on Kishanganga and Ratle Hydro Electric Plants.

The committee also asked the World Bank that till it constitutes the court of Arbitration, it must demand of India an immediate halt to ongoing construction of Ratle Dam till the issue is resolved.

Foreign Secretary Aizaz Ahmad Chaudhry, Secretary Water and Power Mohammad Younus Dagha and Special Invitee/Expert on International Treaties Ahmer Bilal Sofi briefed the standing committees on Foreign Affairs and Water and Power on a common agenda titled "Indian threat to Indus Water Treaty and to chart out a course of action for Pakistan".

The meeting was Co-Chaired by Awais Ahmad Khan Leghari and Muhammad Arshad Khan Leghari, MNAs and respective Chairmen of the NA standing Committees.

Ahmer Bilal Sofi while highlighting overall Water disputes among the states in different parts of the world and particularly on IWT with different legal dimensions and available options and recommendations for Pakistan. He said that the time, the treaty was finalized between India and Pakistan in 1960, the international law was different than of now. Pakistan is not the only country facing such a situation.

There is different point of views if you look into this matter with the eye of an engineer and security analyst. An engineer will tell that construction of dams was not a violation of the treaty unless India keeps releasing water according to the agreement and not stops it. While, a security experts will say that by building these dams India will become in a strategically strong position.

Bilal advised that the standing committee on foreign affairs should write to Indian Lok Sabha, Human rights council and World Bank regarding this issue.

Foreign Secretary Aizaz Ahmad Chaudhry said that this treaty was a matter of life and death for Pakistan. He said that World Bank is not a decision maker but can work as facilitator in holding talks between both the countries if a party was violating the treaty. The Bank was not guarantor of IWT signed in 1960 between Indian and Pakistan in Karachi, but brokered the treaty and facilitated negotiations between the two neighbor Asian countries.

He said that Pakistan has a very just stand on this treaty, while India is endangering it. “We will not allow India to violate this treaty. We also expect from World Bank and International Court to safeguard this treaty.”

Secretary Water and Power said that government has decided to start work on Diamer-Bhasha dam from its own resources. Under the Indus water treaty, on the western rivers India can stock water to a certain limit.

Shah Mehmood Qureshi of Pakistan Tehreek-e-Insaf said that the Confrontation with India on water is increasing and at a time it would reach such a position that everybody will forget the Kashmir issue.

Mehmood Khan Achakzai said that Pakistan should not touch the controversial issues [Kalabagh Dam] and instead build other small and big dams. We should have resolve water issues with India and Afghanistan on permanent basis.

He said that we have no treaty with Afghanistan on rivers that flowing into Pakistan. These committees unanimously approved a draft resolution that states, “It must in accordance with its responsibilities under the IWT, without further delay constitute the court of Arbitration to adjudicate on issues raised by Pakistan against India’s ongoing construction of KG and Ratle Hydro Electric plants. Till the World Bank constitutes the court of Arbitration, it must demand of India an immediate halt to ongoing construction of Ratle Dam till the issue is resolved.”

The Members who attended the meeting are: Sahibzada Muhammad Nazeer Sultan, Mian Najeebuddin Awaisi, Mr. Muhammad Khan Daha, Ms. Tahmina Daultana, Rana Muhammad Afzal Khan, Dr Nafisa Shah, Makhdoom Shah Mahmood Hussain Qureshi, Dr. Shireen Mehrunnisa Mazari, Dr Muhammad Farooq Sattar, Ghous Bux Khan Maher, Naeema Kishwar Khan, Mehmood Khan Achakzai and Senior Officer of the Ministry of Foreign Affairs and Water & Power also attended the meeting.

21/01/2017 online at: <https://www.thenews.com.pk/print/180737-MPs-panel-asks-WB-to-arbitrate-on-Indus-Waters-Treaty>

Four desalination plants lying idle in Gwadar amid water shortage

Despite a serious water shortage crisis in Gwadar and adjacent areas, the government has not made four desalination plants functional which have been lying abandoned for seven years.

A desalination plant installed in the private sector is working successfully and is selling 100,000 gallons of drinking water to the public health engineering department daily for the supply of water to the people of Gwadar.

Sources said that in view of a serious water shortage crisis in Gwadar, Pasni and Jewani in 2008, the provincial government had decided to install four desalination plants in Gwadar district for making sea water drinkable. The installation of plants was planned for solving the water shortage problem of the district on a permanent basis.

The task for the installation of the four desalination plants was assigned to the Balochistan Development Authority (BDA) which had begun work on the project shortly. The construction cost of one plant being installed in Gwadar's industrial area was Rs1 billion. It had a capacity of two million gallons of water per day. The other three plants having capacity of 200,000 gallons of water were installed in Pasni, Jewani and Singhar Housing Scheme with a cost of Rs200 million for each.

The sources said the BDA awarded contracts for the plants and work had begun on all of them. Machinery for the plants had been purchased and shifted to the proposed places for installation. However, work on none of the plants could be completed on time.

The National Accountability Bureau (NAB) had launched an inquiry into the delay in the installation of machinery in the plants, but to no avail.

Despite written assurances by the contractors to complete work on time, no plant has so far been made functional.

After Gwadar and adjacent areas were hit by a severe water shortage crisis in 2014, authorities had tried to complete the desalination plant installed in the Gwadar's industrial area on an emergency basis. Generators were provided and transmission lines were laid. But, the plant could not achieve its full capacity. It is now producing 300,000 to 400,000 gallons of water per day.

An official of the Gwadar administration told Dawn that the plant could not be made fully functional due to non-availability of engineers.

The three other plants in Pasni, Jewani and Singhar Housing Scheme are still not functional.

Officials of the Public Health Engineering Department told Dawn that water crisis was worsening in the Gwadar district. Gwadar town, Pasni, Jewani, Pishkan and many other

villages need 8.3 million gallons of water daily while they are being supplied 2.5 million gallons of water from the Mirani dam, which is located in Kech district.

23/01/2017 online at: <http://www.dawn.com/news/1310204/four-desalination-plants-lying-idle-in-gwadar-amid-water-shortage>

Pakistan aims for water treaty with Afghanistan

Pakistan is about to start talks with Afghanistan to secure a bilateral treaty for the use of water related to Kabul River.

Well-placed sources told The Nation that efforts are underway to frame a draft to take up with Kabul to secure the treaty at the earliest.

The move apparently comes after recent statements by Indian leaders that New Delhi wants to gift a water reservoir to Kabul over the river as a token of friendship with Afghanistan.

The sources maintained that Pakistan wants to secure the bilateral treaty to prevent any future water dispute with the brotherly western neighbor, and in order to address Afghanistan's concern over Pakistan's using water of Kabul River without any formal accord.

The draft of the treaty also includes the use of Pakistani waters from Chitral and adjoining areas which eventually make Kunar-Chitral River as one of major water distributaries of the Kabul River.

According to the sources, Pakistan believes that Afghanistan was using some of its waters from Chitral and its adjoining areas that end up into Kunar-Chitral River which was the main source of water in the Kabul River.

According to the sources, the PTI government in the Khyber Pakhtunkhwa was of the view that Afghanistan was also using waters from Swat River. However, it could not be confirmed immediately from the PTI spokesperson.

Pakistan established Warsak Hydroelectric Power Project about 20 kilometers in the North West of Peshawar city over the Kabul River in 1960 under the Colombo Plan financed by the Canadian government.

It was completed in two phases. The first phase was completed in 1960 at a cost of Rs394.98 million, consisting of construction of the dam, irrigation tunnels, civil works, four generating units with a capacity of 40 MW each and 132 KV transmission system.

In the second phase, two additional generating units each of 41.48 MW were added in 1980-81 at a cost of Rs 106.25 million.

In general, the project consists of a mass concrete gravity dam with integral spillway, a power tunnel, a power station, a concrete lined 10 feet diameter irrigation on the right bank and a three feet diameter steel pipe irrigation conduit on the left bank of the reservoir.

The 250 feet high and 460 feet long dam with a reservoir of four square miles as a live storage capacity of 25,300-acre feet of water irrigates 119,000 acres of land and meeting power generation requirement. A spillway with nine gates is capable of discharging 540,000 cusecs of the floodwater.

Most of the seven rivers that Pakistan and Afghanistan share rise in Afghanistan. River Kabul – which later joins the Indus River – is one of the most developed rivers and a potential source of hydropower for both countries. Some 23 percent of the Afghan population, more than 7 million people, lives in the Kabul basin. On the Pakistani side of the basin, the river is a vital source of irrigation in Khyber Pakhtunkhwa.

23/01/2017 online at: <http://nation.com.pk/national/23-Jan-2017/pakistan-aims-for-water-treaty-with-afghanistan>