

NEWSCLIPPINGS

JANUARY TO JUNE 2019

WATER SUPPLY



Urban Resource Centre

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Setting up of six garbage stations, master plan for water distribution in Karachi recommended

The Supreme Court-mandated commission on water and sanitation in Sindh recommended the establishment of six garbage transfer stations on scientific lines, a master plan for water distribution in the provincial capital and sought timely completion of treatment and effluent plants.



In its final progress report, placed before the Supreme Court, the commission, headed by retired Justice Ameer Hani Muslim, made several recommendations, including proper disposal of garbage, improvement in water distribution and sanitation, revamping of environmental body and establishment of a centralised complaint cell in Karachi to address complaints about civic issues.

The commission, which was established in January last year, and is set to complete its tenure on Jan 15, in its final report said that the recommendations were based on its directives passed from time to time and the undertakings/commitments given by various departments, agencies and individuals.

Judicial commission places final progress report, making various recommendations, before Supreme Court

Solid waste

The commission suggested the establishment of six garbage transfer stations in Karachi on scientific lines and said that this scheme had been included in the annual development programme (ADP) of 2018-19 and required a follow-up and implementation by the Sindh Solid Waste Management Board (SSWMB).

Another scheme about development and transformation of landfill sites to meet international standards has also been made part of ADP 2018-19 and the provincial government needed to identify and set up such landfill sites for all districts in Sindh for proper disposal of solid waste.

The SSWMB has to carry out waste-to-energy projects through the ADP schemes during the current fiscal year, it added.

The report further said that the SSWMB would be activated in other divisional headquarters of Sindh during the current financial year.

Water and sanitation

The commission observed that the Karachi Water and Sewerage Board must prepare a water distribution and sanitation master plan to meet the existing and future needs of the city.

The existing water supply schemes needed to be rehabilitated and the government should come up with a phased plan within three months. Improving the quality of drinking water by rehabilitating and updating the existing water filtration plants through close monitoring and the task of monitoring may be assigned to the Pakistan Council of Research in Water Resources after proper evaluation and fulfilment of formalities, it added.

The commission urged the provincial and federal governments to address the issues related to K-IV on a priority basis and said that water losses, which consumed about a quarter of Karachi's total water resources, must be checked while flow meters at all important water supply stations must be in place by June 30.

It also underlined the need for timely completion of a number of water supply schemes in the provincial metropolis and recommended setting up a centralised complaint cell at the commissioner's office to address public complaints regarding all civic issues in Karachi.

The final report further stated that the completion/rehabilitation of treatment plant-I (TP-I) and TP-III must be completed by July and December 2019, respectively, and TP-IV be completed as per schedule (at the end of 2020).

The commission also asked Defence Housing Authority to complete a 2MGD treatment plant at Seaview by April and to ensure that no untreated waste was discharged in the sea after the completion of the said TP.

The TP-V is committed to be installed by the Karachi Port Trust within two years near the Mai Kolachi Bypass and the combined effluent treatment plant at Nooriabad SITE should be completed by June 2019 while similar effluent plants at SITE in Hyderabad and Sukkur must be completed by December 2019, subject to budgetary allocations.

Environment

The commission recommended a complete overhauling of the Sindh Environmental Protection Agency by strengthening its physical, technical and academic capacity. The Sepa DG has suggested the establishment of climate change, research and development and law enforcement wings, it added.

The provincial government should take steps to establish environmental laboratories, set up Sepa offices at district level and Sepa must complete the survey of all industrial areas.

(By Ishaq Tanoli Dawn, 15, 11/01/2019)

Sindh govt seeks extension in water commission's mandate

As the Supreme Court-mandated Water Commission approaches its expiry on January 15, Sindh Advocate-General (AG) Salman Talibuddin has requested for continuation of the commission. "The commission needs to continue working till the objectives are completely accomplished," the AG said during a hearing of the commission in Karachi on Saturday, conducted by its outgoing chairman Justice (r) Amir Hani Muslim.



He said that the commission can ensure better monitoring of the water supply, drainage, solid waste disposal and other projects which have been initiated on its orders. "In addition there may be other schemes in the formative stages which will also be better monitored by the commission."

Talibuddin pointed out several projects which were still in the assessment level and required commission's oversight. "Continuation of the commission would be in the interest of larger public good."

Advocate Shuhab Usto, on whose petition the Supreme Court had formed the commission over two years ago, also made a similar plea at the hearing. He seconded the AG to request that the commission should continue.

Justice (r) Muslim said only the Supreme Court could consider their request. He told that he had already written to the court that he wanted to step down due to personal reasons after completion of his one-year tenure. The court has already accepted his submission.

Meanwhile, on the issue of objection raised by Sindh additional advocate-general during submission of the commission's final report in the apex court on January 9, the AG Talibuddin tendered an apology. He informed that on instructions of the provincial government, the province's law officer will record 'no objection' over the report during the upcoming hearing in Islamabad on January 14. "The statement made [in the court] by additional AG was without instructions."

(By Our Correspondent The Express Tribune, 04, 13/01/2019)

Commission on water, sanitation asked to continue working

The chief provincial law officer said on Saturday that the Supreme Court-mandated commission on water and sanitation in Sindh needed to continue till its objectives were completely accomplished.



When the commission, which is set to complete its tenure on Jan 15, resumed its sitting, Advocate General, Sindh, Salman Talibuddin made a statement on the behalf of the provincial government.

He appreciated the working of the commission and said that its tenure should be extended since many ongoing schemes would be better monitored by the commission while a number of other schemes were in a formative stage.

The AG also tendered an apology regarding the comments of an additional advocate general made about the commission last week before the Supreme Court when its final report was submitted in the apex court.

He further said that when the same matter would be taken up for hearing by the apex court on Monday, the law officer of Sindh will record "no objection" to the commission's final report.

Shahab Usto, who had petitioned the apex court regarding water and sanitation issues in Sindh, also endorsed the proposal of the advocate general regarding continuation of the commission.

However, the commission, headed by retired Justice Amir Hani Muslim, said that it was the sole domain of the Supreme Court to consider such a request independently.

Justice Muslim had already requested the apex court that he was stepping down upon the completion of his tenure on Jan 15 due to personal reasons and the Supreme Court had also allowed it.

(By The Newspaper's Staff Reporter Dawn, 14, 14/01/2019)

Sindh lawmakers accuse Centre of unequal water distribution

Amid the worsening water crisis in the province, lawmakers in the Sindh Assembly lashed out at the Indus River System Authority (IRSA) on Wednesday and demanded to dissolve it as the authority had failed to provide equal distribution of water to provinces.

During the two-hour-long debate on an adjournment motion moved by Heer Ismail Soho of the Pakistan Peoples Party (PPP), MPAs belonging to ruling PPP, Muttahida Qaumi Movemen-Pakistan (MQM) and the Grand Democratic Alliance (GDA) demanded implementation of the 1991 Water Accord, which guarantees the release of 10 million acre feet of water downstream from Kotri.



The dam factor

Winding up the debate, Chief Minister Murad Ali Shah blamed dams for contributing to water scarcity in the province. "Sindh was the richest province in Pakistan when there was no dam on River Indus. We have no water in the system and they are insisting on building more dams," he said, adding that Sindh's agriculture production was in surplus compared to the rest of the country, but its due share of water had been controlled and diverted for other purposes.

The chief minister, who is an engineer by profession, started his speech on the water crises and role of IRSA. "This subject is very close to my heart."

Referring to the British era and the then government's plan to build the Thal Canal on River Indus, he said, "When the technical committee of British Raj informed the authorities that Thal Canal scheme will cause water crises in Sindh, they dropped the scheme. Later, a dictator built this canal to divert Sindh's water."

Sindh's legal fraternity opposes dams on Indus river

The CM suggested that water can't be saved by building dams, but it can be managed through proper planning, which is the easier way.

Quoting the Indus Water Treaty between Pakistan and India in 1960, the chief minister said that rulers had sold three eastern rivers – Beas, Ravi and Sutlej – to India, without even taking Sindh into confidence. No member from Sindh was included in the treaty. "This was the turning point in the water crisis in the country as pressure was mounted on River Indus and later dams and canal were built to divert Sindh's water. We have protested at all platforms to be given us out due share, but all in vain," he said.

He refuted the reports of 10 MAF water having been released downstream of Kotri. "Only 2 MAF was released, which is nothing."

Responding to opposition lawmakers speeches that former Prime Minister Benazir Bhutto had also allocated funds for the feasibility of Kalabagh Dam, the chief minister said, "This is a lie. Can anyone in this House show me the budget provision allocated by any PPP government for the Kalabagh Dam."

According to the chief minister, there was a provision in the 1991 accord that Karachi would be given a certain amount of water, which was never implemented.

Heer Soho, the mover of the adjournment motion, presented facts and figures. "There is around 40 per cent shortage of water this year in Sindh. The IRSA is incompetent and only fulfills the needs of Punjab," she said. "The tail-enders have more right on water. Sindh being a tail-end province must be given its due share, otherwise it will further shaken trust between provinces and federal government," she added.

United for water

During the speeches, members from the treasury and opposition, with the exception of the Pakistan Tehreek-e-Insaf members, joined hands on the issue. Hina Dastaghir of the PPP drew the attention of the House to the mass migration of people from the Indus Delta areas, including Badin and Thatta. "The sea is eroding fertile land and settlements with each passing day. We demand the federal government to not fill Mangla Dam and release the water to downstream Kotri to protect and save the ecosystem and people living over there for centuries," she said.

Opposition members

Javed Hanif of MQM-P suggested the Sindh government to focus on water conservation by constructing cemented canals and water courses. "We should review our agriculture policy and introduce crops that consume less water." He, however, defended the IRSA. "There is no water in the system. What can the IRSA do?"

Mohammad Qasim of Tehreek-e-Labbaik Pakistan, supporting resolution, said that Karachi will suffer if Sindh is not given its due share of water. "We are with the Sindh government on this issue and condemn the IRSA's tact to steal our water."

Meanwhile, Nand Kumar Goklani of GDA diverted the House's attention toward the unfair distribution of water in Sindh. "We are with the Sindh government on this issue, but demand it to stop exploiting political opponents by stopping their water." Announcing his parties' policy of not supporting the Kalabagh Dam, he said, "We will not accept this controversial dam come what may."

Abdul Rashid of the Muttahida Majlis-e-Amal called water a precious commodity. "Federal government and its ministers are focusing on derailing the Sindh government and no one heeds this sensitive issue. We don't need chicken and eggs, but demand to resolve the water issue." No PTI MPA spoke on this resolution. After discussion on the issue, the speaker adjourned the session till today [Thursday].

(By Our Correspondent The Express Tribune, 04, 17/01/2019)

KWSB rehires officials dismissed by Water Commission

Two officials of the Karachi Water and Sewerage Board (KWSB), who were dismissed on the orders of the Supreme Court-mandated Commission of Water and Sanitation over allegations of negligence, corruption, water meters' tampering and sale of hydrants in exchange of bribes, have been posted again on important positions.

The irony is that the officer, Nadeem Kirmani, who was removed from his post by the commission's head Justice (retired) Amir Hani Muslim for making changes in metres, has been appointed as the Executive Engineer of the metre region again.

According to sources, Justice (r) Muslim had visited the hydrant with the senior officials of the KWSB on February 2, 2018 and had given the orders to immediately remove Kirmani for tampering the metres at the Landhi Hydrant.

The KWSB Managing Director Khalid Nadeem Sheikh had dismissed Kirmani from his post immediately. However, KWSB has appointed him again as the executive engineer of meters for the region in industrial areas, in violation of the commission's orders.

Kirmani has all the administrative authorities to check meters again even though he was the one who was accused of tampering them. According to the Water Commission records, Kirmani was accused of defrauding several million rupees in bills by making changes in the meter numbers.

The surprise visit by the commission on February 2 revealed the allegations on Kirmani, after which he was removed from his post. The post being given back to Kirmani has raised a question mark on the efficiency of KWSB management.

Another senior official, Nisar Magsi, was removed from his post for allegedly selling water illegally from a hydrant but the KWSB had rehired him on an important position as well. The KWSB sources said that the investigations were still investigating the cases of Kirmani and Magsi.

(By Our Correspondent The Express Tribune, 05, 21/01/2019)

K-IV water project unlikely to meet deadline, PA told

People of the city will have to wait for an unspecified period to get smooth supply of potable water as the Sindh Assembly was informed on Tuesday that the Greater Karachi Bulk Water Supply Scheme, also known as K-IV project, may not be completed by June this year due to financial and technical snags.

Besides, the provincial lawmakers were also informed that the project, which was to be completed by June last year, would cost over Rs70 billion upon its completion against its initial cost of Rs25.55bn.

While furnishing statement and answering questions during the Question Hour of the provincial assembly, Local Government Minister Saeed Ghani said the project had been considerably delayed "due to major issues in planning and execution stages".

He recalled that the initial cost of the project was Rs25.551bn to be shared by the federal and provincial governments on a 50-50 basis.

However, later the project was awarded to the Frontier Works Organisation for Rs28.186bn and it was bifurcated into Packages A and B.

The minister said that the original completion date of Package A was June 2018, while completion date of Package B was June 2019.

He said that the project was delayed mainly due to route realignments and subsequent litigation on the issue.

Besides, the minister said, frequent changes were made in the design and there were several missing essential components which were not included in the original PC-1 of the project such as roads, pedestrian bridges and staff colonies.

He said that essential supplementary components such as augmentation project and power supply projects were missing in the original project.

The minister informed the house that it was inefficiency probably on the part of the project's consultant that no funds were allocated for augmentation project and power supply project.

"The chief minister has already ordered an inquiry in this connection," he added.

Responding to a supplementary question, Mr Ghani said that the province had so far contributed funds in the project more than its 50pc share and urged the federal government to release funds of its share as soon as possible.

He justified the delay in progress and said that it was due to missing of several essential components in the PC-I which was not made in the Pakistan Peoples Party tenure.

“The provincial government is committed [to] K-IV as it already has spent Rs19.1bn on the project. We would complete this project even if the Centre does not fulfil its commitment and give its 50pc share.”

Greater Karachi Sewerage

Plan to complete in 2020

Replying to another question, the minister said that a project of Greater Karachi Sewerage Plan, known as S-III, would get completed by August 2020 against its earlier date of completion by June 2018.

“Competent forum, Executive Committee of National Economic Council (Ecne) has approved the revised PC-I of S-III with a cost of more than Rs36,117 million with federal share capped to Rs3,991m which may increase upon the project process,” he said.

That first stage of S-III was inaugurated under which 77 MGD sewage was treated before being disposed of into the sea.

Replying to another question, the minister said as many as 13 major hospitals were being run by the Karachi Metropolitan Corporation. They are: Abbasi Shaheed Hospital, Karachi Institute of Heart Diseases, Sobhraj Maternity Hospital, Sarfaraz Rafique Shaheed Hospital, Leprosy Hospital, Landhi Medical Complex, Spencer Eye Hospital, Gizri Maternity Hospital, Gazdarabad General Hospital, Landhi Cardiac Emergency Centre, Shah Faisal Colony Cardiac Emergency Centre, Homeopathic Hospital Nazimabad and Primary Health Care Centre Lyari.

He further submitted that in response to the city mayor’s request, the provincial government released an amount of Rs177m as special grant-in-aid for the purchase of medicines and allied items for these hospitals.

The minister said that the KMC had purchased medicines and allied items for its hospitals through tenders as per SPPRA Rules and they were distributed among all hospitals as per their respective requirements.
(By Tahir Siddiqui Dawn, 16, 23/01/2019)

Water is the issue!

There is no other country in South Asia than Pakistan which is facing three-pronged threat because of a serious water crisis.



First, on January 17, in a debate on water crisis, several members of the Sindh Assembly accused the federal government of usurping the water rights of Sindh province and held the Indus River System Authority (IRSA) responsible for transforming their province into a barren land. Second, sandwiched between India in the east and Afghanistan in the west, Pakistan’s water predicament is deepening with each passing day. Third, India has built dams and barrages on the rivers Jhelum and Chenab in its controlled parts of Jammu and Kashmir, whereas New Delhi is assisting Afghanistan to construct hydropower projects and dams on the Kabul River. The World Bank is also reported to have expressed its interest to provide \$7.079 billion for the construction of 12 dams on the Kabul River.

If India intends to deprive its western neighbour of its legitimate water rights guaranteed under the 1960 Indus Waters Treaty, its policy to engage Afghanistan in exerting pressure over Pakistan by reducing the flow of the Kabul River will certainly add to Islamabad’s water predicament in the days to come. How the Indian water strategy and diplomacy is perceived as a major threat by Pakistan and as a double-edged plan to augment water woes for its eastern neighbour? What should be Pakistan’s response to meet what it calls India’s policy to deprive it of water resources from the Indus and Kabul rivers systems? How Pakistan can deal with intra water conflicts, particularly between the provinces of Sindh and Punjab?

Pakistan and Afghanistan share nine rivers with annual flows of around 18.3 million acres feet (MAF), of which the Kabul River accounts for 16.5 MAF. Another river which is shared by Pakistan and Afghanistan is the Chitral River which originates in Pakistan and contributes 8.5 MAF, but when it enters Afghanistan this river is called the Kunar River. Unlike India and Pakistan where the Indus Waters Treaty as a legal document determines the water distribution for the two countries, there is no such water treaty between Pakistan and Afghanistan despite the fact that Islamabad has been urging Kabul to sign a bilateral treaty on the distribution of water resources shared by the two countries. As a lower riparian state, Pakistan has a right to get its share of water from the Kabul River inasmuch as the upper riparian state on the Chitral River Pakistan can use the water of that river but when that river enters Afghanistan from Pakistan, as a lower riparian state Afghanistan has a right to use its share of water from that river.

Pakistan’s double water jeopardy is compounded because of three main reasons:

First, the failure of Pakistan to build mega dams in the last 45 years. The last mega dam, Tarbela, was built in 1974 whereas it could have constructed Kalabagh Dam on the Indus River and Munda Dam on the Kabul River. The only dam which has been built on the Kabul River is Warsak Dam which is insufficient to meet irrigation and energy needs because it generates only 500 megawatts of electricity and irrigates 119,000 acres of land. If India can help build 12 hydropower projects with a capacity to generate 1,177 megawatts of electricity and 4.7 MAF of water for irrigation from the Kabul River, why has Pakistan not been able to proceed in the direction of making use of the Kabul River for power generation and irrigation by constructing dams? Paradoxically, if China and India have built hundreds of dams for power generation and irrigation, Pakistan has been unable to build mega water reserves over a period of last four decades which tends to deepen the scarcity of water resources. Kalabagh Dam, which was to be constructed on the confluence of the Indus and Kabul rivers, has been made so controversial that some

political parties from the provinces of Sindh and Khyber-Pakhtunkhwa (K-P) are not even ready to listen to any argument in its favour. Approximately 145 MAF of water is available in Pakistan during the monsoon season out of which 106 MAF is used for irrigation through canals and the rest either evaporates or falls into the sea. Pakistan's case against Afghanistan building dams on the Kabul River is weakened because it has not focused on making use of the availability of 16.5 MAF of water from the Kabul River.

Second, if India has successfully built barrages and dams on the three rivers given to Pakistan under the Indus Waters Treaty i.e. Indus, Chenab and Jhelum knowing that it was violating the treaty, how can Pakistan prevent New Delhi from helping Afghanistan construct 12 dams on the Kabul River? India is not only helping Afghanistan in constructing dams on the Kabul River but according to reports there are plans to build sub-basin four more dams on the Kabul River which include the \$72 million Hajjana project (72MW) with water storage capacity of 178,420 acres feet; \$207 million Kajab (15MW) project with water storage capacity of 324,400 acres feet; the \$356 million Tangi Wadag (56MW) project with capacity to store 283,850 acres feet; and \$51m Gat (86MW) project with water storage capacity of 405,500 acres feet.

Third, if several dams on the Kabul River are being built in Afghanistan, it may have a devastating impact on Warsak Dam as its main source of water is the Kabul River. The cut in the flow of water of the Kabul River will also prevent Pakistan from constructing dams in future on the tributaries of the Kabul River, including the Kalabagh, Mohmand and Munda dams. Pakistan's predicament on current water crisis is further deepened because water availability has dropped to an alarming 1,200 cubic meters today from 5,650 cubic meters per person couple of decades ago. It is feared that if Pakistan fails to conserve water and build water reservoirs then by 2025, as warned by the Pakistan Council of Research in Water Resources (PCRWR), the country will approach absolute water scarcity. According to a report by the International Monetary Fund (IMF), Pakistan ranks third amongst countries facing water shortages. Such type of forecasts and predictions about Pakistan running out of its water resources in coming years has sent shockwaves in the corridors of power which prompted the Supreme Court and the Prime Minister to establish a fund for the construction of Diamer-Bhasha and Mohmand dams.

The Indus River System Authority is supposed to deal with the distribution of water among provinces and often in meetings of IRSA, Sindh accuses Punjab of taking its share of water vehemently denied by Punjab.

The need is to establish a mechanism in Pakistan to deal with intra-water issues so that the year 2025, which is called 'ground zero', is averted. Not only can building more water reservoirs on suitable locations help Pakistan successfully deal with a severe water crisis, it can also help it cope with the challenge of the India-Afghanistan nexus as far as depriving Pakistan of Indus and Kabul river water system is concerned.

In a nutshell, the solution to the three-pronged threat emanating from a severe water crisis rests with Pakistan as by utilising optimum human resource one can expect the country to successfully deal with the threat of 'ground zero' in 2025. Proper conservation of water and augmenting the tree plantation drive will also help overcome water crisis in the country. Besides, effectively fighting its case at the international level against the alleged violation of the Indus Waters Treaty by India needs to be rigorously and wisely pursued.

(By Dr Moonis Ahmar The Express Tribune, 17, 25/01/2019)

Poor use of water resources

Our national life is characterised by long years of complacency and unconcern and then anxiety following wake-up calls. The authorities are being repeatedly warned by experts on water issues. Water scarcity has been increasing in the country with the passage of time due to shortage of storage capacity. Most of the rainwater flows to the sea as no new dam has been built after 1968.

Now the World Bank says Pakistan gets a poor economic return from its significant water resources. The economic costs from poor water and sanitation, floods and droughts are estimated to be 4pc of GDP, or Rs12 billion a year. The economic costs of degradation of the Indus delta are estimated to be around Rs2 billion. Taken together all this puts the country's economic managers in a bad light. The report says little attention is paid to the environmental outcomes from water and water-dependent ecosystems – rivers, lakes, wetlands and the Indus delta. They are in rapid decline. This is causing biodiversity loss, greatly reduced stock of freshwater and reduced protection from storms provided by coastal mangrove forests. Excessive water withdrawals and widespread pollution are the main causes of decline. It says water security is undermined by poor water resource management and poor water service delivery—including irrigation and drainage services – domestic water supply and sanitation services. Some growing long-term water-related risks are poorly mitigated. It says there is no proper system of data collection, analysis of data and action based on analysis. It warns that climate change will make water inflows more variable between and within years, increasing the severity of floods and droughts. The biggest challenges pertain to governance, especially in irrigation and urban water supply. These challenges mainly relate to inadequate legal frameworks and the inadequacy of policy implementation.

(By Editorial The Express Tribune, 16, 29/01/2019)

Water economics

PAKISTAN is getting very poor economic returns from its large water resources, and when we add in the costs of environmental degradation due to misuse of water, the returns are pushed even further down. This is the finding of a new World Bank report Pakistan: Getting More from Water that takes a close look at the country's water endowment, and how well the water is used for productive purposes. Some of the findings are so counter-intuitive as to merit a more spirited debate. For example, the authors say that irrigation, which consumes the lion's share of total water resources, only contributes \$22bn to the annual GDP. The four major

crops — cotton, wheat, sugarcane and rice — consume 80pc of the water in the system, while they generate less than 5pc of the total GDP. This is a startling perspective because laypersons are used to thinking of Pakistan as an agrarian country, and the gross asymmetry in the water allocations between industry and agriculture, as well as city and country, is almost considered normal under the shadow of this assumption.

The figures point to massive waste as the primary problem in the water sector of Pakistan, not quantity. Proponents of the argument that dams are the only solution to our water woes need to reflect on some of the findings of the report. The amount of water that goes into the cultivation of major crops is far out of proportion to what is needed. Wasteful practices such as flood irrigation will remain in place so long as our water conversation continues to be dominated by the talk of dams. The simple fact brought out by the report is that improvements in water utilisation can do far more to ensure the water security of future generations than any number of dams will. Besides waste, the other main cost that poor utilisation practices impose upon society is through environmental degradation, a fact that is unfortunately absent altogether from the country's water conversation. This degradation is made possible by the poor state of water data and monitoring, the authors note. One is reminded of the sorry end that the telemetry system installed in the early 2000s met with; it was supposed to measure the streamflow down to the watercourse level. Without data and monitoring, and a woefully outdated pricing regime, Pakistan's water security will remain on shaky foundations regardless of how many dams the country builds.

(By Editorial Dawn, 08, 30/01/2019)

Committee to meet on Feb 11 to decide water tariff for industries

The regulation process for surface and ground water consumed by the industrial sector in Sindh has been set in motion. In this regard, the Supreme Court-mandated committee and provincial secretaries of various government departments will meet in Karachi on February 11 at the Sindh Secretariat.



Industries like textiles, energy, cement, petroleum, petrochemicals, fertiliser, sugar and paper, among others will have to pay adequate charges after the committee decides the rates for each sector. Sindh chief secretary issued on Saturday intimation for the meeting to eight provincial secretaries, directors general of Sindh Food Authority (SFA) and Sindh Environment Protection Agency (SEPA) and managing directors of Karachi Water and Sewerage Board (KWSB) and Water and Sanitation Agency Hyderabad (WASA).

The meeting will discuss issues including water charges, mechanism of collection and monitoring, environmental approvals for industries, registration with SFA and status of its laboratories. SEPA will have to provide a list of the factories which are operating without laboratories. The apex court-appointed convener of the committee, Dr Muhammad Ahsan Siddiqi, a water technologist, will chair the meeting.

"At the current pace of consumption, the quality of groundwater will deteriorate by 100% in the next five years if it is not regulated," said Dr Siddiqi, while talking to The Express Tribune. He added that the industries were paying inadequate tariffs even for surface water.

He said the industries were using subsoil water for free so far. According to him, all the industries will also be directed to install flow metres to gauge the quantity of water they utilise. He said that the Supreme Court had already fixed Rs1 per litre charges for industries selling mineral water, beverages and juices.

For other industrial sectors, the rates are likely to be lower than Rs1 per litre, he hinted. Dr Siddiqi pointed out that several industries like sugar mills can recycle the water they use for cleaning raw material for their products. "Sugar mills release water in the drains after washing sugarcane. Instead, they can recycle that water and use it again for washing purposes."

The convener said he has visited many factories in Punjab, Khyber Pakhtunkhwa (KPK) and Sindh since the apex court formed the committee and found their management willing to cooperate. The court directed on December 12, 2018, that the committee should recommend the water tariff and devise mechanisms for calculation and collection of water charges and monitoring of water consumption.

The court also directed the provincial government to collect the tariff and deposit it in separate accounts. The governments will also have to submit periodic reports of surface and subsoil water being consumed by the industries.

(By Our Correspondent The Express Tribune, 05, 04/02/2019)

Body formed to monitor RO plants' working across Sindh

Sindh Chief Secretary Syed Mumtaz Ali Shah has constituted a committee to monitor and make functional RO (reverse osmosis) plants in Tharparkar and other parts of the province.

The chief secretary called a meeting against the backdrop of reports regarding the numbers of non-functional RO plants that caused an acute water shortage in localities where the residents were mainly dependent on RO plants for water.

Chairing the meeting, the chief secretary stressed the need for making all-out efforts to ensure the maintenance of all RO plants so that they could remain functional.

He also wanted that all stakeholders must work for ensuring supply of potable water to citizens.

The committee he constituted comprised of the secretary of the public health engineering department (PHED), additional finance secretary, representatives of the NED University, Mehran University and M/s Pak Oasis Ltd.

The chief secretary also directed the committee to prepare a detailed report regarding performance of RO plants along with ensuring that non-operational plants be made functional and submit it to him within 15 days. Earlier, officials of the PHED and others gave a detailed briefing to the CS on the working of RO plants.

741 RO plants non-functional

PHED secretary Hassan Naqvi informed the meeting that 2,222 RO plants had been installed in various areas including Tharparkar district. Of the total RO plants, 1,481 were functional and remaining 741 were non-functional, the meeting was told.

He also apprised the participants that on the directives of Chief Minister Murad Ali Shah and in compliance with court orders all schemes of water supply and drainage had been transferred to the PHED.

A judicial commission on water and sanitation, headed by retired Justice Amir Hani Muslim, had declared the public health engineering department responsible for operation and maintenance of all schemes executed by the department.
(By The Newspaper's Staff Reporter Dawn, 16, 07/02/2019)

Contaminated water

THERE seems to be no end to Balochistan's water-related woes. Not only is its capital city experiencing some of the worst water shortages, a report in this paper has now shed light on the high levels of contamination in the water being used for growing vegetables there. Facing challenges of a growing population and insufficient infrastructure to support it, high levels of industrial and medical waste find their way into rainwater drains that farmers then use to water their produce — which eventually creeps into the local populace's diet. But there is limited research and data on the topic. Prof Zahoor Ahmad Bazai from Balochistan University conducted lab tests on seed germination and seedling growth of lettuce from three locations in the city and published a paper on his findings. He claims that farmers pay off the government authorities in order to continue with the unhygienic practice.

On the same day, another report in the paper carried a photograph of the visibly polluted Malir River in Karachi: vegetables were being grown on the banks of the river with sewage water. Sindh only recently inaugurated a province-wide food regulatory authority to maintain quality control, carry out lab tests and enforce the writ of law. But Balochistan does not have a food regulatory body yet, unlike the other provinces. Anecdotal evidence suggests there are also high levels of adulteration in milk, soft drinks, sweets and cooking oil. Yet these ill practices continue with no checks and balances. It is said time and again that Balochistan is the most neglected province, to the point it seems to have become a complacently accepted reality. Where is the will of the provincial and federal ministers to change that? Where are the agitation and organisation and vision to improve? The prime minister of Pakistan has always placed health and health infrastructure high on his list of priorities — even before the general elections. The creation of a food inspection body in Balochistan is the need of the hour.
(By Editorial Dawn, 08, 07/02/2019)

Water, water, everywhere...

Pakistan is fast becoming a water-stressed country. Perhaps it is already one. But then perhaps we could still sidestep the looming disaster. A latest Report on Water Management, Floods, Transport & Aquatic Tourism prepared by a committee constituted by the FPCCI shows a way out. Submitted to the FPCCI in Dec 2018, the committee which was headed by a former senior Pakistan Navy officer, Naeem Sarfraz, has come up with what can only be described as hope against hope in the backdrop of the impending crisis. According to statistics quoted by the report, Pakistan receives about 145MAF of water annually from the three major rivers — Indus, Jhelum and Chenab and their tributaries, including the Kabul River. Out of this, only 103MAF reach canal heads for irrigation while the remainder flows down to the sea.



And out of the 103MAF at the canal heads, only 26MAF are used for crop cultivation while the remainder is lost through seepage, evaporation, escape below Kotri, leakage from the outmoded infrastructure, mismanagement and corruption. Unlevelled fields, old water distribution system (warabandi) and outdated irrigation methods (flooding) also contribute to water losses.

The report claims there is no water shortage, only a crisis of its proper usage and management and goes on to suggest that all water courses, canal minors and distributaries have to be lined to stop unproductive seepage of water. The report estimates the lining of canal minors and water courses can save 23MAF and increase crop productivity.

The report suggests that old methods of field irrigation need to be changed. 'Flooding' needs to be replaced by improved water saving techniques such as 'Bed & Farrow method', 'Dry Direct Seeding of Rice', 'Alternate Wetting & Drying', 'Laser Land Levelling' and 'Drip' or 'Sprinkler Irrigation System'. This is expected to cause water saving of 30-35% which is equal to 20MAF, substantially more than the storage capacity of Tarbela and Mangla dams combined. Rampant corruption in the Irrigation Department also needs to be curbed, says the report.

Stating that water is a precious commodity, the report talks about its cost. Being virtually free, a great amount, according to the report, gets lost through wastage. Therefore, it suggests that the price of water has to be based on its cost of delivery to the consumer. Farmers in Punjab pay only Rs135 per acre per year, while those in K-P pay Rs625, whereas cost of maintaining and operating the distribution system is Rs875 per acre. Moreover, recovery of water charges (abiana) in all the provinces is low, from 12% in Balochistan to 44% in Punjab. Hence, the report maintains abiana rates need to be increased and improving its recovery system which it believes would lead to reduction in wastage and also generate funds for maintenance of the water distribution system. Similarly, in urban areas, installing meters and charging the correct price would reduce wastage.

The report says adequate water is available for domestic use of rural and urban communities throughout the country, except in isolated pockets of deserts. Enough water reaches every city but does not reach the consumers because of outmoded and badly damaged distribution systems within the cities. The report suggests the first priority should be replacement of or upgradation of the distribution system inside every city. Water received from pristine glaciers and rainfall is clean and pure. It is contaminated by people throwing sewage, garbage and industrial and commercial waste into drains, canals and rivers. Drains, built during the 1960s for lowering the water table in waterlogged districts, are now carrying black water and dumping it in the QB Link Canal or the River Ravi. The first responsibility of society is to stop polluting the waterways and the ground water. Implementing laws and extensive installation of water-treatment systems will stop water-borne diseases. Then there will be no reason why every citizen cannot get clean water from a tap.

The report also makes suggestions on how best to meet the challenges of floods and using waterways for transport as well as promoting aquatic tourism.

(By M Ziauddin The Express Tribune, 16, 09/02/2019)

Degradation of Indus Delta costs over \$2b a year: World Bank

As the release of river water towards the sea remains at low ebb, the World Bank's report titled 'Pakistan, getting more from water' has estimated the cost of degradation of the Indus Delta at over \$2 billion per year. The 163-page report was launched at a ceremony in Karachi on Wednesday evening.



The report noted that the Indus delta, being the fifth largest in the world, featured rich biodiversity and valuable ecosystem services with productive fisheries and coastal storm protection by mangrove forests. The delta stretched to around 0.6 million hectares with over one third of it originally covered by mangrove forests. "However, reduced river flows and sediment loads and sea level rise are driving a multifaceted environmental crisis for the delta, including sea water intrusion, soil salinity, mangrove forest loss, reduced freshwater supply and depleted fisheries," the report stated.

The delta was once fed by 17 freshwater channels but currently the water source has been reduced to just one. Moreover, for 138 days each year, the delta does not receive freshwater because the flows downstream of the Kotri Barrage have been limited to August and September. The situation allows the seawater to penetrate the delta for hundreds of kilometres during large part of the year. According to the report, "Sediment delivery to the delta is just 4% of pre-development [of barrages and canals in Pakistan] level."

The reservoirs and irrigation infrastructure has plummeted the sediment delivery from an estimated 270 million tonnes per year to around 13 million tonnes per year at present. "Four out of eight plant species that had thrived in the delta have disappeared in recent years".

The delta's degeneration has estimated to have affected around half a million lives. Furthermore, the shrimp production and catch of Palla fish have dropped by 90%. The mangrove cover has shrunken from around 0.24 million hectares to 0.10 million hectares, consequently affecting the biodiversity because they are an important winter habitat for migratory birds. The loss has also deprived the coastal areas from active barriers against tropical cyclones and storms and left them at greater risk of coastal erosion and flooding.

The report points out that the coastal Sindh districts including Badin, Sujawal, and Thatta are more vulnerable to seawater intrusion than coastal areas of Balochistan. Seawater has penetrated 30 to 50 kilometres inland in some coastal areas of Sindh.

Climate change

The report predicts that the sea level rise and frequent and severe coastal storms will exacerbate seawater intrusion into the delta and the coastal groundwater. This will further degrade quality of subsoil water and the ecosystems and irrigation productivity which depend on it.

"During periods of greater water scarcity, the time spent for collecting water can rise by as much as 60% in rural Balochistan and 40% in rural Sindh."

The heat waves, with temperatures exceeding 40 degrees Celsius for 10 consecutive days, are expected to become more frequent in Sindh, besides Punjab and Balochistan. The waves augment demand for urban water supply besides affecting energy security because the warmer water used for thermal plant cooling reduces power output by up to 0.5%. The crop water requirements and natural water losses through landscape evaporation will also increase.

Groundwater

The report finds that much of Sindh's underground water is saline and, therefore, not a useful agricultural resource. The causes of salinity are both natural as well as poor irrigation management. It notes that average yields per hectare for the major food crops are 1.5 to 4.2 times below field potential and 2.1 to 5.6 times below international best practice.

"Water leaks from the canals and distributaries into the groundwater, and excess water applied to the fields flow to drains and thence to the river, or seeps to underlying aquifers". The report underlines that leakage and drainage to fresh subsoil water supports groundwater pumping but the same to saline groundwater is non-recoverable for irrigation use. "Desalination of saline groundwater could potentially augment urban supply".

Many drinking water supplies across Pakistan are contaminated by geogenic pollutants and industrial effluents. High concentration of arsenic, which is primarily geogenic in origin, in groundwater is widespread. Its prolonged exposure can cause skin lesions, cancer, and cardiovascular disease. The number of people drinking arsenic-contaminated water has not been verified.

Water pollution

The nutrients from fertilisers and pesticides in agricultural drainage, untreated municipal wastewater and industrial effluent are widely polluting freshwater ecosystems across Pakistan. Eutrophication, excessive presence of the nutrients, is affecting several water bodies like Manchhar Lake which used to be the largest lake in Pakistan. "Eutrophication leads to uncontrolled growth of algae and depleted oxygen levels in the water, killing fish and causing a major decline in biodiversity," the report states.

According to the report, piped urban water supplies are not reliable. "Only 27% of the households receive water for more than six hours per day". The water supply reliability is higher in Punjab, with 57%, in comparison to Sindh. "Low reliability reflects poor customer orientation by the water service providers". The report observes that irregular services discourage the consumers from paying water bills and consequently affects the financial health of the service providers.

Tharparkar drought

Over 1,000 children died and 22,000 were hospitalized with drought-related diseases in the Tharparkar district alone during the drought years from 2014 to 2017. Between 35% and 45% of Tharparkar's families migrated to barrage areas in search of labour and grazing land for livestock in those years.

"Women are less likely than men to migrate individually in search of work or in response to water-related shocks," the report identifies. "Heat stress appears to be a stronger predictor of migration in rural Pakistan than rainfall shocks."

Irrigation system

The report rates the irrigation service delivery as poor and less productive and the efficiency of water distribution very low and water delivery across the command areas inequitable. "Service tariffs are set too low and the operational costs of service providers are far too high."

It attributes water-logging and salinization to poor operational performance of the irrigation system.

The economic return per unit of total water withdrawn from the surface and the subsoil is significantly higher in Punjab than in Sindh.

The causes of lower economic productivity in Sindh include water-logging and drainage, water losses and rice cultivation, which has higher evaporative losses compared to other crops, on a large part of agricultural land.

"Sindh's drainage system is neither contiguous nor integrated and waterlogging is widespread due to high surface water delivery," the report said. The saline drainage collected from around 2 million hectares by the Left Bank Outfall Drain (LBOD) moves from near the Punjab-Sindh border and discharges it in the Arabian Sea and in the Shakoor Lake at Pakistan-India border.

Water disputes

The inter-provincial water disputes of Punjab and Sindh preceded the creation of Pakistan. "Pre-partition ambitions of Punjab to divert water for irrigation were opposed by Sindh and in 1945 the British imposed a solution." The British arrangement remained in place until 1970 when the federal government began allocating water on an ad hoc basis, creating the disputes.

Various commissions, subsequently, failed to reach agreement, until the four provinces agreed to the 1991 Water Apportionment Accord. The Accord shares a baseline volume of 144.749 billion cubic meters per year between the provinces. The accord lacks specific provisions for the industrial and urban water demands, according to the report.

"This is especially problematic for Sindh, given the size and rate of growth of Karachi and its importance to the national economy and the lack of viable alternative water supplies beyond limited groundwater and internal runoff".

(By Z.Ali The Express Tribune, 04, 09/02/2019)

No water for Karachi even as Hub Dam level rises

The recent spell of rainfall in Karachi and its surrounding areas has raised the water level at the Hub Dam, which supplies water to a significant part of the port city. However, citizens have been deprived of this basic amenity, with officials of the Karachi

Water and Sewerage Board (KWSB) pointing to leaks in the Hub Canal, saying that water supply would only be resumed after it is repaired.

At its current level, the Hub Dam can provide 40 million gallons of water per day (mgd) to Karachi. Saleem Ahmed, the chief engineer of the KWSB's main trunk line, however, has a different take. "The Hub Canal is in a very bad state and a lot of water would be wasted through the leakages," he told *The Express Tribune*.

According to Ahmed, the KWSB has decided to start the repair work from now so that, come monsoon season when the Hub Dam is filled to capacity, they can start supplying the optimal 100mgd of water. He added that tenders have been sought for the repair work of the Hub Canal and the KWSB is trying its best to get the repairs completed before the monsoon rains.

Routed to Lasbella

At its optimal, the Hub Dam supplies 63% of its capacity, which comes to 100mgd, to Karachi's District West, as well as North Karachi and New Karachi which fall in District Central. The remaining 37% of the water is supplied to Lasbella.

Muhammad Ahtesham, who is the project director of the Water and Power Development Authority at the Hub Dam, told *The Express Tribune* that the recent rainfall had raised the dam's water level by three feet, which in turn had increased the water level in its reservoir to 279 feet. At its present level, Karachi and Lasbella could be supplied water on a limited scale for some time, said Ahtesham.

He added, however, that the KWSB had refused to take water due to leaks in the canal, which is why WAPDA was supplying 22mgd of water to Lasbella, which would continue for the next 102 days at the current pace.

Rise from the dead

Before the recent rain spell, water at the Hub Dam had reached the dead level at 276 feet and water supply to Karachi had been stopped for the past three months. Now that the reservoir's level has reached 279 feet, after a good spell of rain in the catchment areas, it was expected that Karachi's supply would be restored, mitigating the shortfall in the water supply to its designated areas in District West and District Central. However, residents of these areas have yet again been left yearning for the basic amenity on account of the poor planning of the KWSB.

Citizens suffer

When *The Express Tribune* reached out to other engineers associated with the KWSB, they all agreed that areas of District West, New Karachi and North Karachi were facing acute shortage of water for the past three months. Currently, the KWSB is supplying 30mgd of water to the affected areas by routing it from the Indus River. Areas of District West are supplied water on 10 days a month, while those in District Central are given water on only five days.

All these areas, which include Baldia Town, Orangi Town and SITE are densely populated and also comprise large industrial complexes, for which the water supply is inadequate. One engineer, speaking to *The Express Tribune* on condition of anonymity, lamented that had the KWSB repaired the Hub Canal in time, water could have been supplied to these areas from the Hub Dam.

More water expected

For his part, Pakistan Meteorological Department Director Abdur Rasheed told *The Express Tribune* that there was little possibility of further winter rainfall in Karachi or other parts of lower Sindh. He added, however, that rainfall was expected in Upper Sindh and different areas of Balochistan. "The Hub Dam has a vast catchment area, therefore it is possible that the reservoir's water level would be further increased after the expected rainfall," he added.

(By Ashraf Ali *The Express Tribune*, 04, 11/02/2019)

KWSB to resume supply as Hub Dam level touches 300ft mark

The recent spell of rains in Balochistan has raised the level of water in the Hub Dam up to 300 feet, making it possible for the Karachi Water and Sewerage Board to resume the supply of water to the city.



According to the KWSB's officials, who asked not to be named, the board will start supplying water from the dam over the next few days. At the current level, up to 70 million gallons of water per day can be supplied to the city for the next year.

At its optimal, the Hub Dam supplies 63% of its capacity, which comes to 100mgd, to Karachi's District West, as well as North Karachi and New Karachi which fall in District Central. The remaining 37% of the water is supplied to Lasbella.

Glad tidings

The rise in the dam's level comes as a welcome relief for the citizens of districts West and Central, who had been facing acute shortage of water over the last several years due to scarcity of rainfall the Hub Dam's catchment areas.

There are concerns, however, that a considerable volume of the water to be supplied to Karachi will be lost in leakages from the Hub Canal, which is the main line connecting the dam to the pumping station.

Repairs needed

Around 10 days ago, when the water level had reached 279 feet, the KWSB had refused to supply the water to Karachi, citing leakages in the Hub Canal. "The Hub Canal is in a very bad state and a lot of water would be wasted through the leakages," Saleem Ahmed, the chief engineer of the KWSB's main trunk line, had told The Express Tribune.

According to Ahmed, the KWSB had decided to start the repair work as soon as possible so that, come monsoon season when the Hub Dam was filled to capacity, they could start supplying the optimal 100mgd of water. He had added that tenders had been sought for the repair work of the Hub Canal and the KWSB was trying its best to get the repairs completed before the monsoon rains.

Ahmed's stance had been corroborated by Muhammad Ahtesham, who is the project director of the Water and Power Development Authority at the Hub Dam, who had told The Express Tribune that the KWSB had refused to take water due to leaks in the canal, which is why the WAPDA was supplying 22mgd of water to Lasbella.

Go-ahead given

When these contradictions were pointed out to a KWSB engineer, he said that the KWSB MD had already given directives to carry out the repair work. The maintenance, he said, would be carried out in phases and water would be re-routed from the part of the main line which was under repair at the time.

The engineer, who asked not to be named, said that the KWSB will begin supplying 70mgd of water to Karachi over the next few days.

(By Naeem Khanzada The Express Tribune, 04, 22/02/2019)

Effective use of irrigation water, not dams, can mitigate water scarcity, says expert

Dr Hassan Abbas, an expert in hydrology and water resources, underlined the need to restore the ecological integrity of the Indus River, while speaking at a meeting of Pakistan Institute of Labour Education and Research (PILER) on Friday.

He said that the Indus Basin Treaty with India was against the interests of Pakistan, adding that military dictators had sold the three eastern rivers to India for their petty interests and to earn commissions from construction of Tarbela Dam.

"Had we gone to the International Court of Justice against the construction of dams by India before signing the Indus Basin Treaty, Pakistan would have stopped construction of all Indian dams". He added that it was unprecedented in the history of the world that three rivers were sold out to a country.

According to Dr Abbas, the construction of dams on rivers had proven to be destructive for the ecology and environment and thus has become an obsolete practice around the world.

He added that Western countries had started dismantling their dams. Dr Abbas said that with the technological advancements, dams had become useless and a wastage of money.

"We are working on technologies for effective use of irrigation water," he said adding that there is a need to create awareness among people for changing pattern of use of water in agriculture sector. "We are using 6,000-year-old irrigation system, which was initiated by the Pharaohs of Egypt," he said. Currently, 104 million acre-feet (maf) water is taken from river system for agricultural purposes. "We can grow the same agriculture products using only 15 to 20 maf water," he added.

He said that Pakistan was seeking hundreds of billions of dollars for the construction of dams, but by spending some money on new technologies the water problem could be solved.

(By Press Release The Express Tribune, 04, 23/02/2019)

Dam fund disappointment

"If to do were as easy as to know what were good to do, chapels had been churches, and poor men's cottages princes' palaces."

Shakespeare's immortal lines are perhaps a suitable analogy for former chief justice Saqib Nisar's Diamer-Bhasha and Mohmand Dam Fund, an initiative born out of a fantasy to 'save Pakistan'.

At the Lahore Literary Festival, when Mr Nisar was asked what he proposes as the way forward for the construction of the dams, given the gap between the required amount — a whopping Rs1.5tr — and the modest Rs9.8bn collected, he responded by saying the understanding was that the funds would be used to create awareness, and not for the actual construction of the dams.

This will likely come as a rude awakening to those who donated, both voluntarily and involuntarily — from institutions like the armed forces and private banks, to poorly funded organisations like Pakistan's football federation.

At the height of the campaign it appeared as if everyone was making donations. As chief justice, Mr Nisar had even contemplated invoking Article 6, which relates to high treason, against critics of the fund.

As prime minister, Imran Khan, too, commended the judge for “doing what civilian leaders could not do”, encouraging pensioners and expats to pledge precious capital for the initiative.

But alas, despite all the populist slogans and promises, what was championed as the answer to Pakistan’s looming water crisis achieved nothing beyond an expensive, omnipresent campaign.

Those who contributed their savings under the impression that they were making a sacrifice for a national cause will be disappointed to learn that their money will, in fact, not be used for the dams’ construction, and that the fund they contributed to may never reach its goal.

The entire episode serves as a warning for leaders of institutions to avoid overstepping their domain and exploiting well-meaning citizens by promising something beyond their intellectual and financial capacity.

As it stands, the dams remain a pipe dream and a cautionary tale for citizens perpetually on the lookout for a saviour.
(By Editorial Dawn, 08, 24/02/2019)

Contaminated water

That people in Pakistan are vulnerable to water-borne diseases is not surprising. Time and again it has been reported that lack of sanitation efforts have contaminated our water streams. Recently, water samples collected from different parts of Hyderabad found that the water in the city is infected with dangerous viruses, such as the one that resulted in the recent outbreak of the drug-resistant (XDR) typhoid.

Since 2016, around 8,000 cases of the XDR typhoid have been reported with 69 per cent of cases in Karachi and 27 per cent in Hyderabad alone, according to the Pakistan Medical Association. With people in Hyderabad already on alert because of XDR, in the sewage water samples tested were also found the presence of poliovirus — a virus Pakistan has been struggling to eradicate.

But despite the alarming situation and with experts cautioning against the outbreak of various diseases, the district officers of Hyderabad’s Water and Sanitation Agency (WASA) and the Pakistan Peoples Party’s (PPP) provincial government have not taken stock of the situation. Even during a recent emergency meeting convened by the Health Department that aimed to raise concerns over the prevalence of the poliovirus and initiating an anti-polio drive, officials of the Hyderabad Municipal Corporation and WASA only provided lip service. While they spoke of the measures taken towards fixing the broken sewage and drainage system, the ground realities present a different picture.

The issue of contaminated water is not just limited to Hyderabad or cities in Sindh. Pakistan ranks at number 80 among 122 nations on the quality of drinking water, making water pollution one of the major threats to public health in the country. The provincial and federal governments should work together towards ensuring that something as basic as the provision of clean drinking water is provided to the citizens.

(By Editorial The Express Tribune, 16, 26/02/2019)

Rising level of water at Hub Dam attracts picnickers

With the rise in water level at the Hub Dam, the site has become ideal for fishing and picnics and many people have begun making their way to the location for fun.

Many citizens arrive at the site early in the morning to catch fish. Some claim to have caught up to nine kilograms of fish in a single.

Moreover, many families come to the site for picnics and enjoy their breakfast or lunch in the pleasant weather besides the glistening water reservoir.

The Hub Dam, located in Balochistan, is spread over an area of 24,000 acres.

Just a short time ago, the lack of rainfall had caused the water level to deplete to the dead level. However, with the recent downpour, the water level has increased and was at a record high of 299 feet on Friday, for the first time in 40 years.

The Hub Dam is one of the main sources of water for Karachi.

It mainly supplies water to the District West and with its increased level it can provide water to Karachi and areas of Lasbela for the next seven months.

While talking to The Express Tribune, visitors said that it was propitious that the dam had been filled with water. They said that if the water was distributed fairly, citizens would not have to face water shortage for at least some months.

The people said that they had made their way to the Hub Dam for picnic as there was a lack of picnic points in the city.
(By Saba Naz The Express Tribune, 05, 28/02/2019)

Hub Dam's revival to allay city's water woes

The city's thirsting western and central neighbourhoods will have a better summer after Hub Dam, they have been hooked up to, has started receiving ample rain and floodwater from its catchment areas to offer for the next two years at least, officials said on Sunday.

They said torrential rains in the catchment area of the dam, which falls in Balochistan and is located on the fringes of Sindh, had substantially increased the water level of the reservoir that had been offering dust for the past two years.

Hub Dam had witnessed no rains for years and its catchment areas were part of the years-long drought endured by the two provinces separated by the reservoir, which is key to solve the water woes of the city's most populous western district and parts of Karachi central district.

Officials in the Sindh local government ministry said the floodwater had substantially raised the reservoir level by 70 feet to reach at 348 feet till Sunday. Hub Dam's peak level is 396ft.

Officials at the LG ministry and the Karachi Water and Sewerage Board said a tangible increase in Hub Dam was enough to provide the required water to the city's areas, which were hooked up to it and had been facing grave water shortages for the past many years.

The officials said the dam, with the maximum capacity of supplying 100mgd water to Karachi, could offer a continuous city-ward stream for at least next two years.

Officials at the meteorological office said various districts of Balochistan had received intense rains in the past many days that played havoc with the routine life and caused damage to human life and property and livestock were killed.

Hub Dam is also the main source of water for irrigation and industrial and domestic uses in Lasbella district.

The officials said the dam supplied 100mgd to Karachi and around 66mgd to Lasbella's industrial town of Hub when it was filled with water.

"If it is fully filled it [the dam] can provide water to Karachi and Lasbella for three years," said an official.

Officials said the reservoir's level had dropped to 276ft until the recent downpour lashed the region.

The concerned authorities were using suction pumps to provide water to the areas hooked up to it for drinking water supply.

The officials in the Sindh government said households in the two districts of Karachi had been dependent on the rationed water supplies that had been carved out from other parts of the city because of a dead source at Hub.

"With the revival of this source, the areas, which had not been getting water for weeks, will get it on daily basis," an official said.

He added the situation would also benefit the rest of the city, which would get back its water from going into West and Central districts.

"Overall, it will add up to 60mgd to our system, which is half of the city's requirement."
(By Hasan Mansoor Dawn, 13, 04/03/2019)

Diamer-Bhasha dam fund

It is indeed generous of a nation to have blind faith in its judiciary as well as the system, and to choose to pay heed to the call of a former chief justice and donate in their capacity for the much-debated Dam Fund.

Initiated almost a year ago by the then top judge of the country, the fund not only earned the former chief justice the label of a 'populist' for allegedly taking over the job of the government and the political leadership, but also remained surrounded by uncertainty for political reasons, structural incapacity and most importantly the will of the nation to donate enough to achieve the \$14 billion target to fully cover the cost for the building of the Diamer-Bhasha Dam.

Now that Prime Minister Imran Khan has lauded the nation for touching the Rs10 billion mark as dam donations, the initiative still stands afar from taking the face of reality more when the former Supreme Court chief justice himself recently declared that the purpose of the dam fund was only to create 'awareness' over the important issue of water scarcity. In retrospect, the funds collected are equal parts of donations given at will and at compulsion as penalty for legal cases against some of the political and bureaucratic bigwigs.

The PM along with the praise for his people should have said a little on the future of the fund too, as Pakistanis regardless of their naivety over the internal politicisation of the dams and water issue look forward to a strong response with a coherent policy to address the issue of water scarcity in the face of Indian aggression and global climatic changes. Initiated by a top judge in his tenure and taken over by the PTI government, the dam fund might be put to use by the next government only, if at all.
(By Editorial The Express Tribune, 16, 13/03/2019)

In PPP heartland, not a drop of water to drink

It may have been the home of Sindh's first family for the last 30 years, but the common citizenry of Nawabshah still cannot even get a glass of clean drinking water.

"The government might have spent billions on the construction of buildings or roads, but drinking water is still a distant dream for us," said Abdul Majid Soomro, a resident of Nawabshah, the hometown of the Pakistan Peoples Party's (PPP) top leadership. Soomro was not alone in his longing for clean, potable water. Thousands of other people living in the hometown of PPP co-chairman Asif Ali Zardari suffer from the same dilemma.

The PPP has allocated billions of rupees in provincial budgets and special packages since coming back to power in 2008, but drinking water and sanitation schemes are still nowhere to be seen.

"My wife has been admitted in the civil hospital for the last two weeks. I have had to pay Rs3,000 just for bottled water for her and attendants like myself. There is no potable water for patients in the entire hospital," said Nawaz Dahri, a middle-aged man sitting at the medical facility – one of the largest teaching hospitals in Sindh.

Filtration plants

During a visit to the areas, it was found that almost all water filtration plants established by the then-district nazim Faryal Talpur – Zardari's sister – during the General Pervez Musharraf era are out of order. However, two newer filtration plants, which cost Rs1.5 billion and were inaugurated by Bilawal in 2012, are partially operational.

"These plants have the capacity to filter around one million gallons of water every day, but hardly 100,000 to 200,000 gallons are being filtered," said local journalist Ismail Domki, adding that after inaugurating both the plants, the government did not make any effort to extend the water network to provide water to houses.

"The government has built universities, roads and upgraded hospitals, but it is lagging behind as far as drinking water is concerned. People are compelled to fetch potable water from hand pumps installed in various areas," he remarked.

Azeem Colony, Sanghar Road, Taj Colony, Gharibabad, Police Headquarters, Katchery Road, and Manwabad are among the worst-affected areas, where people have not had access to potable water for years.

Budget books

The Sindh government's budget books show that billions of rupees have been allocated and spent on various initiatives in Shaheed Benazirabad district, but water and sanitation have been a low priority for the ruling party and its leadership. According to the finance department, Rs18 billion was allocated in 2017-18, Rs5.2 billion in 2016-17, Rs17 billion in 2015, and Rs2 billion in 2013 under special packages separate from the routine budget for the division.

In the evenings, huge crowds rush to hand pumps outside the town adjacent to freshwater canals. "Every day after work, I come here to fill three to four jerry cans of water for my household use," said Hussain Panhwar, who lives in Taj Colony.

Not only men, but large numbers of children are also seen waiting for their turns to fill their jerry cans. "The water in the city is undrinkable, so most people who can't afford bottled water come here," Panhwar said.

District government water supply schemes are in abject condition.

A few ponds, built many years ago, are linked from Rohri Canal, but they are in a pathetic condition. Stray animals roam around them and garbage lines the ponds, indicating the apathy of local authorities.

"Since filtration plants are not working, the ponds are useless," said Arshad Khaskheli, a social activist who runs the Shah Sachal Saami Foundation. Referring to a UNDP survey, he said, "Over 95 per cent of underground water is not fit for human consumption. Arsenic is found in the water." He added that no sincere effort was made in redressing this important issue.

Discrepancies in hospital expenditure

"The teaching hospital's administration, in their expenditure, has shown bills of Rs20 million in a year for bottled water, but patients have suffered from water scarcity for years. I don't know to whom they provided water," he said. He referred to the judicial water commission's visit last year, saying, "Justice (retd) Amir Hani Muslim took strong exception to the condition of the hospital, which is deprived of drinking water facilities for patients," he said.

An official privy to the development told The Express Tribune that Justice Muslim expressed concern over Rs860 million being spent by the hospital administration in just two days and asked, "Please provide me with the original record showing how you spent this huge amount in two days...and why you have failed to provide water despite having so much funding available."

Public Health Engineering Department Executive Engineer Sajjad Saeed, whose department is responsible for running the ponds and filtration plants, held the high-ups responsible. "The filter plants are not working properly because of membranes which need to be replaced," he said, adding that they have written to senior officials, but with no result.

Talking about the ponds, he said, "The expected life of these ponds will also end by 2020." He said that three years back, they submitted a scheme to revamp the ponds and lay down a pipeline network in the city. "Now, we have received some funds and started work on it."

Zardari and his sister, Azra Pechuho, are the incumbent MNA and MPA from the areas. Despite many attempts, neither was available for comment.

(By Hafeez Tunio The Express Tribune, 04, 14/03/2019)

Activists demand 'free flowing of River Indus' on World Rivers Day

Representatives of the fishermen community and social activists demanded "free flowing rivers and personhood rights of Indus River and its delta" on Thursday at an event organised to commemorate World Rivers Day.



The event was organised by Pakistan Fisherfolk Forum (PFF) at the Arts Council of Pakistan, Karachi. A large number of people, especially from the coastal belt of Karachi, Badin, Thatta and Balochistan, attended the event.

The event was also attended by victims of the Indus Delta, who were once rich because of abundant agriculture, but the shortage of river water has forced them to leave their ancestral abodes and migrate to safer places.

"We will soon launch a movement for the free flow of River Indus," PFF Chairperson Mohammad Ali Shah said in his address. "We are celebrating World Rivers Day from March 1 with different activities in various districts of Sindh. All our events including rallies, marches and seminars concluded today with today's event," said Shah said, adding that the Indus River was one of the mighty rivers in the world, but people in upstream and successive governments had caged it by building dams and carving out canals.

Environment expert Nasir Panhwar expressed serious concern over the degradation of the Indus Delta and said, "Water is the basic human right of people. We are fortunate that we have such a rich delta, which is unfortunately dying now because of the government's negligence."

Gulab Shah, one of the landlords who has lost many acres of farming land due to sea intrusion in Thatta district said, "The worst situation can be gauged from the fact that we don't even have water to bathe the deceased before their burials."

Writer Ayoub Shaikh, Gul Hassan Kalmati, a researcher who has also worked on Indus Delta and its islands, political activist Khalid Junejo, and water expert Zulfiqar Halepoto also spoke on the occasion.
(By Our Correspondent The Express Tribune, 05, 15/03/2019)

Illegal constructions on residential plots in Hyderabad continue despite ban

The violation of Supreme Court-mandated Water Commission's ban on the construction of commercial buildings on residential plots continues in Hyderabad, arguably with official connivance. Sindh Building Control Authority (SBCA), which is under obligation to enforce the ban, has apparently failed to ensure compliance of the order.

This is despite the fact that the authority acknowledges that despite expiry of the Water Commission, its orders still stay in place. "In compliance of the order of the Water Commission a stay order was issued with directions to stop all construction activities at the site forthwith," reads a letter dated March 18, written by SBCA to builders constructing a ground plus four commercial buildings on plot number 356, Block D, Latifabad Unit 6.

"...the field staff has reported that you are not complying with the directions of this authority and continuously raising construction on the site." The letter was issued in a rare action against the builder after the authority was repeatedly approached by some local residents of the area who produced video and photo evidence of the ongoing work.

The authority took notice of the complaint because they had also filed a petition earlier against the project in Sindh High Court and a complaint to the Water Commission with the former still being heard in court, said a complainant speaking to The Express Tribune. The SBCA also wrote to the local police station on the same date to stop the construction work while also writing to Hyderabad Municipal Corporation, Latifabad mukhtiar and property registration sub-registrar to not entertain the property transactions.

"... kindly disconnect or not provide water supply, electricity and gas connections to the said property," states the authority's letter addressed to Hyderabad Electric Supply Company (HESCO), Water and Sanitation Agency (WASA) and Sui Southern Gas Company (SSGC).

However, unlike this project for more than a hundred commercial projects which are supposed to stop work under the commission's order, the SBCA appears visibly lax. The authority's officials were not available for comment.

An office bearer of the Association of Builders and Developers (ABAD), who requested anonymity because the issue is litigious in nature, said most builders are in a limbo because the Water Commission does not exist. ABAD has been demanding that

ongoing projects on the plots converted from residential to commercial should be allowed to continue while a future ban should be put in place until the provincial government decides the plan for further horizontal growth of urban towns.

The Water Commission banned commercial projects on residential plots in November last year because the water supply, drainage and road infrastructure of Hyderabad do not allow the growth of horizontal structures.
(By Our Correspondent The Express Tribune, 05, 21/03/2019)

Karachi's water challenge

WATER-STARVED Karachiites, do you know who James Strachan was? Appointed chief engineer and secretary of Karachi municipality in 1873, it was his genius that made Karachi into one of the cleanest and most well-managed cities of that time. It was his transformative thinking that brought a water connection to every home in the Karachi of 140 years ago — even when his superiors told him to plan only for the cantonment, main colonies and bigger roads, and not to worry about the other (poorer) residents of the city. Today's bleak water situation in our city is crying out for a modern-day James Strachan, or a repeat of his transformative thinking, to rescue Karachi from its pervasive water crisis. The good news is that it can be done.

Karachi is Pakistan's largest and most populous city, as well as its commercial hub — contributing over 20 per cent of GDP, high proportion of taxes collected by the government, the largest base of generating businesses and the employment engine of Pakistan.

Karachi is also among the largest megacities in the world. However, due to the multifaceted aspects of its evolution, economy, population influx mix, different ethnicities and sociopolitical positioning, it has become one of the most difficult cities to govern. It is, therefore, equally difficult to supply and manage water in this city through a single organisation.

The state of affairs of the Karachi Water Sewerage Board, the body responsible for water delivery, calls for an immediate strategy for its transformation. KWSB is responsible for the production, transmission, treatment and distribution of potable water to the citizens of Karachi, along with managing the sewerage system of the city. In all its responsibilities, it has unfortunately fared badly, and it will continue to do so unless its current business model and governance structure is transformed and KWSB can operate independently.

The state of affairs of the Karachi Water and Sewerage Board calls for an immediate strategy for its transformation.

To fully understand the challenges faced by KWSB, one must understand its chronic problems. The continuous political interference in its operations has resulted in serious mismanagement. Lack of autonomy means a board that possesses little independence.

Poor quality of leadership and recruitment policies based on seniority means that the professionals required to run a modern water utility are not present. Its infrastructure and operating systems are outdated, with no investment strategy in place for their upgradation. There are increasing deficiencies in water quality and access. Rising water demand and decreasing water supply has put further pressures on a leaking system. KWSB is caught up in circular debt, revenue collection is poor, and there is no accountability for non-revenue water. From a citizen's perspective, there is no focus on customer service. In this scenario, investing only in 'mega-water projects' in order to solve Karachi's water crisis is futile unless the core issue of governance and management is addressed.

An amended model of public-private partnership called a government-investor-public partnership is proposed, which will allow retention of asset ownership by the government while leasing or subcontracting its operating and management functions to an investor/operator who is incentivised by reasonable return on investment and given freedom to manage the entity professionally.

The board will be made independent with membership consisting of government representatives, investor representatives, independent water experts and distinguished citizens of the city ('the public') who will provide 'neutral' opinions, independent from politics.

The primary aim of this new business model will be to develop focus on service delivery, accountability, customer satisfaction, revenue collection, investment strategy and infrastructure development. Quantifiable performance standards, staff productivity, operational efficiency and replacement and/or upgrading existing infrastructure can be covered under agreement. Given the size and scale of the city, more than one investor/operator may be contracted.

The government's job will be to undertake the required governance and institutional reforms, create the necessary enabling environment, fix water tariffs, make policies for subsidised or free water for the poor and let the investors/operators get on with their job. The investors/operators will have to extend services to all areas of metropolitan Karachi, thus leaving no one behind. The interests of the currently underserved population will be secured through subsidies and/or free water and hiring of community members in the public works programmes.

The 'unbundling' of KWSB would not be an untried experiment. There is ample evidence and some good examples available from other cities in Asia where such transformations have successfully taken place. Manila's successful conversion of a rambling government-mismanaged water entity to an efficient water utility can be used as a model for KWSB.

Nearer to home, we can look at those public utilities that have been freed from government control, resulting in win-win situation both for government and customers. The de-control of KESC into KE and the new PTCL has led to improvement in services and these entities becoming major contributors to the state treasury by depositing taxes rather than surviving on subsidy from the state as KWSB does.

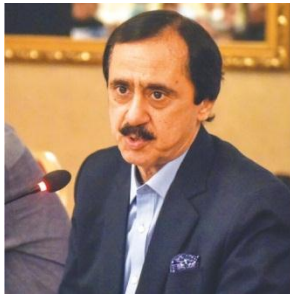
The positives of controlled relaxation from government are further supplemented by our experience with the banks, such as HBL, MCB, UBL and others. Today, they are considered well-run institutions, are depositing huge amounts of taxes every year in the government kitty and have attained such levels of operational excellence as to offer local consumers an attractive option over foreign banks.

Unless the proposed engineered change of KWSB is taken up urgently, neither Karachi's aspiration of becoming a modern megacity, or expanding as the trade and economic hub of Pakistan, will be realised. While another James Strachan is unlikely to land in Karachi, we can only hope that the decision-makers now move urgently towards transforming KWSB to ensure efficiency and equitability in water supply for all citizens, as well as swift removal of sewerage. Such a model can then be replicated in other urban centres of Pakistan.

(By Zohair Ashir Dawn, 08, 24/03/2019)

'Water commission needs to be re-established'

What's the status of Sindh's basic utilities and their infrastructure and how far the Supreme Court-mandated water commission had been effective were discussed in detail at a seminar held on Tuesday at a local hotel where the take home message for the audience was that citizens must not hope for improvement in governance if silence remained the norm on persistent bad governance and corruption.



"Use your forum and raise a voice like I did. Unless we all take ownership, the (style) of governance wouldn't change. I am optimistic because we have seen things moving. If there is a will followed by honesty and hard work, things do change," noted Shahab Usto, a seasoned advocate whose petition in 2016 led the Supreme Court to establish a commission to investigate the poor state of water and sewage disposal in Sindh.

Titled 'Management of Water Resources and Way Forward', the seminar was organised by Shehri-Citizens for a Better Environment with the support of Friedrich Naumann Foundation for Freedom. *Experts urge state to fix KWSB's basic administrative problems before investing more funds into it*

The programme began with a brief documentary on the performance of the commission during the tenure of retired Justice Amir Hani Muslim (from 14-1-2018 till 15-1-2019).

Earlier, the commission was headed by Justice Mohammad Iqbal Kalhoro after it was formed in Dec 2016.

The commission lasted for two years during which it met 274 times and five reports were generated.

According to Mr Usto, corruption, bad governance and absence of accountability for decades have created the prevailing dismal situation in Sindh on which people need to raise their voice.

"If millers, contractors and industrialists could get together for their vested interests, why couldn't we unite for a just cause? I am committed firmly but need the support of civil society, intelligentsia, academia and the media."

Ban on high-rises

Criticising the Supreme Court' judgement of withdrawing the ban on high-rise buildings, he said the order shocked him. "The court continued with the ban for over a year, but then one fine morning we saw that within 15 seconds the court reversed the order without hearing arguments."

Sharing his observations, the evidences gathered by the commission and the steps initiated by the commission led by retired Justice Muslim, he said that during this time the commission also visited schools and hospitals.

Condition of govt hospitals

"The government itself admitted that almost half of the total 44,000 public-sector schools were being supplied with contaminated water whereas the rest didn't have any water supply system," he told the audience, adding that 29 public-sector hospitals in Sindh either didn't have an incinerator at all or the equipment was lying non-functional.

The commission found that these hospitals were dumping their harmful medical waste, along with non-infectious refuse, in the open. In addition, none of the 33 filter plants, the three waste treatment plants in Karachi and the 2,100 water supply schemes in the whole province were found operating during the visits. Some of these facilities, he said, had been rehabilitated and now were being operated on court's directives while work was in process to make others functional.

The commission, he pointed out, had given deadlines to sugar cane millers and industrialists to set up treatment plants and he was waiting to see level of their compliance with the orders. The government had also committed to set up landfill sites in each district.

"I believe that if the commission is re-established and is allowed to work for at least two years, the face of Sindh will change. On our part, we must assert ourselves. If we all come together, nobody can ignore us," he said while committing to file contempt of court petitions in case of non-compliance with court orders.

Mr Usto praised Justice Muslim especially his efforts for getting 130 acres of land, earlier under dispute between the Karachi Port Trust and the government for years, declared state land to be used for a treatment plant and green spaces.

KWSB needs fixing

Giving a presentation on the Karachi Water and Sewerage Board (KWSB), seasoned urban planner Farhan Anwar underscored the need for fixing the basic administrative problems plaguing the utility for decades before investing more funds into it.

“Before investing more, we need to see that whether we received optimal benefits from past water schemes,” he said, hinting at the efforts in the pipeline to get World Bank assistance for KWSB overhauling.

According to him, the biggest challenge, which unfortunately becomes a political issue, is to bring administrative and financial autonomy to the utility in order to run it professionally.

On Karachi’s water crisis, he referred to some data according to which leakages and theft took away almost 40 per cent of the city’s water whereas currently only 53pc of the city’s water needs were being met.

“If this situation continues, we won’t be able to improve the city’s water situation even if K-4 project becomes functional,” he warned, describing political interference as a major barrier to the reform process at the utility.

During the question-answer session, Gulzar Memon, former chief engineer of the KWSB, said: “The rehabilitation process initiated by the commission in 2016 has come to a halt. Currently, no work is under way on treatment plants, filter plants or even the K-4 project.”

(By Faiza Ilyas Dawn, 15, 27/03/2019)

Call for ‘independent’ KWSB to overcome city’s water problems

The Karachi Water and Sewerage Board (KWSB) subdued by high-level political/government pressures cannot deliver unless it is allowed to be run by an independent board led by professionals.



Water ‘crisis’ in the city has more to do with large-scale unfair distribution, mismanagement, wastage and theft than deficiency.

These points were raised by speakers at a programme titled Urban Water Dialogue organised by Karachi Urban Lab on Thursday at the Institute of Business Administration (IBA).

While a number of suggestions were shared during the event on what’s required to be done at the state and individual levels to help overcome water shortages, the discussion painted an overall bleak picture of current government and court initiatives.

“The way things are moving, the K-4 project won’t see light of day before 2025. Presently, no sewage is being treated even at the treatment plant (TP3 in Mauripur) inaugurated with much pomp and show by former chief justice in July last year,” said Syed Mohsin Raza, general secretary of Peoples Labour Union, KWSB, at the forum.

He strongly objected to the government decision of seeking loan assistance from the World Bank to overhaul KSWB, arguing that the utility was already running into debts of billions of rupees and unable to pay them off.

He was of the opinion that a particular “mafia” wants to get projects as they brought funds, though problems could be addressed at much lesser cost.

According to him, water supplies to Karachi, currently receiving half (650 million gallons per day) of its total requirement, have always remained deficient. The problem got intensified as the city was allowed to densify without planning and in violation of rules and regulations.

He also criticised cantonment authorities and said areas falling in their jurisdiction had been heavily commercialised but nobody could question their actions.

Issues plaguing the KWSB, he noted, could only be fixed through an independent board also having representation from civil society.

Giving a presentation highlighting how Malir district’s fertile land got barren and water resources fell, Gul Hassan Kalmati, noted historian and writer, pointed out that underground water table in the area had gone down from 60 to 70 feet to 600 feet.

He also questioned how new housing schemes, for instance Bahria Town, DHA City and the Fazaia housing project, had been allowed to be constructed in the city when decades-old housing projects couldn’t be completed on the pretext that water and electricity were not available.

Projects like Bahria Town and DHA City, he said, would destroy Malir River's catchment area and spell more disaster for district's ecology and its residents as both project developers had been allowed to build eight (Bahria Town) to four (DHA City) artificial lakes in their area.

Sharing findings of a survey, Mr Kalmati informed the audience that there were at least 200 spots in Malir district from where underground water was being extracted with the help of deep drilling.

"Three big mineral companies are also involved in this [illegal] practice, which needs to be stopped," he said, adding that illegal water connections was a common practice in the district and people were not willing to pay for water.

He emphasised the need for building small dams, which could also help in underground water recharge.

Sharing her perspective on city's water crisis, seasoned water expert Simi Kamal said that water shortages could be effectively overcome through better and wise management of water resources both at the government and individual levels.

Regulating water use

There was a need, she said, to fix water entitlement and people should be charged for consuming water beyond what could be their human right and that water use should be regulated through meters.

Speaking on bureaucracy of urban water, Dr Kaleemullah Lashari said that the government must make integration of "go green policy" in all projects and develop rural areas to reduce migration pressures from villages to cities.

There was also a call for turning to drip irrigation system from flood irrigation which wasted a lot of water.

The programme was moderated by Dr Abdul Haque Chang, assistant professor of anthropology at IBA.

Dutch Ambassador Ardi Stoios-Braken also briefly spoke, telling the audience how her country made progress amid climate change challenges and what Pakistan could learn from it.

(By Faiza Ilyas Dawn, 16, 29/03/2019)

The state of water in Sindh

IN December 2016, I had filed a constitutional petition in the Supreme Court of Pakistan, praying for the appointment of a commission to probe whether people in Sindh received clean drinking water, and whether the Sindh Environmental Protection Agency (Sepa) had discharged its statutory responsibilities. The apex court appointed a commission headed by a sitting judge of the Sindh High Court, Justice Muhammad Iqbal Kalhor. During its one-year tenure, the Justice Kalhor commission produced two comprehensive reports containing, inter alia, findings and recommendations.



It must be stated that the commission's findings have never been disputed by the provincial government or by any other person mainly because they were drawn from a variety of sources — official records, government functionaries, forensic reports, experts' input, public hearings, judicial proceedings, and the inspections of water and sanitation infrastructure. The conclusion that the commission reached was: "people of Sindh are not drinking clean water". The mixing of untreated sewage with freshwater bodies — rivers, canals, lakes, ponds etc — was found to be the prime cause of contamination. In fact, there are 750 points of confluence where raw sewage meets with freshwater bodies, turning the entire 8,000-kilometre-long provincial irrigation network into a big conduit of drainage.

A grim finding of the commission on water is that virtually the entire water and sanitation infrastructure had been nonexistent or flawed.

Another grim finding of the commission is that virtually the entire water and sanitation infrastructure — water filtration plants, sewage treatment plants, landfill sites, water-testing laboratories, solid and liquid waste disposals, hospital incinerators and so on — had been for years nonexistent or flawed to the point of dysfunction. Yet no past or present government paid heed to this 'existential' issue, though billions of rupees were spent every year in the name of development, repair and maintenance of the water and sanitation-related facilities.

A case in point is the Karachi Water and Sewage Board. It has about 14,000 employees and an annual budget upwards of Rs6 billion. But none of the city's seven water-filter plants produced water as per WHO standards. Likewise, all three sewage treatment plants with a cumulative capacity of treating 160MGD had been dysfunctional for many years. As a result, the sea receives 450MGD of raw industrial, municipal and hospital effluents, besides the oil slick and tar balls, causing "degradation of water quality, habitat loss, localised eutrophication, and metal accumulation in fish and shrimps". Moreover, one-third of the water (650MGD) is lost to theft, line leakages, adulteration and so on. The quantum of loss can be measured by the fact that only one per cent of water is supplied through water tankers in the entire city.

The commission also found that underground water that is supplied to many cities in the province, including Larkana and Shikarpur, had turned brackish, and hence unfit for human consumption. Lack of sanitation, excess withdrawal of groundwater, low precipitation, encroachments on drainage outlets, and use of pesticides are some causes behind the degradation of underground water. But the provincial government has remained blissfully oblivious to the increasing loss of this important source of water.

Reverse osmosis plants are yet another source of water that is being tapped largely in the Thatta, Badin and Tharparkar districts. Indeed, RO plants present a classic case study in bad governance and corruption. Hundreds of plants were installed without following the rules; in many cases a single contractor installed, operated and maintained them; although the installation, operation and maintenance of these plants were financed by as many as five departments/agencies, involving billions of rupees, yet none of them ever bothered to monitor the quality or quantity of water produced by these plants.

It is proven by the fact that none of the 2,000-odd RO plants had a water-testing lab or water-measuring meter. No wonder, the commission concluded that the entire scheme was “nothing but a farce”, and recommended an investigation to fix the responsibility on, and award punishment to, the officers concerned.

There are about 2,100 rural water supply and drainage schemes which cater to the needs of the rural population. Most of the schemes were found to be dysfunctional mainly due to bad governance and local councils' incapacity to operate them. Therefore, while the government spends billions of rupees annually on these schemes, the people continue to consume contaminated water, endure insanitary conditions, thus increasingly falling prey to various water-borne ailments eg hepatitis, kidney failure, typhoid, skin lesions, diarrhoea, etc.

Sadly, the commission also didn't find the state of public hospitals enviable. Most of the district/tertiary hospitals lacked clean drinking water facilities, many suffered from bad sanitary conditions, and none had incinerators, and related arrangement, to dispose of hospital waste in accordance with Hospital Waste Management Rules, 2014. Deplorably, the dangerous waste was dumped on the open grounds to be lifted along with municipal waste, which polluted not only the hospital environment but also posed risks to the health of local communities.

Another glaring instance of delinquency on the part of public functionaries noted by the commission was the total absence of a solid waste disposal system, notwithstanding the fact that Solid Waste Management Board had been created through an act in 2014. Therefore, there are no designated landfill sites anywhere in the province, including Karachi, and everyday thousands of tons of garbage are thrown into the drain nullahs, canals or the sea, or burnt on the open grounds, aggravating environmental degradation.

However, the most lamentable fact that came to the notice of the commission was the failure of Sepa, the provincial environmental regulator, to discharge its statutory responsibilities. Some of Sepa's multiple failures are evident from the emission of untreated industrial effluents, contamination of irrigation system, degeneration of underground water, and degradation of the coastal belt. No wonder, the commission concluded unhappily that Sepa had yet to establish 'justification for its existence'.

It would be worth discussing in a subsequent article the tasks that the Supreme Court assigned to the water commission headed by retired justice Amir Hani Muslim, to what extent he achieved those tasks in his one-year tenure, and whether the commission should continue.

(By Shahab Usto Dawn, 06, 01/04/2019)

Chicken feed, water samples in city found contaminated with heavy metals

A large number of samples of chicken feed and water collected from poultry markets and shops in the city were found contaminated with various heavy metals, a Karachi University (KU) study shows.

The study — Distribution & occurrence of heavy metals in poultry feed and water in Karachi — was conducted at KU's Institute of Environmental Studies (IES) by Dr Aamir Alamgir, Prof Moazzam Ali Khan and Maiza Javed.

Samples of chicken feed and water given to birds for drinking were collected from various spots including Nazimabad, North Karachi, Nagan Chowrangi, Orangi Town, Gulistan-i-Jauhar, Saudabad, Liaquat Market, Khoso Goth, Malir Halt, Jinnah Square, Quaidabad, Korangi, Dawood Chowrangi, Landhi, Rehri Goth, Bagh-i-Korangi, Saddar, Shadman Town, Shah Faisal Colony and Green Town.

“We collected a total of 68 samples and found none free of contamination from heavy metals,” said Dr Alamgir, an assistant professor at the IES.

The ingredients used for preparing feed were possibly tainted with raw industrial waste

He added that the level of these metals in water and feed samples were compared with the guidelines of the World Health Organisation (WHO).

Sources of contamination

Asked about the sources of contamination, he explained that the presence of metals, especially lead, nickel and chromium, in chicken feed indicated that the ingredients used for preparing feed were possibly tainted with raw industrial waste.

“While there might be multiple sources of contamination, I did not find the findings surprising given the fact that we have been using our sea and even freshwater sources as gutter for all kinds of raw waste.

“I believe that this extremely harmful practice, which has played havoc with marine life, has contaminated the food chain,” he said, adding that small-sized fish and poultry waste were used as a protein source in raising chicken.

The second major contamination source, in his opinion, might be city's water.

"Multiple studies have found city's water unsafe for consumption. One important reason behind it is the mixing of sewerage lines with water lines at many places," he said.

On health hazards posed by food contaminated with heavy metals, he said that studies had linked prolonged exposure and short-term overexposure to heavy metals to various illnesses including damage to lungs, kidneys, central nervous system, respiratory and cardiovascular systems and reproductive system.

Heavy metals in poultry feed

Ninety-one per cent of feed samples had lead values above the WHO 2011 guidelines (0.2mg/kg) whereas they all crossed safe limits for nickel. The maximum level of lead was found in the Quaidabad sample.

Samples collected from Shadman, Shah Faisal Colony and Malir contained lead within the guideline value.

Copper was observed above the guideline values in 67pc samples of poultry feed. Its maximum value was found in the sample collected from Nazimabad.

Eighty-two per cent of samples showed iron above the guideline value. Samples from Malir, Kala Board, Jinnah Square, Nazimabad and Shah Faisal (one sample) were within the safe limit.

Seventy-nine per cent samples had chromium concentration above the guideline limit (0.5mg/kg). Its highest concentration was found in Saddar.

All samples had nickel above the guideline limit.

Arsenic contamination was detected in samples collected from Jauhar Chowrangi, Saudabad, Liaquat Market, Malir RCD and Khoso Goth.

Water samples also tainted

All water samples had iron, lead and nickel above the WHO 2011 guidelines. Their highest concentration was recorded in Korangi, Saddar and Quaidabad, respectively.

Copper, however, was found within safe limits in all water samples. Fifty-five per cent of water samples were above the WHO guideline for chromium (0.05mg/L). The maximum concentration of chromium was found in the Dawood Chowrangi sample.

According to the study, arsenic in water is a major concern in Pakistan because it is also found naturally in water reservoirs and can originate from pollution by industrial activities or specific feed additives.

Thirty-four per cent of all samples had arsenic values above the WHO guideline and the highest arsenic concentration was found in Korangi 2 1/2.

Last year, a study published in the International Journal of Community Health Sciences had found samples of lentils, potatoes and chicken meat brought from the open market in Karachi, both in raw and cooked form, tainted with metals known to cause human poisoning.

The study was conducted by the department of community health sciences at the Aga Khan University in collaboration with the department of environmental and preventive medicine of Jichi Medical University in Japan.

The chicken meat was uniformly contaminated with high arsenic levels irrespective of the utensil material used for cooking.
(By Faiza Ilyas Dawn, 15, 02/04/2019)

Water wars

THE pins have been removed from live grenades held by both India and Pakistan. Only experts know when they will explode. None of us innocents knows where.



The spectre of war has remained a permanent resident in the subcontinent since 1947. It has bunkered itself so deep in our sub-consciousness that now confrontation comes more naturally to us than conciliation, argument before agreement.

On both sides of the border that connects Himalayan heights to Sindh's shores, jingoists demand armed conflict while peaceniks want an 'uninterrupted, uninteruptible' dialogue. Both are unaware that national belligerence and pacifism are in fact conditioned by topography.

Roads can be halted at the border, but who owns flowing water?

The Westphalian concept of nation states is tested whenever territorial boundaries have to contend with nature. Who owns a mountain that straddles an international border? Who owns a river that flows through one or more countries? Who has the right to use that water, and more vexatiously, should one upper riparian country have the power of denial over a lower riparian one?

In 1947, Cyril Radcliffe did not apply his mind to such niggling questions. So when Viceroy Mountbatten suggested he should continue as governor general of both India and Pakistan as a conciliator, Quaid-i-Azam refused. He did not want Mountbatten acting the guilt-ridden surgeon, offering to rectify a botched amputation. Mountbatten did remain in New Delhi as India's G-G until June 1948, but he did little to prevent sores from festering — contentious issues such as Hyderabad, Jammu & Kashmir, Junagadh, and most critically, the ownership and the use of the waters of the Punjab.

Within two years of Independence of each other, the new countries came near to blows over water. Our foreign minister, Chaudhry Zafrulla, warned India that any “diminution in that flow or even a threat of interruption would have the effect of converting millions of acres of fertile lands into arid wastes”. Pakistan, he hinted, would be prepared to go to war to protect its right to water.

A recent scholar Daniel Haines in his book *Indus Divided* (2017) has drawn a distinction between sovereign territory and sovereignty over resources that pass through that territory. Roads and railways can be halted at the border, but who owns flowing water? It recognises no check-post or customs barriers, only dams and canals.

It took India and Pakistan 13 years of raucous recrimination over the sharing of the Indus rivers before they agreed to mediation by the World Bank. An experienced US water manager David E. Lilienthal was put to rectify the damage caused by Radcliffe. The resultant Indus Waters Treaty (IWT) of 1960, in working order even today, never resolved the basic conundrum: “The dispute was not simply an engineering question with a technical answer [.] Access to, and the ability to manipulate river water formed a key plank of state power in the region.”

Sixty years later, the Indian government still clings to its position that, under the IWT, it can allow water to flow into Pakistan but refuse to relinquish its claim to sovereignty over the Indus basin rivers.

In 1960, China was on the far, inaccessible side of the Himalayas. Today, China's declared interest in the modernisation of agriculture in Pakistan has brought China into the Indus basin. Access to river water is a sine qua non for the success of the CPEC's agricultural projects. An arid Pakistan is of no use to China. The malevolent twist of an upstream valve by India could well be viewed by China as an unacceptable provocation.

China's seed-pearl port Gwadar gives it more than a view of the Indian Ocean. It is a lighthouse of China's maritime ambitions. President Xi Jinping has declared China will take an “interest in the sea, understand the sea, and strategically manage the sea, and continually do more to promote China's efforts to become a maritime power”.

To achieve this, the People's Liberation Army Navy (PLAN) intends by 2030 to commission “ninety-nine submarines, four aircraft carriers, 102 destroyers and frigates, twenty-six corvettes, seventy-three amphibious ships and 111 missile craft”. Ten years from now, China with 415 ships will have the world's largest navy. It will do more than patrol the Indian Ocean. It might rename it.

For centuries, India has luxuriated in a landlocked mentality. Only now has it realised that in addition to its 3,323-kilometre north-western border, it has an equally vulnerable 7,516-km. coastline. The Indian Navy's recent Exercise Sea Vigil — the ‘first ever’ on such a large scale — boasts of India's preparedness to defend any assault by sea. India has cause to be vigilant. It has a pendulous peninsula of states south of Mumbai to defend.

Will the next war be over access to water from the Himalayas? And will its outcome be decided by nuclear missile-bearing submarines lurking below the surface of the Sino-Indian Ocean?
(By F.S. Aijazuddin Dawn, 09, 04/04/2019)

Toxic water

ACCORDING to a recent report in this paper, samples of chicken feed and water collected from various poultry farms across Karachi for lab testing at the Karachi University were found to have traces of heavy metals in them. The amount of lead, nickel, copper, iron and chromium found in poultry feed exceeded the WHO guidelines. Meanwhile, the water sample contained significant amounts of iron, lead and nickel, along with arsenic. According to the researchers, the source of the contamination was linked to the untreated industrial waste being dumped into the rivers, lakes and sea, and the mixing of sewerage lines with water lines. This revelation should not come as a surprise to even those who give the headlines only a cursory glance. Words upon words — and warnings — have been written in these pages about the damage caused to the environment and public health due to untreated industrial waste, sewage and plastics directly entering water bodies. In case it bears any repeating, our water is toxic. And not only does this impact marine life, but the poison finds its way into the bodies of land mammals and birds. Exposure to metals, for instance, leads to a range of health problems that include damage to the lungs and kidneys, as well as the central nervous, respiratory, cardiovascular and reproductive systems.

Rarely is food and water tested in labs, and food authorities struggle to find the required human resources and capital to tackle the enormous challenges before them. But the problem of contaminated food and water is too large for a single authority to tackle. In fact, it is the failure of the state to effectively govern and one of the discontents of unchecked capitalism devoid of any social consciousness or a sense of responsibility towards the public's welfare that must primarily be blamed. The natural law is: what goes around, comes around.

(By Editorial Dawn, 08, 04/04/2019)

Expert stresses desilting of dams to meet water needs

“There has not been much thought given to the silting issue when speaking of dams here. The capacity in Mangla and Tarbela dams has decreased in the last 40 years due to silting. So are we to build a new dam every 40 years due to this?” said architect and town planner Arif Hasan during his inaugural speech at the Water Conference titled ‘Political Economy and Issues of Water Management’ organised by the Irtiqa Institute of Social Sciences at the Dr Abdul Qadeer Khan Auditorium of the Federal Urdu University of Arts, Science and Technology here on Saturday.

He also said that there was also the issue of the Indus delta, which is also going into the background these days. “Some engineers believe that the water which flows into the sea is wasted. And no one is challenging this notion anymore. A former chief justice also thought so and said that he won’t let a drop of water be wasted this way. He even went further by saying that those who were against the building of new dams were enemies of the state,” he said.

Coming to a third issue regarding water here, he said that around 92 to 95 per cent of water in Pakistan was being used by the agriculture sector and the population of this country of about 200 million was fast growing. “Then what will we do when the population needs will increase and they will need more water? Where will they get water from? Therefore, water conservation is also needed,” he said.

‘No one is challenging the notion that the water flowing into the sea is wasted’

He also said that as a fourth issue, the underground water table was going down for which there was a huge need for proper water management, coming to things such as regulating of water pumping, storing rainwater, water rationing in cities with bulk metering, etc, which needed maintenance budgets and infrastructure investment.

Executive director of Roots for Equity Dr Azra Talat Sayeed spoke about ‘Understanding water dynamics’. Sharing figures, she said that the total water of the world added up to around 1,359 million cubic kilometres comprising mostly of ocean and inland seas. “Around 97.2pc of the water is ocean and inland seawater while the fresh water is 2.8pc. And three-fourths of the fresh water is in the glaciers,” she said. “But this ratio has been disrupted and our water reservoirs are at risk. Therefore that talk of dams.”

Environmentalist and researcher Nasir A. Panhwar, speaking about ‘Sea intrusion and the delta’ said that all over the world, rivers naturally flowed into the sea. But out here it was the sea flowing into the Indus delta. “The Indus delta is a unique coastal system where the sea and river meet, where the soil is very fertile due to the accumulation of silt from the river for thousands of years. But after the diversion of the upstream water the amount of silt has become less while bringing up various threats to the delta,” he pointed out while explaining about the 17 major creeks starting from the Gizri Creek to Sir Creek in the delta.

“Due to the diversion there is less freshwater flow in the delta now and an intrusion of the sea, a man-made disaster,” he said. “And because of the sea intrusion, the land is losing its fertility.”

Earlier, Dr Huma Ghaffar, Irtiqa’s president, said that water was essential, whether for livelihoods, health, food security or general economic development. “In Pakistan, population growth, elite capture of public benefits, rapid urbanisation and shifts in production and consumption patterns have placed unprecedented stress on water resources,” she said. “Coupled with institutional, operational, and governance failures, increasing pressure over water use and misuse is fostering domestic discord.”

Economist Dr Kaiser Bengali, Abrar Kazi, Mansoor Raza, Idris Rajput, Irshad Bohio, Hassan Abbas, Rubina Abro and Kaleem Durrani also spoke.

(By Shazia Hasan Dawn, 15, 28/04/2019)

Russian envoy offers to help resolve Karachi's water woes

The Consul-General of Russian Federation in Karachi, Aleksandr G Khozin, said that maintaining international peace and security is one of the priorities of Russian foreign policy.

Russia’s stance today is based on the recognition of its responsibility for universal security and global stability, along with promoting national interests.

Being a nuclear power and a permanent member of the United Nations’ Security Council, Russia has its own duties, said Khozin while speaking at a dinner reception hosted by the Consulate at a local hotel to celebrate the Day of Russia.

The reception was attended by diplomats, businessmen, industrialists, high government officials, and elites of the city.

Karachi’s water woes

Khozin said that throughout history, Russia had gathered a lot of experience, particularly when it came to those lessons of the 20th century that emphasised on a balanced policy in international affairs.

“We are trying to work with all global partners. We introduce our proposals on how to enhance predictability and trust in the field of international security,” he said.

The Russian envoy added that the increasing interaction between Russia and Pakistan on regional and international issues as well as in bilateral dealings enjoyed an independent value. He said his country welcomed Pakistan’s joining the Shanghai

Corporation Organisation (SCO) in 2017 as a full-fledged member. And, that Pakistan played a significant role in the SCO Regional Anti-Terrorist Structure, particularly in moving forward the anti-narcotics cooperation. The exchange of teachers and students of the organisation in anti-narcotics field would be an important move.

In 2018, many contacts were made between the Russian and Pakistani governments at different levels in connection with celebrating 70 years of diplomatic relations between both the countries. Both the governments expressed their satisfaction on level of relations based on the principles of equality, mutual respect and consideration of each other's interests as well as the constructive nature of their cooperation in global affairs. The two sides re-affirmed to consistently furthering bilateral political dialogue and expanding practical cooperation in diverse areas including counter-terrorism, trade, economy and other areas of interest, he said, according to a press release.

The Russian Consul-General said trade and economic partnership were truly important aspects of Russia's interaction with Pakistan. In 2018, bilateral trade was around \$732 million; which was 191m higher than that of 2017. However, he said, it was much lower than the real potential of the economic cooperation.

He referred to the visit of the trade delegation from St Petersburg, Russia, led by its Vice Governor Sergey Movchan and the signing of the road-map with Sindh government in October 2017, which aimed at the realisation of joint projects in the fields of industry, trade, education, science and culture till 2021.

Khozin mentioned that Pakistani partners were mostly interested in creating light industry cluster on the territory of St Petersburg like the creation of Pakistani Trade House. There was also prospect of cooperation in solving water supply, sewage and water purification problems in Karachi.

He urged the Pakistani business community, especially in Karachi, to actively be involved in putting the plans into practice. "Our joint efforts are all for the good of mutually beneficial Russia-Pakistan relations," he asserted.

Sindh Senior Minister for Work, Services and Irrigation, Syed Nasir Hussain Shah said that Pakistan welcomed Russia's growing global engagement and would remain keen to continue consultations and coordination with Russia on international and regional issues.

Pakistan and Russia have been long-standing friends with a special and privileged strategic partnership. "We also seek strong cooperation with Russia for broad-based and mutually beneficial economic growth and development in the region," said Shah. (By PPI The Express Tribune, 05, 29/04/2019)

Mohmand Dam

It is never too late. After much delay, the causes of which are well known, Prime Minister Imran Khan performed the groundbreaking ceremony of the Mohmand Dam in Mohmand district of Khyber-Pakhtunkhwa on May 2. Former Chief Justice Mian Saqib Nisar, who was chiefly instrumental in raising public awareness about the need for new dams, was also present on the occasion. The dam is being built on the Swat River and will be completed by 2024 at a cost of more than Rs184 billion with a storage capacity of over two million acre-feet. Upon completion the water body is expected to generate 800 megawatts of electricity. It will also bring 17,000 acres of barren land under cultivation. The dam will primarily help overcome water shortage and also protect Peshawar, Charsadda and Nowshera districts from floods.

Since the dam is expected to be completed by 2024, it should fill us with joy as experts have been warning that the country might go dry by the year 2025. PM Imran Khan and his government deserve all praise for getting one of the much-needed projects going. Given the benefits that the dam will bring in, one wonders why some quarters were or are opposing the construction of new dams. Our country is water deficient. This no one can deny. This is also well known that much of the rain that the country receives flows into the sea in the absence of a sufficient storage capacity. So only those with perverted thinking could or can oppose building of dams. One significant point is that once a thing gets going other things of the same kind follow one after the other in quick succession. Now we should be optimistic about overcoming water shortage. In our region, there are cities which face the prospect of evacuation due to growing water shortage. (By Editorial The Express Tribune, 16, 03/05/2019)

Badin's farmers approach SHC over acute water shortage

After protesting for several months to bring their plight, caused by acute water shortage, to the notice of the provincial government, the farmers of Badin have finally knocked the door of the Sindh High Court (SHC). The Hyderabad Circuit Bench on the farmers' petition, alleging a design fault in the Rs300 billion rehabilitation project of Phuleli canal which has led to the shortage, has issued notices to the respondents for June 20.

"Declare that the raising of crest levels of cross and head regulators of Phuleli canal under newly built project is illegal and in violation of the fundamental rights of the petitioners and lower riparians [of the canal]," Noor Ahmed Talpur, Azizullah Dero and five other farmers pray in the petition. They contended that the raised crest level, which refers to the highest level that the canal can reach at a certain time, is the sole cause of shortage across Badin district.

"[The crest level] has been raised with mala fide intention to divert the due share of the petitioners and other farmers towards the lands of influential upper riparian farmers." The petitioners have cited the officials of Sindh Irrigation and Drainage Authority

(SIDA), Sindh Water Sector Improvement Project (WSIP), Sindh chief secretary and chairperson of a recently formed inquiry committee, which probed the canal's rehab project, as the respondents.

The petitioners also pleaded that the court declare the inquiry committee's report unjustifiable and unreasonable because it did not offer solution to redress the problem.

Under pressure of the agrarians' protest, SIDA's Chairperson Abdul Basit Soomro had notified the 19-member committee, headed by former irrigation secretary Idress Rajput, on March 22. The committee was tasked to 'inspect' whether the canal's design fault, which underwent rehabilitation in 2017-18 at the cost of Rs300 million, was creating the scarcity.

"The chairman and members shall inspect the newly built cross and head regulators over Phuleli canal executed under World Bank funded Water Sector Improvement Project (WSIP)," read the terms of reference of the notification. "... evaluate the performance of structures in the light of raised sill levels that whether these sill levels are creating any acute shortage." The storage above sill level is called live storage and below the level is called dead storage.

Save Badin Action Committee's Mir Ghulam Rasool Talpur claims that the water of Kotri barrage, from where the Phuleli canal springs, is being diverted to the lands of feudal lords. The opponents of Pakistan Peoples Party (PPP) accuse the party's provincial government for taking retributive action against Badin's people, who voted the PPP's dissident, Dr Zulfiqar Mirza, in the local government and general elections, by depriving them of water. On Sunday the Sindhi nationalist parties took out a protest rally in Badin to condemn the official apathy to the plight of the coastal district's residents.
(By Our Correspondent The Express Tribune, 04, 21/05/2019)

No water, but filth and dirt in Karachi

A large fraction of Karachi's residents remained deprived of water amid scorching heat and high temperatures, as a water crisis persisted in the city on Eid and following days.

Rise in temperature during Eid increased the demand for water across the city by 1.3 billion gallons. As a result, the city faced a shortage of 750 million gallons of water, with its water supply limited to 550 million gallons.

Additionally, the already dismal state of water supply in the city was worsened due to the unfair distribution of water, by Bulk Supply Department. According to sources, officers from the Bulk Supply Department diverted the supply of water to industrial and commercial areas, neglecting the need of residential areas.

As a result, Korangi, Landhi, Buffer Zone, Federal B Area, North Karachi, Surjani Town, Baldia Town, Orangi Town, Lyari, Mahmoodabad and several other localities in Karachi faced a shortfall in the supply of water.

Earlier, it had been announced by the Karachi Water and Sewerage Board (KWSB) authorities that six hydrants of the water board would be kept operational during Eid days so as to ensure ample water supply to the citizens of Karachi. Sindh Local Government Minister Saeed Ghani had also issued directives to keep the hydrants operational on Eid, particularly to supply water to areas facing shortage. He had also directed to supply water to the affected areas through tankers to overcome the shortfall.

However, despite Ghani's directives, all water board's hydrants were closed on the eve of Eid, just as the first day of Eid began. Additionally, tanker drivers also left the city to celebrate Eid in their villages. With only 25 per cent to 30 per cent hydrants supplying water on Eid and Sindh Government and water board officials failing to address the growing water crisis in the absence of a backup plan, the metropolis largely remained deprived of water.

According to sources, taking advantage of the situation, private tanker owners increased their rates and citizens in various localities were forced to buy water at much higher prices.

Uncollected garbage

Foul smell and heaps of garbage also plagued the environment of the city on Eid, with no concrete measures taken by the authorities to remove solid waste from different areas of Karachi.

The dismal state of the city's environment witnessed during Eid contradicted claims made earlier by Ghani and Solid Waste Management Board (SSWMB) Managing Director AD Sanjrani regarding the preparation of a plan for the removal of garbage.

Almost 12,000 tonnes of garbage is produced in Karachi every day, out of which the authorities only manage to remove 2,000 to 3,000 tonnes. The remaining is left on the city's roads, streets and neighbourhoods, lying around untended, which causes difficulties for the citizens.

In Karachi, the responsibility for waste collection and removal lies with SSWMB and Karachi Metropolitan Corporation (KMC). It is SSWMB's responsibility to remove waste from city's four out of six districts, making it liable for waste collection from a major part of the city. However, most areas which come under SSWMB, including Gulshan-e-Iqbal, Gulistan-e-Jauhar, Lines Area, Old City Area, SITE, Baldia Town, North Karachi, Surjani Town, PIB Colony, Jamshed Road Lasbela and Nishtar Road, remained deprived of the department's attention during Eid and residents in these areas were forced to bear the foul smell emitting from heaps of garbage. Similar scenario was witnessed in areas that come under the jurisdiction of KMC.

Admitting that SSWMB was unable to make necessary arrangements for waste removal during Eid, Sanjrani attributed the department's inefficiency to the absence of staff during Eid days. He also said that the board would take necessary action against those found to be guilty of disregarding or neglecting their duties and directed the officials to take measures for improving the situation around the city.

However, according to Gulshan-e-Iqbal UC 21 Chairman Adnan Ahmed, SSWMB was intimated of the growing heaps of garbage in the area a week before Eid and SSWMB authorities had assured that adequate measures would be taken to resolve the issue.

He said that despite the assurance, nothing was done to solve the problem, adding that the department seemed uninterested in resolving the issue which was persisting due to the provincial government's corruption. Ahmed said that SSWMB was paying \$29 for the removal of a tonne of garbage to Chinese companies, and the money could have been utilised to remove garbage from the entire city.

The SSWMB had given the contract for waste collection and removal from Karachi to two Chinese companies, paying them exorbitantly. However, according to reports, the companies' management of the waste collection and removal has been poor so far, which cite the lack of funds as a reason for their unsatisfactory performance.

Citing the growing complains of poor waste management in the city on Eid, SSWMB Executive Director Operations Nisar Ahmed Soomro, along with the representatives of Chinese companies visited different areas of Karachi to review cleaning activities.

They visited University road, Shahr-e-Quaideen, Shaheed-e-Millat road, Tipu Sultan road, Bahadurabad, Tariq road, Jail Chowrangi, Rashid Minhas road and other areas. During the visits, Soomro said that the garbage should be lifted immediately otherwise strict action will be taken against the companies, in accordance with the agreement.

It is reported that the provincial government has paid its dues to SSWMB, which has affected the department's performance. (By Naeem Khanzada The Express Tribune, 04, 08/06/2019)

CM for strategy to get rid of contaminated groundwater 'almost across Sindh'

Sindh Chief Minister Syed Murad Ali Shah on Saturday said that "almost all over Sindh" the groundwater had turned contaminated, thus, "I am in constant touch with experts and donor agencies to stem the rot".

Mr Shah said his government was improving water supply and drainage schemes to the rural areas of Sindh and simultaneously another plan was in the works to refresh and revive groundwater quality.

"The biggest reservoir of contaminated water has accumulated in the Manchhar Lake and we are working on a plan with the World Bank and European donors and expert agencies to wash and refresh the Manchhar Lake to revive its past glory," he said while presiding over several meetings to finalise the government's uplift portfolio for the next financial year.

'We are working on a plan with the World Bank and European donors to wash and refresh Manchhar Lake'

The public health engineering department meeting was attended by Minister for Local Government Saeed Ghani, P&D chairperson Naheed Shah, PHE secretary Roshan Shaikh, local government secretary Khalid Hyder Shah, special secretary for finance Asif Jahangir, member (services) P&D Fatah Tunio, chief engineer of the PHE department and others. CM Shah said groundwater across Sindh, except for a few districts, used to be sweet and fresh but with the passage of time its quality had deteriorated, as a result the government had to switch over to reverse osmosis plants to meet the need of drinking water in rural areas.

"The actual solution of the problem lies in adopting a scientific approach for improving the quality of groundwater for which I am working with the World Bank and other agencies to launch a comprehensive plan to refresh and revive the aquifers," he said.

Mr Shah said the PHE department was important in terms of its services of efficient water supply and drainage schemes in the rural areas.

"I want the department [to] complete its ongoing schemes to benefit people and plan for more schemes in other rural regions," he said.

Schemes to be completed

Roshan Shaikh said 169 new schemes, with 96 ongoing schemes, would be completed with an estimated cost of Rs26.7 billion.

They included 39 ongoing water supply and 57 ongoing drainage schemes during the current calendar year. The new 28 water supply and 15 drainage schemes meant to be completed next fiscal were expected to get completed this financial year.

Minister Saeed Ghani said that during the current fiscal his department would complete 100 schemes worth Rs13.5bn.

Roads, flyovers for Karachi

The chief minister said he would sanction some important schemes for Karachi next fiscal which included roads, flyovers and beautification of important places. He added that the rural areas of Karachi would also be given importance in the next Annual Development Plan.

At a meeting on the education department, the chief minister was told by Education Minister Sardar Shah that there were 9,600 shelterless schools in Sindh; of them only 71 units had around 100 enrolments.

Taking a policy decision, the CM said shelterless schools which had enrolment of about 40 should be shifted to a nearby government school.

“Schools having fewer than 40 students cannot be termed schools; those schools may be scrapped from the list of shelterless schools.”

He also asked the education ministry to focus on teachers’ training programmes.

Mr Shah also asked the education hierarchy to reconstruct 160 dangerous school buildings. “Some school buildings have become too old and fragile, and need to be reconstructed.”

A meeting of the works and services department was told that there were 349 schemes, including one new one worth Rs33.5bn against which Rs26.5bn had been released.

Works and Services Minister Nasir Shah said that of the 348 schemes, 326 were highways, 14 at Thar Coal — the road schemes transferred Thar Coal to the works department — and three transferred by the special initiatives department. He said that of the 349 schemes, 108 would be completed by the end of the current financial year.

The chief minister was told at another meeting on the irrigation department that 56 schemes of Rs18.1bn would be completed by the end of current fiscal.

Nasir Shah said some schemes soon to be completed included construction of a stone pitching/retaining wall of Rohri Canal near Ranipur, construction of a bridge over the LBOD main Sim Nullah and construction of a drain from Ali Ahmad Mahri to T.M. Khan.

CM Shah said he would pay surprise visits to some of those schemes after approval of the budget.
(By The Newspaper’s Staff Reporter Dawn, 15, 09/06/2019)

Water as a symbol

WATER is critical for life on earth. This is a well-known fact. However what is less known is that this scarce resource is being carelessly used globally. Recognising these issues, the UN dedicates two international days to it: the International Water Day (on March 22) to raise awareness about the issues of water shortage, and Global Handwashing Day on Oct 15 to sensitise people about the significance of washing hands with soap.



These problems are genuine and must be addressed at all levels; individual, institutional, national and global.

With the significance of the above issues, testified by the shortage of it in Pakistan, water is, however, also important for a deeper spiritual reason and that has to do with its use in religion as a symbol of purity, and cleansing of the human soul. Almost all religions use water as a symbol but we focus here on Islam due to space constraints.

The Quran describes water as an expression of Allah’s mercy and power. It uses water both in a physical and in a symbolic sense.

In the first, the Quran alludes to His mercy and majesty and how He creates and sustains things from water. It says, “He made all living things from water. ...” (24:45). Verses of the Holy Book also refer to water in a symbolic sense, such as, “...We sent down ‘Pure Water’ (ma’an tahura) from the sky” so that He may give life to a ‘dead’ land, and ‘slake the thirst’ of things Allah created.

Still more fascinating is another verse that says “...His [Allah’s] throne was upon the water. ...” (11:7). Such verses very likely are symbolic, as the literal meaning would be difficult to understand; they lend themselves to multiple interpretations, the discussion of which is beyond the scope of this article. Prophetic traditions advise us to use water judiciously, and Muslim ethics have elaborate instructions about its sharing even among enemies.

Prophetic traditions advise us to use water judiciously.

In Muslim tradition, water is used in so many ways from birth to death and in between. Selecting a few, for example, a newborn child is bathed, and before burial, ghusl is given to the dead. Muslims must be ritually clean for prayers. As well, there are many other forms of ritually using water before or after a particular occasion, such as Eid prayers.

The most sacred water in Muslim tradition is seen as that of Aab-i-Zamzam, found near the Ka’aba from which pilgrims bring a quantity back as tabarruk (blessings) for their kith and kin; it is received with utmost respect. In his illuminating talk on water, Dr Ali Asani, a Harvard University professor of Indo-Muslim and Islamic religion and cultures, highlights how the Quran, Hadith collections, Muslim tradition, and subsequent scientific literature show that water is a key substance and symbol in Muslim piety.

In Muslim histories, other than ritual or ceremonial use, water has been utilised in art and architecture of the built environment. Architects have played with water in notable public buildings such as mosques, gardens, and hospitals inspired by Quranic descriptions of paradise wherein are mentioned, among other things, water canals (anhar) flowing underneath. Often, water has been taken as a symbol for rahma, barakah, and ilm.

Yet another dimension of water, ie the opposite side of its blessings, is its destructive power, such as excessive water/ rain converting into floods, tsunamis, poisonous rain and polluted water. The flood of the Prophet Noah is proverbial; Pharaoh and his armies were drowned in the Nile. Many excessive rains cause floods that destroy a lot of property and human life.

The theological argument traditionally advanced says that these (floods) are caused by the sins of people. If that is the case, how have some nations overcome many of these? Many nations have contained the damage through, for example, meteorological science enabling weather forecasts, and by following up on strategic plans to contain the damage. Though these issues are beyond the scope of this article, it is, nonetheless worth reflecting upon them with the intention of finding ways to convert tragedies into opportunities (such as storing excess rainwater through reservoirs).

In sum, the significance of water is a sine qua non for human life, a substance for the sustenance of life, and of ritual purity. All of us, collectively and individually, should be alive to its value and use it judiciously. In addition, when we use it for ritual purposes we need to reflect on the multiple symbolic meanings in each act of the ritual to enrich our spiritual lives.

Finally, we also need to appreciate our traditions of art and architecture of employing water in iconic buildings to sustain heritage meaningfully.

(By Jan-e-Alam Khaki Dawn, 09, 14/06/2019)

Dam fund returns

DROP by drop, some semblance of sense is beginning to find its way to the whole 'dam fund' conversation. When the Supreme Court looked at the Rs10.6bn that have been deposited in the fund thus far and learned that the entire amount seems to be sitting in current accounts that yield no return, and that, with the rise of inflation, are losing close to Rs10m per day, it was right to be alarmed. Fact is, this is one of those things that is always taken into account whenever large quantities of money are being handled by any institution or entity. In most cases, however, where even a bit of competence is available, such things are thought of and sorted out before, not after, the large quantity of money materialises. Idle money evaporates. This is common knowledge, and the fact that these donations were allowed to sit in unproductive accounts for such a long period of time means that the trust of the donors that their money would be properly utilised had been dealt a blow at the very outset of the whole affair.

Now that the court has decided to place the funds in 10-year paper — from the sounds of it since the National Bank of Pakistan is offering a return of 12.6pc on them — further questions of an equally critical nature arise. What tenor is the return for? Meaning, for what time period will the funds be put away to ensure this annual rate of return? Second, what happens to the interest earned, considering the amount could be larger than Rs1bn a year? Does it get compounded or will it be drawn and used elsewhere? If it is compounded, that means the funds are locked away for an extended period of time, and somebody might want to inform Wapda of this because some of its people have come on the airwaves announcing that they have plans for utilising these funds. If the interest is to be withdrawn, where will it be used?

Instead of venturing further down this road, and taking on the task of fund managers, the Supreme Court would be well advised to find an alternate use for the money — one that adheres to the spirit in which it has been donated. When the former chief justice launched the whole enterprise, he clearly did not know what he was doing. Everything about the fund was made up along the way, with no foresight about how the money would be placed, how the amount would be utilised — or whether or not it is the job of the court to be running such an effort in the first place. Now that this unfinished business has been left for posterity to tackle, the best thing would be to use the funds to finance small dam construction in Balochistan and call it a day.

(By Editorial Dawn, 06, 17/06/2019)

Karachi's water supply affected as another pipeline bursts

Electricity breakdowns at the central Dhabeji pumping station have become a common occurrence. A power breakdown on Monday morning caused a 72-inch Qatar pipeline to burst. This is the second pipeline which has burst in the past four days. On Friday, another 72-inch pipeline had burst, severely affecting the water supply to the city. As 80% of Karachi's water supply comes from the Dhabeji station, the breakdowns have worsened the water crisis in the city. Citizens' patience is now waning and protests broke out in the city against the water crisis.

Although both pipelines have been repaired on the directives of the Karachi Water and Sewerage Board managing director, the city's water supply was short 10m gallons of water on Monday while Friday's breakdown had caused a shortage of 340m gallons of water as compared to the routine water supply to the city.

As Karachi already faces a shortage of 600m gallons of water, the recent power breakdowns and subsequent damage of pipelines has aggravated the problem. KWSB MD said that frequent electricity breakdowns have worsened water scarcity in the city.

All efforts are being made to supply water despite limited resources, he said. According to him, it will take another two to three days for the city's water supply to resume as normal.

He advised citizens to use water with caution.

Areas where water supply has not resumed as normal since Friday include the Old City Area, Lyari, Kemari, Korangi, Gulshan Iqbal, Gulistan-e-Jauhar, Malir, Landhi, Model Colony, Manzoor Colony, Mehmoodabad, Ahsanabad, Gulshan-e-Maymar, and Orangi Town, among others.

Protests have broken out in the city. Citizens claim water supply is suspended for many days. Water has become a scarce commodity, especially in hot weather, they lament.

(By Our Correspondent The Express Tribune, 04, 18/06/2019)

Karachi receives less than half of its water demand, says minister

The water shortage crisis in the city, which is already receiving less than half of its required water supply, is deepening because of suspension of supply from main pumping stations twice in recent days, while on the other hand, authorities have claimed that the supply would be normalised, a top official said on Wednesday.

He also expressed the hope that the new pumping station installed at the Dhabeji pumping station would start operation within the next few days which would further reduce the pressure.

However, he added that the recent damage to key pipelines in the city due to fast eroding infrastructure remained a source of concern which had caused wastage of hundreds of gallons of water recently.

"Unfortunately 72-inch pipeline at the central Dhabeji pumping station burst due to power breakdown twice in a week," said Sindh Local Bodies Minister Saeed Ghani.

"That caused suspension in water supply for a few days. It took time to get it normalised, but then within the city some key pipelines were damaged which affected the supply to a couple of districts. The supply has turned normal and situation would improve in a day or two," he added.

Due to recent suspension of supply from Dhabeji, old city areas of Lyari and Keamari, Korangi, Gulshan-i-Iqbal, Gulistan-i-Jauhar, Malir, Landhi, Model Colony, Manzoor Colony, Mehmoodabad, Ahsanabad, Gulshan-i-Maymar and Orangi Town were among the areas which remained badly affected.

The minister said the city was facing acute water shortages as it was receiving close to 500MGD against demand of 1,100MGD.

The Sindh government had allocated enough funds for development of water resources and supply as well as improved the sewerage system, which would improve the situation within the next two years, he claimed.

"In this budget, allocation for the Greater Karachi Sewerage Plan is Rs5bn," he said. "There is a mega project called S-III with a budget of Rs36.11bn and it is under implementation since last over a decade. Similarly, the Sindh government has allocated Rs800m for the ongoing Greater Karachi Water Supply project, also known as K-IV. We are also working on multiple proposals to finalise them for recycling of water and contain its wastage."

(By The Newspaper's Staff Reporter Dawn, 16. 20/06/2019)

Sindh govt ready to sit with Centre & KMC to resolve Karachi's water issue: adviser

Adviser to Sindh Chief Minister for Information, Law and Anti-corruption Barrister Murtaza Wahab has said that the water problem of Karachi is worsening and asked the federal government and the Karachi Metropolitan Corporation to refrain from playing politics on the issue of water. He suggested that the Sindh government, federal government and KMC sit together to work out a plan to resolve Karachi's water issue.

Speaking at a press conference at Sindh Assembly's media corner on Thursday, Mr Wahab said the Sindh government was working on a desalination plant and added that they were ready to sit with the federal government and the KMC to utilise the resource of seawater.

Criticising Karachi mayor's performance, the adviser said Wasim Akhtar had done nothing for the people of Karachi and was only shedding "crocodile tears" for power. "If the mayor has power to purchase vehicles, build houses and undertake foreign tours, why has he failed to provide relief to Karachiites?" the adviser added. He said that former deputy mayor Arshad Vohra had also spoken against the KMC.

'Thirteen of the 19 development schemes mentioned in the federal budget are continuing from the PML-N tenure'

He said the MQM had done nothing for the development of Karachi except china-cutting, and such illegal actions became their identification.

ECP notice to PM

The adviser said that they had raised objection to the prime minister, Sindh governor and members of federal cabinet's visit to Ghotki as the Election Commission of Pakistan had issued a by-election schedule on the seat vacated due to the death of Ali

Mohammad Mahar and had demanded that the ECP take notice of it as it was a violation of the code of conduct of the election commission.

He welcomed the ECP action that issued notices to the prime minister and the Sindh governor and hoped that the ECP's action would not be limited only to show-cause notices and proper action would be taken against the violators of the ECP codes.

Karachi package

The adviser said that the Sindh governor in a live interview to a private television had given a statement contrary to the factual position and added that the people of Karachi were only given lollipops. It is incorrect that Rs162 billion had been allocated for Karachi in the federal budget, the adviser remarked.

He said 19 development schemes were reflected in the federal budget, of which 13 were continuing from the tenure of the Pakistan Muslim League-Nawaz. He said the federal government had spelled out no scheme for Karachi from the PSDP. He said that "real face" of the PTI had become clear to the people of Karachi.

"The total estimate of the 19 schemes is Rs12.5 billion. Nothing has been allocated for the three hospitals of Karachi recently taken over by the federal government," the adviser said. He said the PTI's federal government had promised that they would run the Green Line bus service but the project was still waiting to be completed.

He said the PTI had only spread chaos in the country in the last 10 months. It was unprecedented in the history of the country that the government itself was protesting in parliament.

Answering a question, the adviser said that it was the responsibility of the speaker to issue production orders for any member of the parliament.

(By The Newspaper's Staff Reporter Dawn, 15, 21/06/2019)

Lyari residents protest water supply suspension

The residents of Lyari once again took to the streets to protest the suspension of water supply in the area on Monday. The protesters blocked Mauripur Road for a couple of hours causing a traffic jam on Mauripur Road, West Wharf, Jinnah Bridge and Native Jetty Bridge.

Scores of residents from Agra Taj Colony, Machar Colony, Memon Society, Hangurabad and the adjoining areas resorted to protest early morning on Monday against the prolonged water suspension. Women and children also protested and carried placards.

The agitated protesters, erecting barriers blocked Mauripur Road for traffic and shouted slogans against the Karachi Water and Sewerage Board (KWSB), halting the movement of vehicles carrying goods to and from Karachi Port. The traffic jam lasted for hours.

The protesters complained that for the past six months, water supply in their area had been suspended and despite registering complaints with the water board repeatedly, no steps have been taken yet.

They said that they were being punished for voting for Pakistan Tehreek-e-Insaf (PTI) as the ruling party at the Centre. They added that they would continue to protest until the KWSB authorities assured them that water supply would be restored to their area.

An elderly man and woman fainted during the protest and were promptly taken to a hospital.

The hours-long protest and the resultant traffic jam brought the attention of the police to the suffering of Lyari's residents. Assistant Commissioner Anwar Ameen along with a heavy contingent of police reached the site for negotiations with the protesters. He assured them that the issue of water supply and several others would be resolved. The protesters peacefully dispersed after negotiations and Mauripur Road opened for traffic.

(By Our Correspondent The Express Tribune, 05, 25/06/2019)

Sindh ACE gears into action against 'tanker mafia'

The Sindh Anti-Corruption Establishment launched a drive against elements involved in the organised theft of water through the tanker mafia at Dhabeji and Haleji Conduit on Friday.

According to ACE officials, as many as 21 illegal water connections diverted to personal farm houses, dairy farms, and commercial cultivation fields have been detected and sealed. They had been operating illegally for the past several years.

An ACE official revealed that in the same area, through yet another modus operandi, water was being stolen from the main installation of Karachi Water and Sewerage Board (KWSB) by tanker owners for sale in the city. As many as 13 uncovered and punctured sites, en route Haleji Conduit, were detected and sealed. One water tanker being filled from one of the openings was seized on site and the contractor, along with the driver, has been booked.

The official said that a number of such tankers filled water from KWSB installations and ply on the road from Ghara to Karachi. These tankers face no scrutiny because the contractors pay a 'monthly' sum to the police and the KWSB officials.

Separately, the ACE has found that around 46 contractors, possessing a fleet of tankers, keep stealing potable water from the main pipeline of KWSB, mix it with subsoil water and sell it in the city at highly profitable rates.

The ACE said that the subsoil water was also being taken by the contractors without any NOC and regulation. It was just a front to cover water theft from the KWSB's main trunk.

Officials of the Deputy Commissioner, police and the KWSB were found involved in the water theft. As part of its crackdown, six perpetrators including 2 XENs of the KWSB, have been taken into custody for interrogation. All illegal hydrants have also been sealed.

(By Press Release The Express Tribune, 04, 29/06/2019)

Project to tackle Karachi's water crisis likely to face further delays

Karachi has been facing an acute shortage of water lately and soaring temperatures have aggravated the situation. Akin to several other projects that the provincial government introduced to address the water crisis, a mega project — with a capacity of supplying 65 million gallons of water per day (MGD) — is also likely to face unnecessary delays due to a lack of funds.

To complete the project, the Sindh government needs Rs11 billion, however, only Rs500 million have been earmarked for it in the budget for the next fiscal year.

Meanwhile, out of the Rs600 million reserved for the project in the budget of the outgoing fiscal year, only Rs150 million had been released. It will come as a shock to Karachiites that the project was approved in 1985 as part of the city's present water quota of 650 MGDs.

Demand and supply

The project could have been started 13 years ago through the construction of canals and conduits in the Keenjhar Lake to link them to the city — a move that could have addressed the shortage that the city is currently facing. However, the lukewarm attitude of the authorities, coupled with other priorities, led to unnecessary delays.

For the past one-and-a-half years, the Sindh government has neither approved Rs11 billion for the PC-1 of the project nor did it allocate the necessary funding to the original PC-1 that amounted to Rs5.9 billion.

To top it off, the negligent and laid-back attitude of the Karachi Water and Sewerage Board (KWSB) officials halted the development of the project for around 10 months in 2018. The development work commenced in 2017 with an 18-month deadline, but only about 15% of the work could be completed in the past two years.

According to KWSB officials, there is a considerable difference between the demand and supply of water in Karachi. At present, a total of 600 million gallons (MGD) of water is supplied to the city under the bulk water distribution system, while hindrances such as water theft, seepage in water lines, evaporation, and lack of capacity in water pumps only allow a supply of 420 MGDs to reach the city.

A project aimed at increasing the capacity of pumps at the Dhabeji Pumping Station was proposed and initiated but it is also facing undue delays. Based on its population, Karachi needs about 1,100 MGDs of water on a daily basis but it currently faces a shortfall of 780 MGD.

In view of the current shortfall, 65 MGD is quite an insignificant volume to meet the shortage but if the project had been completed on time, the ongoing water crisis would not have been as acute as it is now. Moreover, areas where water is not supplied for months could get some water on a rotational basis every 15 days.

For the past 13 years, the citizens of Karachi have been deprived of the city's approved water quota. In 1985, during the government of former president Gen Zia-ul-Haq, 650 MGD of water was approved for Karachi from the Indus River, out of which only 585 MGD is being currently supplied.

Reasons for delay

At present, Karachi gets its water from the Keenjhar Lake through canals and conduits built under the K-III scheme. Under the scheme, the last water project was completed in 2006 with a capacity of 100 MGD. Per the plan, a canal with 65 MGD capacity had to be built after the completion of the project to account for Karachi's approved water quota but the government of Sindh, together with the water board, focused its energies on getting additional water quota from the Indus River for the completion of the K-IV project.

Talking to The Express Tribune, a KWSB official — who spoke on the condition of anonymity — said that owing to the acute water shortage in the city, the board started employing efforts to start a water project in 2012, but it was approved by the provincial government only in 2014.

The initial study of the project was completed in 2016-17, while a budget of Rs1 billion was allocated for the project in 2017-18. However, out of the total, only Rs250 million were released.

The funds were utilised for carrying out a detailed study and creating the design of the project. The consultants completed the designing work within six months, after which the contract for the project was awarded to the National Logistics Cell (NLC) against the lowest tender bid. Soon thereafter, the project was kick-started. However, work related to Package-1 and Package-3 of the project is under way, while the tenders for Package 2 and 4 have not been awarded yet.

According to a KWSB official, in 2018, some high-ranking officials of the water board removed some engineers from the project. The project director and engineers were later appointed on the basis of nepotism with no field-work experience. The incompetent engineers termed the design unfeasible due to which the development work on the project remained suspended for 10 months.

Later, Local Government Minister Saeed Ghani took notice of the delay and transferred the engineers immediately. He also ensured the appointments of qualified staffers anew.

Based on Ghani's instructions, the development work resumed in the beginning of 2019 but the provincial government has released only Rs150 million out of the approved total of Rs600 million for the project. Consequently, the development work on the project is going on at a snail's pace with the total completion progress reported at 15 per cent.

The progress on development work has also been slowed down because the reviewed PC-1 of Rs11 billion is also being deferred. The operations at the pipe manufacturer used by the Karachi Development Authority (KDA) have been suspended due to which the KDA failed to procure the pre-stress pipes suggested by the design.

In addition, the water board has also been unable to procure other materials needed for the construction of the conduit. Prices of the construction materials have also gone up due to which development cost has increased from Rs5.9 billion to Rs11 billion. The water board prepared and forwarded a revised PC-1 to the planning and development department about a year-and-a-half ago. However, the approval for the new PC-1 is still pending due to which the water board has been unable to award tenders for PC-2 and PC-4.

K-IV project

The KWSB official further said that considerable changes have taken place in terms of the cost and design of the K-IV project, which has a capacity to process 260 MGD of water. The mega project is seeing delays due to increased cost as its original PC-1 was Rs25 billion which had to be equally shared by the federal and the provincial governments.

However, changes in the project's design have led the revised PC-1's cost to jump to Rs75 billion. To see to the matter, the Sindh government has tasked the National Engineering Services Pakistan (NESPAK) to ascertain the reasons for the changes in the design. After a drastic increase in the project costs, it is difficult to state whether the federal government will approve the new PC-1 or agree to increase its share.

Importance

Under current circumstances, the 65 MGD project has gained immense significance. The project is completely funded by the provincial government and it does not involve a lot of technical difficulties or hurdles. If the Sindh government takes an interest in the project, this low-cost project could easily be completed in the shortest possible time.

Spanning a distance of 58 kilometres, the 65 MGD water scheme will link the Keenjhar Lake to Pipri Pumping Station. The project has four development packages, out of which PC-1 and PC-3 are under construction, which will include a 14.5-kilometre open RCC canal and a five-kilometre conduit from the Keenjhar Gajol Canal to the Gharo Pumping Station. The Halejee Lake will also be augmented at the same time with the installation of a new gate. From Halejee Lake, a water line will be linked to a new RCC canal.

The Express Tribune tried to reach out to the KWSB's project director several times to confirm the news, but he was neither in his office nor available over the phone.

A KWSB spokesperson, however, said that the revised PC-I of the 65-MGD plan has been sent to the Sindh government for approval.

He said that the development work on the remaining two projects will begin shortly after the approval of the revised PC-I by the Sindh government.

(By Syed Ashraf Ali The Express Tribune, 04, 29/06/2019)

Organised gangs busted, six arrested in operation against water theft

Organised gangs involved in water theft from Dhabeji, Gharo and Haleji conduits were busted and six suspects, including two executive engineers (XENs) of the Karachi Water and Sewerage Board (KWSB), were arrested during a "grand operation" launched against water theft here on Friday.

At Dhabeji and Haleji, 21 illegal water connections were detected through which a sizeable amount of water meant for Karachi was being stolen by diverting it to personal farmhouses, dairy farms and for commercial cultivation in fields. The connections, which were illegally operating for many years in collusion with KWSB officers and other beneficiaries, were sealed.

The operation has been launched by the Sindh Anti-Corruption Establishment (ACE) on the directives of the Adviser to Chief Minister on Anti-corruption and Law Barrister Murtaza Wahab.

According to the ACE, water was being stolen from the main installations of KWSB through tankers for sale illegally in the city. In the area, as many as 13 uncovered/punctured sites en route to Haleji conduit were found. They were sealed by ACE officials.

The ACE team also found one water tanker being filled from one of the openings. It was seized and its contractor and driver were booked.

The officials said that a number of such water tankers, which illegally were being filled from the KWSB installations, used to ply on roads freely from Ghara via Dhabeji to Karachi, without any check on account of "monthly" given to local police and water board officers, regularly.

In addition to those modes of water theft, a different way of theft was also detected. On the pretext of subsoil water selling, approximately 46 contractors, possessing a fleet of tankers, keep stealing potable water from the main pipelines of KWSB. Either they are mixed with a little subsoil water or parked at subsoil stations for further sale in the city at exorbitant rates.

The officials said the stolen water being sold as "subsoil" water was also being marketed without any no-objection certificate (NOC) and regulation. It was just a front to cover water theft from the main trunk of water board lines.

In the latter instance, it was found that offices of the deputy commissioner, police and Karachi water board were operating like a crime syndicate. According to the ACE, in the overall crackdown against water theft, six perpetrators were taken into custody for interrogation.

(By The Newspaper's Staff Reporter Dawn, 16, 29/06/2019)

Murad reiterates commitment to K-IV

Sindh Chief Minister Syed Murad Ali Shah has said that he is committed to the completion of Karachi Bulk Water Supply Scheme, K-IV project, for which he is working hard to arrange funds and waiting for the Nespak report on design verifications.

This he said on Saturday evening in a meeting to review the status of the project. The meeting was attended by Local Government Minister Saeed Ghani, Chief Secretary Mumtaz Shah, Local Government Secretary Khalid Hyder Shah, Local Government Special Secretary Niaz Soomro, Karachi Water and Sewerage Board (KWSB) Managing Director (MD) Asadullah Khan and K-IV Project Director Asad Zamin.

The CM was informed that K-IV was designed to ensure the provision of 660 million gallons per day (MDG) of water to Karachi in three phases.

In phase-I it will be able to provide 260 MGD, in phase-II 260 MGD, and phase-III 130 MGD which is to be completed by 2022-26.

The phase-I contract was awarded to Frontier Works Organisation (FWO) in 2016 for Rs28.187 billion. The project was to be completed in packages within a period of 24 months. The package-A of civil work was signed at Rs15.254 billion and package-B of electrical and mechanical works was signed for Rs12.9 billion.

The K-IV is a three-phased scheme of channels or conduits or rather conveyance system, designed to transport water from Keenjhar Lake to Karachi. During the fiscal year 2015-16 it was realised that even if phase-I of K-IV project was completed, it would not provide any benefit to the people of the city as there would not be enough electricity to pump and supply the water, meaning there was no connection of bulk channel with the distribution network. Moreover, more than 120km conveyance system was being laid, passing through a variable terrain as well as a highway and there were no bridges and culverts, etc. or provision of colonies for the personnel working there. Therefore, the Sindh government decided on ancillary and supplementary components.

These include K-IV road and pedestrian bridges, staff colonies, fencing workshop, etc. The augmentation plan included connecting three filters of K-IV project with existing Bulk Water Supply system of KWSB through three augmentation pipelines, one at Pipri, one at NEK and the third one at COD, at a cost of Rs18.679 billion.

The third component was the installation of 50 MW power plant to operate two pumping stations of K-IV. This would be installed on a public-private partnership (PPP) modality.

The CM was also informed that the FWO had proposed the construction of 650 MGD conveyance system on the current alignment of the on-going 260 MGD conveyance system as a one-time activity instead of three separate canals in three phases. According to FWO, this would result in long-term cost savings and construction of the second and third phases would be difficult due to blasting issues. This required a massive increase in the cost and scope and delay in time. Therefore, the provincial cabinet in its meeting in February, 2019 decided to conduct third-party review through Nespak to vet the existing design and hydraulic model of the proposed 650 MGD, as well as confirm availability of additional water before moving the case for revision of PC-I.

Murad said that since 70% of the civil work had been completed, necessary requests might be made to Nespak to expedite the third-party review for timely completion of the project.

He said that K-I, K-II and K-III were completed in a period of 20 years, now this too had taken a long time. While PC-I was approved in 2014 and work on the project began in 2016. "We are committed to the people of Karachi and all bottlenecks would be removed to ensure the project is completed," he vowed.
(By PPI The Express Tribune, 04, 30/06/2019)