



# Water, Sanitation and Hygiene in the Media

A collection of stories by Journalists' of Media Fellowship Programme



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**Young Journalist Media Fellowship Programme** has been designed to build the capacity of young journalists of Pakistan who are interested to investigate water and sanitation problems in Pakistan and their relation with health and human development. This program will provide an opportunity for field visit; research and investigation about WSS related problems in Pakistan and provide a platform for young journalists to engender responsible and accurate coverage of water and sanitation issues. More specifically, programme aims to achieve following objectives:

- Sensitisation of policy makers through in-depth coverage of water and sanitation related problems, success stories and shaping public opinion
- Creating awareness for behavioural change through stories
- Recognise and promote the work of young journalists in the area of water and sanitation sector through giving them exposure of field

**We are WaterAid.** To end poverty, we believe everyone, everywhere must have clean water and toilets. Together we can make it happen by 2030.

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**Cover photo:** Neelama Kumari, 9, is seen here learning the steps involved in hand washing, Government Primary School (GPS) Harijan Colony Malan Hore Veena, Tharparkar, Pakistan, 2013.  
Mustafa Abdul Aziz

**Compilation and editing:** Ayesha Javed  
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## Amar Guriro

### Environmental Journalist

Coordinator Washmedia-South Asia



Amar Guriro is a print media journalist, a blogger, photographer, multimedia producer and a professional fixer based in Karachi, Sindh, Pakistan.

He is regional president of WashMedia-South Asia. WashMedia-South Asia is a forum of journalists from across South Asian countries, including Pakistan, India, Bangladesh, Nepal and Sri Lanka working on water and sanitation. He is IVLP fellow and also a media fellow of the UK-based NGO Water Aid Pakistan's media fellowship program since 2009.

He has contributed to several national and international publications, including BBC – Urdu, The Times (English), Himal SouthAsian, Nepal (English), Indian Marathi language paper Lokmat and also for Pakistani local and national newspapers. He can be reached at: [amarguriro@amarguriro.com](mailto:amarguriro@amarguriro.com)

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## Myra Imran

### The News, Islamabad



Myra Imran works as a staff reporter for The News in Islamabad and is an award-winning journalist. She is Joint Secretary for National Press Club, Islamabad.

Myra reports on human rights issues including water and sanitation. Her expertise is on women issues. In 2010, the Supreme Court ordered legislation on acid crime following one of her stories on an acid burn victim who managed to take her case to the higher courts despite social odds.

Myra has done several interviews for her paper besides covering extensively the activities of civil society in Pakistan. She has also reported for Radio Pakistan and has been on several television talk shows. She handles gender section of website JournalismPakistan.com. She was declared 'Media Woman of the Year' by the Excellence Award Foundation and the Ministry of Information and Broadcasting in 2009. The following year, she was presented the 'Benazir Women in Leadership Award' by the Ministry of Human Rights. In 2010 she directed a documentary on the post-earthquake situation in Balakot, one of the worst affected areas in the October 2005 earthquake. She has participated in several panel discussions and has spoken as guest speaker on the role of media in national and regional conferences. Myra is a US government's International Visitors Leadership Program (IVLP) fellow and has attended hands-on training on social media in Denmark. She is on the visiting faculty of International Islamic University.

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## Imrana Komal

### Daily Express, Multan



Imrana Komal is a print media journalist; she works with the national Urdu daily Express, Multan. Imrana covers different issues, but her focus is to cover issues around women. She is extensively writing WASH issues faced by women of southern Punjab. She is the author of a book and also travelled extensively for trainings around journalistic practices.

## Hafeez Tunio

**Express Tribune, Karachi**

Hafeez Tunio works as a reporter for The Express Tribune, Daily English newspaper affiliated with The International New York Times. Hafeez covers politics, environment, water and sanitation, human rights, minority and women issues. He says he wants to write on environmental issues, because he loves nature - in spite of what it did to him.



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## Aoun Sahi

**The News on Sunday, Islamabad**

Aoun Sahi is a print media journalist based in Islamabad, Pakistan. He is working with The News on Sunday, the weekend magazine of The News International, since 2003 as reporter. A Daniel Pearl and Alfred Friendly Press fellow 2010, Sahi worked with The Wall Street Journal as reporter for six months as part of fellowship. He is also WaterAid Pakistan's media fellow since 2010. He covers crime, environment, water and sanitation, militancy, politics, security, and social issues. He has also contributed to Newsline, Agence France Presse, Inter Press Service and Western newspapers such as the Los Angeles Times, Sunday Times, Wall Street Journal and Washington Post.



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## Gonilla Gill

**Daily Dunya, Lahore**

Gonilla Gill is working as "Social Reporter" for the Urdu newspaper "Daily Dunya". She is Fellow of Asian Journalism Fellowship program of 2012 in Wee Kim Wee School of Communication and Information, Nanyang Technological University – Singapore. During her professional career Kamran Michael Provisional Minister for Minorities and Human Rights presented her a Gold Medal on behalf of Saawan International magazine for her best reports on minorities, women and child rights and human rights.



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## Ramzan Chandio

**The Nation, Karachi**

Ramzan Chandio is a staff reporter for The Nation, in Karachi, Pakistan. He is a media fellow of the UK-based NGO Water Aid Pakistan's media fellowship program since 2010. He specializes in reporting on parliamentary proceedings, Environment, Climate change, Disaster risks and Wash and Human rights issues. Ramzan has vast experience in reporting on politics, policies of Pakistan related issues in context to their affects on masses. Ramzan has reported in The News (Pakistan), Daily News (Pakistan) and in Sindhi language newspapers too.

[www.ramzanchandio.blogspot.com](http://www.ramzanchandio.blogspot.com)

[www.ramzanchandio.wordpress.com](http://www.ramzanchandio.wordpress.com)







# Water in the pipeline

Aoun Sahi

March 2, 2014

People of Bhalwal are yet to benefit from the newly-launched water scheme in the area.

Sheikh Abdul Hameed, a 59-year-old resident of Al-Fazal Town in Bhalwal tehsil of Sargodha district, has started getting clean drinking water at his home for the first time. “I am the fifth in my street to get the connection of water being provided under the newly-launched scheme,” he tells *TNS*. The water scheme was started in the town in 2006 under Punjab Municipal Development Fund Company (PMDFC) which launched the Punjab Municipal Services Improvement Project (PMSIP) with financial assistance from the World Bank. The scheme was supposed to be completed in three years, but it has not been made fully functional even after eight years in 2014. The initial cost of laying water and sewerage pipelines in the



town was put at Rs60 million and a contract was awarded to a Lahore-based construction company. But the company completed only 45 per cent of the work and never came back. “The company which is owned by the brother of a PML-N MNA from Lahore not only delayed work but also got most of its bills approved during the last PML-N government in Punjab,” a senior official of TMA Bhalwal tells *TNS*. Again in 2012, work on the project was started with a revised cost of Rs130 million. “The contract was awarded to a new company which has almost completed its job, but most of the pipes have already

started leaking,” he says, adding that 4,000 households would be provided water connections under the project. “The PML-N government believes in completing projects in time in Lahore only,” he says.

In 2012, the government of Punjab requested Nazir Ahmed Wattoo, chief of Anjuman Samaji Bahbood (ASB), a Faisalabad-based civil society organisation expert in water and sanitation issues, to help TMA Bhalwal manage the scheme under *Changa Pani Project* (CPP), a public and private partnership aimed at providing sustainable water

and sanitation system involving local communities. Wattoo has formed a committee of local people and TMA officials which oversees the project. CPP has been termed a great success in its pilot project in Lahore, but it has been facing problems in Bhalwal. "In Lahore, we were involved from the planning stage. We worked with local community, sensitised it first and then executed the scheme. In Bhalwal, the infrastructure was laid down by the contractor and we intervened almost at the end of the scheme. It is true that we have been facing different challenges, but hopefully we will overcome them and make the community realise that the project belongs to them and they have to invest in it," Wattoo says. "People in Pakistan believe that water should be provided to them without any cost. People take water for granted. Water is a commodity which has been depleting fast in our country and we need to manage it properly." Under this scheme, 24/7 water would be provided to 4,000 households in the town.

Bhalwal is not a very old town as it was established under the colonisation of West Punjab in the last quarter of 19th century. It was a planned colony town which was designed by Sir Malkan Hailey, the first colony officer of the area. The first water supply scheme was laid down in

Bhalwal in 1927 which could not cater to the requirements of increasing population of the area. But consecutive governments in Punjab neglected the area and did not provide adequate water and sanitation facilities in the town.

The town's current population is around 100,000 which would reach around 150,000 in 2025. Majority of the population is still living without water and sanitation facilities.

**Underground water in Bhalwal is brackish which is unfit for human consumption. There are two water supply zones in the city; the first comprises old portion of the city while the second is situated along the Bhalwal-Sargodha road.**

Underground water in Bhalwal, according to Tehsil Municipal Administration (TMA), is brackish which is unfit for human consumption. There are two water supply zones in the city; the first comprises old portion of the city which is also the commercial centre while the second is situated along the Bhalwal-Sargodha road. "There is only a small portion along the canal on the outskirts of town where we could find sweet water fit for human consumption," says Rana Muhammad Jameel Akhter, Tehsil Municipal Officer

(TMO), Bhalwal.

Hameed, who shifted to the neighbourhood two decades ago, used to travel five kilometres on his motorbike to fetch water for drinking and cooking purposes.

"Underground water in our city is not healthy at all. We either have to fetch water from tube-wells near canal bank or buy it from local vendors who sell drinking water in plastic bottles," he says, adding that connection fees for the new water scheme is Rs3500 which is a big amount for the poor people in his area. "We are also not sure whether this scheme will succeed or not. The water supply remains disturbed most of the time due to different reasons. In many areas, the water pipelines have already been damaged," Hameed says. "It was promised that water would be provided 24-hour uninterrupted under the new scheme but it seems a distant dream. Leakage of pipelines is a routine matter which results in suspension of the water."

So far, only 270 people have got connections. Majority of them want to get the water connection for free. "World Bank has given the money for the project but now we are being asked to pay money to get connection. It should be free," Muhammad Arshad, a resident of Al-Fazal Colony, tells TNS.

Rehan Butt, a community leader and part of the committee which oversees the

project in Bhalwal town, says that people need to understand the importance of water and the project. “The success of this project is very important. A household usually spends Rs20 on drinking water a day which is brought to them in unhygienic plastic bottles. That is the reason that waterborne diseases are on the rise in our town. People need to take ownership of the project.” Rehan Butt says, “There are different reasons for the leakage of the pipelines. It is true that the contractor did not use good material. We have repaired pipes from over 150 places after the contractor completed the project and handed over it to TMA. The capacity of the main water tank is 100,000 gallons which is enough to provide 24/7 water to 2500 households with pressure, but so far only 270 households have got connections. So, when we release water from the main water tank, it becomes difficult for the pipelines to hold the pressure.”

According to TMA officials, there is no culture of paying water bills in the city. “We only charge Rs360 per year per connection under the old scheme which was built around 40 years back in the town. Majority of connections holders never paid their bills,” says an official of TMA. “Nazir Wattoo has been working day and night but the Punjab government also needs to take the project seriously and ask

its parliamentarians to take ownership of the project to make it a success.”

## A hospital without water

Hafeez Tunio

August 14, 2013

**The circumstances at Jinnah Hospital are bleak at best and authorities should urgently act to improve them.**

Not that being a doctor has ever been a glamorous job, contrary to what is sometimes portrayed on television and in movies, but being a doctor in Pakistan is sometimes the antithesis of a glamorous job. Take, for example, Jinnah Postgraduate Medical Centre in Karachi, which houses one of the largest

public hospitals in the country. The hospital currently faces a water shortage with visitors having to run back and forth from neighbouring restaurants and mosques to secure water for themselves. The hospital, unfortunately, is in such poor condition that visitors coming from hours away are made to wait out on the footpath for several days because all wards are occupied. Given the bleak circumstances at Jinnah Hospital, all authorities concerned are asked to urgently act to improve the distressing situation.

Water is vital to life, especially



People have to rush to nearby areas to get water. PHOTO: FILE

for the ill. The fact that the hospital runs out of drinking water is a shame and points to the hospital's incompetency. A second fact pointing to this is the lack of water in its lavatories, which is essential for obvious hygiene purposes. Hygiene is a top priority of hospitals the world over and it is terrible that it is not even on the priority list for this hospital located in Pakistan's largest city. Further woeful is that a senior official at the hospital alleges a high portion of the

water is being diverted to the hospital's laundry, which is being used on a commercial basis by nearby dry cleaners and residents. This practice is unethical and if true, must be stopped immediately, by the hospital administration.

Rather than playing the blame game of not enough water being supplied by the Karachi Water and Sewerage Board (KWSB) or the hospital administration not doing an efficient job of allocating the

water, a problem has been identified and a solution must now be found. The way to go about finding this solution is by calling the KWSB and the Jinnah Hospital administration to sit with the Public Works Department, which is responsible for the maintenance of the hospital, and first dissect the causes of the problem. Solutions then need to be found — and quickly, before the situation deteriorates further.

# Drip...drip...drip: Sindh MPAs stare at drinking water crisis

Hafeez Tunio

April 15, 2014

**This was the first time an MPA from the MQM openly criticised KWSB and city administration.**

They believe water shortage in Karachi and other districts of the province might trigger a 'civil war.'

“For the last four to five months there has been no water in many areas of Karachi,” said Muttahida Qaumi Movement (MQM) MPA Muhammad Hussain. “The residents of Baldia, Orangi

Town, Qasba Colony and Gulshan-e-Iqbal have started occupying water pumps and disrupting the law and order situation. The Karachi Water and Sewerage Board (KWSB) and the local government have failed to provide the citizens of

**KARACHI: Water, according to members of the Sindh Assembly, is going to be the next big crisis in the city.**

this city with water.” He added that concrete measures should be taken before the water problem spirals out of control.

This was the first time an MPA from the MQM openly criticised the KWSB and the city administration.

According to Hussain, Karachi used to get 115 million gallons per day (MGD) from Hub but the quantity has been reduced to 40MGD. He requested the house to form a committee to visit different areas of the city in order to understand the suffering of the residents.

Sindh's Information and Local Government Minister, Sharjeel Inam Memon, acknowledged the water crisis and said district West and Central were the worst affected in the city.



Sindh information minister speaking during the assembly session on Monday. Photo: PPI

The minister said the situation had become worse as it hadn't rained in some time and Hub Dam was drying up fast. In addition, he said, the illegal hydrant mafia had grown and people were stealing water from the main supply lines.

Memon added that his department had written letters to the Rangers and IG police for their help in taking action against the illegal hydrant operators.

The minister believed that K-Electric was to be blamed for hours of loadshedding at the water pumping stations. "K-Electric being private utility company has made the lives of citizens miserable," he said. "It has become a mafia. Despite paying millions of rupees, the power utility company has yet to provide electricity connection for River Osmosis Plant (ROs) established by the

provincial government in many areas of the city to convert brackish water into potable."

As the MPAs continued to talk about water, Pakistan Peoples Party's (PPP) Nadir Magsi brought up the issue of illegal water courses set up by the people of Balochistan at Saifullah Magsi Canal in Qambar-Shahdakhkot district. He said that officials from the province's irrigation department were involved in stealing water and creating an artificial shortage.

This prompted PPP MPA Nawab Taimur Talpur to move a resolution demanding the provincial government remove illegal outlets from the main canals and take action against the irrigation officials.

#### **Toxic water**

The issue of poisonous water flowing from the Punjab to

Sindh was brought up by the MQM's Naheed Begum. She asked the House why water mixed with industrial waste from the Punjab was being disposed off in Sindh.

"We want to know if the provincial government has ever registered a complaint or protest with the authorities of the other province," she said. The Minister for Parliamentary Affairs, Dr Sikandar Mandhro, said they had taken up the issue with the Government of Punjab and would raise it again if the problem persisted.

The MPA said Ghotki is one of the most fertile lands in the province and was turning barren. In addition, she said, the water was causing gastro diseases in the area.

The members of the Assembly demanded the federal government to implement the 1991 accord in order to provide Sindh with the water it was due and stop illegal canals – Chasma and Jhelum link canals – which according to them take up most of the water coming in from the Indus River.

#### **Hostage release**

Pakistan Muslim League-Functional's Nusrat Seher Abbasi questioned the performance of the Home Department, which is currently being looked after by the Chief Minister of Sindh.

"After negotiations between the Taliban and federal government to release militants, notorious dacoits are

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also being released from the jails in Sindh,” she said, referring to the release of a kidnapped Hindu businessman, Lachman Das, in Sukkur. His abductors, she said, were paid Rs6 million in ransom and had asked for the release of their men from jail.

“We, as lawmakers of this house, are confused as to how the affairs of the home department are being run,” said Abbasi. “More than 50

people, including minors, are being held hostage by dacoits but we don't see much effort on the part of government.” She asked the Chief Minister to brief the house about what was being done about the prisoners release.

#### **Sectarian violence**

The leader of the opposition, Faisal Subzwari, raised the issue of sectarian violence and 45 persons of the MQM who were still missing, and who,

according to him were kidnapped by people dressed in plain clothes.

Memon said the violence did not have anything to do with ethnicity or sects.

During the session the Assembly adopted a unanimous resolution to initiate compulsory vocational technical training at juvenile jails in the province to develop skills among the prisoners.

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## Where dose all the water go?

Kalbe Ali

July 13, 2014

**Despite being constantly highlighted as a major future problem for the entire country, water conservation is a concept that**

**has yet to seep into our national consciousness.**

The Capital Development Authority, responsible for providing residents of Islamabad with life-nurturing water, seems oblivious to the impending shortage and has taken no action over the

gratuitous wastage of an already-dwindling water supply.

Many sectors of the capital are already facing an acute water shortage, but at the same time, neither citizens nor administrators seem to be too worried about plugging the holes in the city's water supply lines.

A collective public welfare water supply system established by the slum dwellers in F-7. But in the process, there is a small stream running all the time wasting water into the nullah below.

Fresh water from the Khanpur Dam flows into a nullah from the main supply line under a bridge between F-10 and F-11 sector. There is also leakage





from the valve. This main pipe was damaged with a saw by labourers working on different projects to obtain water. But like illegal connections, the authorities seem indifferent to such tampering of the main pipe.

Not all the leakages are caused by labourers and slum dwellers, however, many are

due to the carelessness of the department concerned of the



CDA such as this manhole which houses a water supply valve and is filled almost all the time due to dripping. Here,



some residents of the G-7 sector 'chill out' during these scorching days.

The shopkeepers and the residents of illegal hutments have established a public bath hidden in the bushes along a main trunk sewerage line in G-7 sector. But they did not bother to understand the meaning of



conserving potable water Local villagers and shopkeepers take a bath at a broken water pipeline in Bari Imam area

A leaking joint at the main water trunk in G-8 sector



provides an excellent spot for the locals to cool off in the sizzling summer. But the amount of water lost in the process is not accounted for by the engineering department of the CDA.

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# Drops of life: 'New blood in KWSB could fix water woes'

Hafeez Tunio  
August 14, 2013

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## Head of NED University's architecture department discusses water issues in Karachi.

The Karachi Water and Sewerage Board (KWSB) seems to be struggling to quench the thirst of a thriving city of 18 million people. One way it can improve the situation is to bring new blood on board, said Prof. Noman Ahmed, the chairperson of NED University's Architecture Department.

On Wednesday Oxford University Press, in order to mark World Environment Day, organised a seminar at which Prof. Ahmed delivered a lecture on Karachi's water woes. He

spoke to the eager audience for nearly an hour, pausing occasionally to let the audience take in a number large maps and thought-provoking shots of Karachi's slums woven into the presentation.

There's not enough water to go around because of political interference, aging infrastructure, unprecedented development and a swelling population, said Prof. Ahmed. "The city's daily water requirement is 837 million gallons," he said.

"The water board is inefficient and the alleged 'tanker mafia' doesn't want the city's demand for water to be met for its own benefit. "Getting water through tankers is no longer an option

used in case of emergencies – it has become a commercial enterprise." Prof. Ahmed added that the city's water board is mired in debt. "It owes more than Rs52 million to international donors," he said, adding this was why there were plans to privatise the organisation back in 1995.

He added that urban water supply is conventionally facilitated through an underground pipe system. In most developing countries, the system is underdeveloped and doesn't meet demand. Prof. Ahmed said that communities in such countries turn to alternative sources to obtain water. "They include boreholes, water tankers, pumps and drawing water informally through the main."

Prof. Ahmed then offered a couple of suggestions which could help alleviate the situation: the utility has to be revamped by injecting fresh blood into it and making it an attractive place to work for competent professionals. He added that the current tariff structure must also be revised.

Prof. Ahmed said consumers must pay the water board for



its services – currently around 10 per cent of them pay their bills. He said the water board's inability to respond to complaints, the ad hoc way in which the utility functions and poor consumer relations also disrupt smooth water supply in city.

He added that a regulatory body should be formed to oversee the supply of potable water, focus on consumers' concerns and ensure that all dues are collected promptly. A master plan to revamp service based on scientific planning and management should be sketched out, said Prof. Ahmed.

Oxford University Press has also published Prof. Ahmed's book on the subject titled 'Water Supply in Karachi: Issues and Prospects'.

### Sale of water through tankers banned in Hyderabad

Hyderabad Development Authority's Director General, Ghulam Muhammad Kaimkhani, has banned the sale of water through private tankers. He announced the ban at a meeting with Water and Sanitation Agency (WASA) officials on Wednesday.

The decision came following the orders of Governor Ishratul Ebad, who had been getting complaints about a 'tanker mafia' causing an artificial shortage of water. Kaimkhani asked WASA's Managing Director, Salimuddin, to stop the system whereby people were signing contracts to

receive water through tankers.

# MUCH OF THE WORLD REMAINS OFF-TRACK TO MEET THE MDG WATER AND SANITATION TARGETS

## Sub-Saharan Africa

### Sanitation coverage in 2015



### Water coverage in 2015



At current rates of progress, **348 million** people will still be without safe water and **667 million** people will lack sanitation in 2015

## South Asia

### Sanitation coverage in 2015



### Water coverage in 2015



At current rates of progress, **100 million** people will still be without safe water and **almost a billion** will lack sanitation in 2015

Source: WHO/UNICEF JMP 2012

# Researchers say Karachi's tap water isn't adequately filtered

Hafeez Tunio

June 14, 2013

## Experts gather at Urban Resource Centre to discuss lack of potable water.

KARACHI: Research conducted by the Pakistan Council of Research in Water Resources (PCRWR) has led experts to believe that in the city by the sea, there's hardly any potable water.

As a part of the research, 28 samples of water were collected from different localities of Karachi. Of them, only two were fit for consumption. Rubina Jaffri, the general manager of Health and Nutrition Development Society (Hands), used this research as one of the many examples in her talk on the city's water supply at Urban Resources Centre on Wednesday.

She said that 86 percent of the water samples were contaminated with pathogens which cause diseases, such as cholera, typhoid, bacillary and hepatitis.

Jaffri added that approximately 640 MGD of water is being supplied to Karachi, out of which 440 MGD is being filtered at seven filtration



A resident of North Karachi holds up a bottle full of tap water inside his home. Research has led health experts to believe that water supplied to a lot of areas in the city isn't fit for consumption. PHOTO: FILE

plants. She added that 20 per cent of the water is lost because of leaking pipes while 15 per cent is siphoned off by water thieves .

She added that the water board doesn't adequately filter the water, which is why its quality is compromised – according to Karachi Water and Sewerage Board (KWSB), 60 percent of bulk water supply is filtered while around 40 percent is chlorinated.

Jaffri told the audience that in Pakistan, the mortality rate for

children under the age of five is 101 deaths per 1,000 and diarrhoea – one of the biggest killers – emerges from contaminated water and poor hygiene.

She added that in a survey conducted by Hands, 93 per cent of the respondents said they use tap water for household chores. Nine percent buy bottled water while around 80 per cent just drink tap water, added Jaffri.

She said that after consuming contaminated water, both

adults and children commonly report symptoms such as stomach pains, vomiting, diarrhoea, headaches and sore throats. Hepatitis is another real danger of consuming water which hasn't been treated.

Some of the survey's respondents stated that they used water without boiling or filtering it first. A portion of them said they boil water only when their children fall sick.

She told the audience that according to the UN Human Rights Policy, it is the government's responsibility to provide people with an adequate amount of safe, filtered, potable water.

THERE GO THE BUGS

440

MGD of the

640

MGD of water

supplied to karachi is filtered, according to Rubina Jaffri, the general manager of Health and Nutrition Development Society (Hands)

## Harvesting rainwater: Clean drinking water saves some lives in Thar

Hafeez Tunio

July 13, 2014

**Villagers are storing rainwater in man-made ponds which can hold around 30,000 litres of water**

The Moori Ji Wandh village, located five kilometres away from Mithi, has seen no deaths during the drought. This is because they save rainwater for later use.

**MITHI: There is a village five kilometres away from Mithi Town where, unlike the rest of Tharparkar, no child has died in the last two years.**

Medical records and interviews with the residents of the Moori Ji Wandh village show that safe drinking water is what saved their lives in the drought affected area of Mithi, Tharparkar.

“Three children have died in a village next to ours,” said Heero Bheel, a villager. “But we are all fine and healthy. There is no disease here.”

While talking to *The Express Tribune*, Heero claimed that their children were healthy compared to those living in nearby villages.

“It is because we harvest the rainwater. We store it in this nadi pond [man-made ponds],” he said while pointing towards a small pond which was about four metres deep and has a storage capacity of 30,000 litres. One end of the nadi pond, he said, was closed off with a flat sheet while the other side – which was higher, had a cane on top.

There is a 75mm thick layer of concrete around 1,066



feet catchment of the nadi pond where the rainwater is collected and can be filled up within 30 minutes – even in 70 to 80 mm of rainfall.

“We cover the roof of the pond and install a geometric sheet inside to curb the slow seepage,” said Mukesh Raja, programme coordinator of the Sukkar Foundation, an NGO that has provided the village with 10 nadi ponds. “Each pond provides water to four households for three to four months.” He added that they had around 20 different villages in three talukas of district Tharparkar with these ponds.

Raja claimed that communities in over one hundred villages had been mobilised to start doing this on their own.

“We have introduced another method for the villagers to get clean water,” he said. “Locally we call it chonara pond. It is a large ground water tank and has the storage capacity of at least 50,000 litres.” He added that community based organisations had been formed to look after and

maintain the rainwater harvesting systems to ensure that their drinking water demand was met.

While responding to a question about how the lack of rainfall affected this system, Raja said that there was at least 60mm to 100mm rainfall twice a year. He added that while this might not be enough for agricultural purposes, it could be easily used to harvest drinking water.

As word spread, many people in Mithi, Diplo, Islamkot and Chelhar adopted similar rainwater harvesting techniques without any help from the government or NGOs.

“There were around 20 wells near our villages which had contaminated ground water,” said Haresh, a primary school teacher from Deedsar.

“Now, three villages have built their own nadi and chora ponds. Each house now gets around five buckets of water.”

According to Haresh, the water doesn't go bad for months due to the way the ponds are built. He said that this was because they used bio-sand to filter it.

## **Water woes**

Ali Akbar Rahimoon, a social activist from Tharparkar claimed that there was a great potential to harvest rain water in the area but due to the unavailability of a structure or awareness about water conservation, the villagers would not be able to do it. He said that while some organisations had run successful pilot projects it was primarily the government's responsibility.

According to Rahimoon, the World Health Organisation (WHO) has set a limit according to which a person cannot drink more than 1.5mg of fluoride per litre but they were forced to drink water with high levels of fluoride toxicity.

According to a research study conducted by the Pakistan Council for Research in Water Resources, the total domestic water need for Thar equals to 0.25 per cent of the total annual rainfall in the area. This means that there is need to improve the capacity to harvest it.

# World water day 2014: When water is death

Hafeez Tunio  
March 22, 2013

## The quality of water and its availability is a serious issue in Pakistan.

KARACHI / THARPARKAR:

Khalid Jogee is afraid of ever staying a night in any village of Sindh. His experience of staying a night at Dalan Jo Tarr located in Taluka Chachro, district Tharparkar, was nothing short of a nightmare. "I can't even imagine the kind of water my relatives use," Jogee said.

"It was one of the worst experiences of my life, staying in the village and having to use and consume the water. My whole body was swollen. I was unable to see properly," he shared. "Ever since, I do visit the village but I stay on only until I have my own water," he smiled. "Whenever I visit any village anywhere in Sindh, I ask about the source of the water and don't use it if it is groundwater."

With the recent focus on the suffering of the people of Tharparkar, a very important point is the crux of the problems of this region as well as many regions of Pakistan – the lack of access to clean water fit for human consumption.

"The worst situation of quality water is in southern parts of Punjab and Sindh," said Wateraid Pakistan Programme Manager, Policy and Advocacy, Abdul Hafeez. Information on the official website of Pakistan

common source of drinking water, is considered a worldwide public health crisis and an unprecedented natural disaster.

Hafeez said that underground water consumption in Pakistan is very common, and people use



The quality of water and its availability is a serious issue in Pakistan. Photo: PPI

Council of Research in Water Resources (PCRWR) confirms that the concentration of arsenic in groundwater of several districts of Punjab and Sindh provinces has been observed through different water quality studies conducted by PCRWR, further adding that the natural presence of arsenic and other toxins in groundwater, the most

the water without proper testing. "The quality of water and its availability is a serious issue in Pakistan," he added. He urged the government to look into the matter seriously, suggesting that raising awareness about this could reduce the incidence of water-borne diseases.

According to Hafeez, the increased death toll in

Tharparkar is the outcome of unavailability of water, and the water available being of bad quality.

“The people of Thar don't use drinkable water,” said Zafar Junejo, CEO Thardeep. “The available water is not fit for human consumption,” Junejo stressed. He said that different kinds of resulting diseases include kidney failure, liver disease, bone formation, teeth decaying and skin diseases.

Junejo informed this correspondent that not only fluoride but other elements like lead and arsenic are also found in the available water across the desert. “The water table will be disturbed in some parts of the district in the coming years,” he warned, adding that appropriate measures should immediately be taken.

“The access to drinkable water is the major issue of Tharparkar,” said the executive director of the Association for Water Applied Education and Renewable Energy (AWARE), a non-governmental organization, Ali Akbar Rahimoon. He criticized the lack of a drinkable water policy, saying that the federal government had made the first such policy in

September 2009. “Sindh has not made a policy yet.”

Another social activist and writer, Bharo Amrani, said that a separate water policy is required for Tharparkar. “The major issue of Thar is water and all major sources of earning depend upon water.”

Environmentalist Nasir Ali Panhwar said that per capita water availability in Pakistan has reduced from 5,650 cubic meter per person in 1951 to current 1,000 cubic meter per person. He said that 60 per cent of infant deaths are caused by waterborne infections. Panhwar added that 250,000 children die each year in Pakistan because of waterborne diseases, referring to USAID data, and that stagnant dirty water, both in rural and urban areas, account for a large number of deaths caused by fatal diseases like cholera, malaria, dysentery and typhoid. According to WHO reports, 25 to 30 per cent of hospital admissions in Pakistan are connected to waterborne and bacterial parasite diseases.

In Sindh alone, the people of Naro, district Khairpur, Achhro Thar of district Sanghar, Badin, Thatta, Jamshoro and Dadu also use underground water without

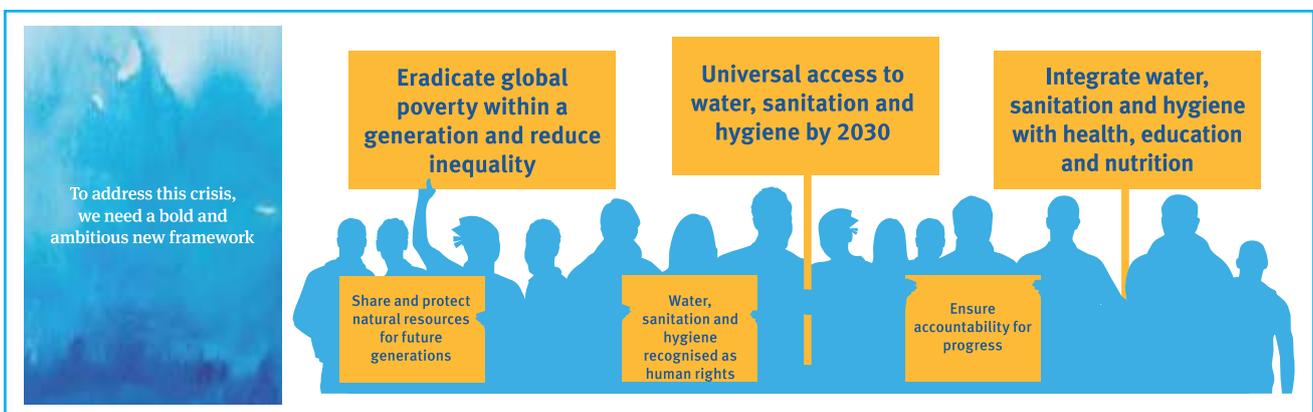
prior testing, to name a few. If the water is salty, they believe they won't need additional salt in their foods.

The coastal regions of Sindh are more vulnerable. “I have to purchase water though I stay on the bank of the river,” said Mai Hoor who lives near Keti Bunder.

The water supply schemes and filtration projects in rural areas of Sindh are missing. “I have heard that the water available in our village is contaminated but we have to consume it; there is no other option,” said Ibrahim Pali of Seerani, a small town of Badin. Being one of the aged persons of the area, Pali believed that most diseases in his area increased when the taste of water changed.

“The entire population of Thatta city is being provided contaminated water,” said Imam Dino from Thatta. “Industrial waste is being released in the main supply canal from Jamshoro to Karachi.”

“The gutters and water lines go together not only in Johi but across the province,” Aslam Khushak, a resident of Dadu commented. “You say water is life but it is death actually in Sindh. Not blood but toxic water runs in our veins.”



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# Clean water: WASA refuses to share 'accurate' study on arsenic levels

Sonia malik  
July 30, 2012

## Arsenic removal plants installed at 7 of 14 sites.

LAHORE:

The Water and Sanitation Agency (WASA) has refused to disclose where in the city arsenic levels in the water exceed 10 parts per billion (ppb), the acceptable concentration level set by the World Health Organisation (WHO).

WASA chemist Zainab told *The Express Tribune* that WASA and the Environmental Science Department of Punjab University tested water from 457 tubewells last year and found that, in 14 samples, the levels of arsenic exceeded 50 ppb, the acceptable level for Pakistan, as set by the Pakistan Standard and Quality Control Authority (PSQCA). However, she refused to say exactly how far these samples exceeded the 50ppb threshold.

At 173 tubewells, the level of arsenic was found to be above 10ppb, the acceptable limit set by the WHO and most developed countries. The WASA chemist refused to say which areas were supplied

with water between 10ppb and 50ppb. The study was conducted after the Lahore High Court had taken suo motu notice of press reports of an Environmental Protection Department study that found arsenic contamination at 253 of 392 tubewells.

WASA officials had criticised the study, saying the EPD had used faulty methodology. Zainab said that the WASA and PU study was more accurate as it used a more advanced technique called inductively coupled plasma mass spectrometry (ICP-MS).

The LHC disposed of the case after the WASA Managing Director told the court that it planned to install filtration plants at each of Lahore's 150 union councils.

WASA officials said that they had so far installed 44 filtration plants, each costing around Rs1 million, and would install six more by the end of August. Plants have been set up at seven places where the WASA study found water to be most contaminated with arsenic. These places are National Town, Raj Garh; Corporation Society in Islampura, Sanda; Patiala



WASA officials said that they had so far installed 44 filtration plants, each costing around Rs1 million, and would install six more by the end of August.

Ground; Township; Iqbal Park; Jahangir Road near Mughalpura; and Ghaziabad Main Bazaar.

Work on a plant at Kohlu Ghar near Misri Shah bridge is underway, while plants are yet to be installed at Rafiab Darbar near Bund Road; Old Ravi; Paracha Colony; Yousaf Park near Sheihkupura Road; Majeed Park; and Aziz Colony.

These are the other places where arsenic levels exceed 50ppb. Work on an arsenic removing plant is also underway at Brandreth Road, where the concentration level is between 10 and 40ppb.

Tanveer Ahmad, a senior construction engineer at the WASA, said that they had been unable to find space to install filtration plants at the above

places as they were too congested. Each plant requires building a room measuring 12 feet by 12 feet.

Chaudhry Aftab, another engineer working on the project, said that the plants could not filter all the water from the tubewell, so residents did not get filtered water at their homes. The filtered water is available through taps at the

plant that must be collected in bottles or buckets.

Studies have shown that long-term exposure to arsenic increases the risk of skin, lung, bladder, kidney and liver cancer, as well as various other illnesses. High arsenic levels also affect reproduction and child development.

# Slow death: Drinking water in 130 areas unsafe for consumption

Sonia malik

October 1, 2012

## Arsenic levels exceed Pakistan Standards and Quality Control Authority safe levels in 15 areas.

**LAHORE:** The groundwater pumped by WASA tubewells and supplied to more than 130 areas in Lahore for drinking contains arsenic well above 10 parts per billion (ppb), the World Health Organisation (WHO) guideline, reveals a study available to *The Express Tribune*.

The safe arsenic level set by the Pakistan Standards and Quality Control Authority

(PSQCA) is 50ppb. Of the areas surveyed, water at 15 locations exceeds the PSQCA limit.

Around 47 sites had arsenic concentration ranging between 40ppb and 50 ppb; as many as 70 areas have arsenic concentration ranging between 30ppb and 40 ppb.

At 173 tubewells, the level of arsenic was above 10ppb. Forty-seven of the tubewells had between 40ppb and 50ppb of arsenic.

In 1993, the WHO had set the standard for arsenic in drinking water at 10ppb. Since then the standard has been implemented in most of the developed countries. America, which adopted the standard in

2002, complied with it by 2006.

It, however, remains fixed at 50ppb for countries with inadequate detection measuring facilities like Pakistan, Bangladesh and India. Other countries with the 50ppb limit include Bahrain, Bolivia, China, Egypt, Indonesia, Oman, Philippines, Saudi Arabia, Sri Lanka, Vietnam and Zimbabwe.

The study was a joint venture between the Water and Sanitation Agency (Wasa) and the Punjab University's Department of Environmental Engineering.

The agency commissioned the study after the Lahore High

Court took suo motu notice, in 2010, of news reports regarding an Environmental Protection Department study. The study had found dangerous levels of arsenic in 253 of 392 tubewells in the city.

The court disposed of the notice after the Wasa MD assured the court that he will install arsenic filtration plants in areas with high arsenic levels. He had also assured the court that the agency will commission another study to measure arsenic levels.

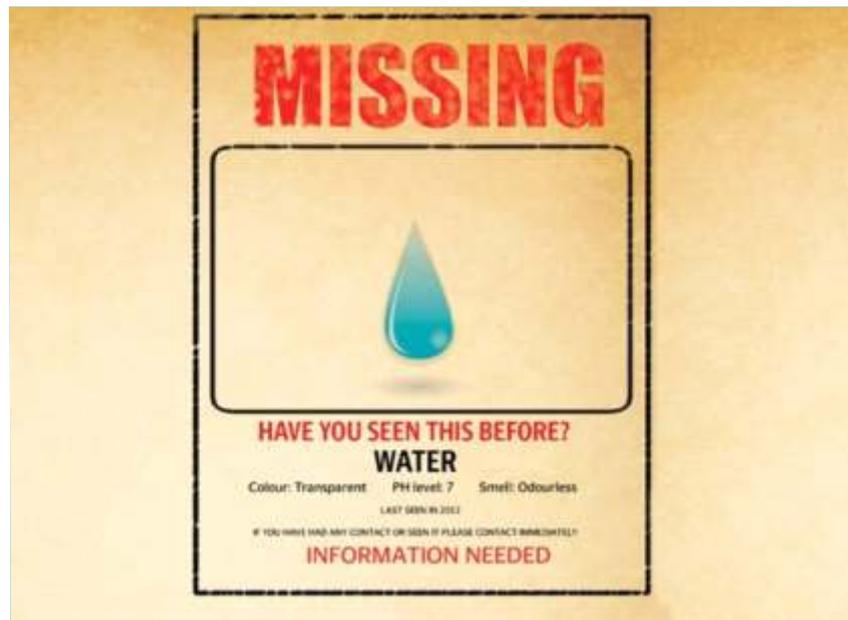
A fresh study was commissioned in early 2011. It was finished in December the same year.

The agency has not shared the findings with the media or the public.

A senior WASA officer, who spoke to The Tribune on condition anonymity, said arsenic concentrations well above the safe level had been detected in groundwater in the entire upper Indus plain.

The official said arsenic had been first detected in Lahore's groundwater seven years ago. He said although in many countries arsenic among other heavy metal seep into the ground as a result of using sewage water contaminated with industrial effluents in raising crops, that is not the case in Pakistan.

"It is present in the aquifer and has no relation to the depth from where the water is lifted.



WASA is going to install 50 arsenic removal plants across the city in collaboration with the KSB Pumps. Photo: FILE.

It has been detected in two cusec tube wells setting water from depth of 650 feet as well as four cusec tube wells drilling it from 750 feet."

Wasa Managing Director Chaudhry Abdullah made himself unavailable for comment.

Asked why the results of the study had not been made public Iqtidar Shah, the agency's deputy managing director (operations and management), replied "There is no need [to do that]."

He said the report had been shared with the Planning and Development Department and the Finance Department so that sites could be chosen for the installing of arsenic removing plants.

"There is no need for an awareness campaign because

the water at the consumer end is diluted compared with the water at the source," Shah said of the areas with high levels of arsenic.

Asked why the agency had not made the public aware seven years ago that high levels of arsenic had been detected in Lahore's water supply, he said, "We have better things to do. This was never an emergency."

### **50 arsenic removal plants being installed**

The Water and Sanitation Agency (Wasa) is going to install 50 arsenic removal plants across the city in collaboration with the KSB Pumps. The agency started the installation in June.

Each of the plants purifies up to 4,000 litres of water per hour and has a storage capacity of 400 litres.

Muhammad Tayyab, a KSB Pumps employee, told The Tribune that 46 plants had been installed, most of them in central Lahore.

Tayyab said areas with the highest levels of arsenic had gotten the plants first. “The residents of the area have been informed about the problem and most of them now fetch water from the plant,” he said.

Sumaira, a resident of Faizabad Bazaar, said that her family did not receive any such information.

The plants, he said, remove arsenic through GFH (granular ferric hydroxide) adsorption technology. The water is then passed through an ultra filtration membrane to remove microbes.

Tayyab said power outages caused plants to shut down for up to two hours or more. Though power outages do not

affect the purification process, in some places the plants run out of water if electricity is out for too long.

Naveed Mazhar, a deputy director at Wasa, said the Planning and Development Department had been asked to approve another Rs8 million, so that 42 more plants could be installed.

Sajjad Haydar, a professor at the Institute of Environmental Engineering and Research at UET, said that though GFH was an effective method for purifying water, the absorption capacity of the membrane decreases with time. Haydar said the membrane will need to be replaced after every three years. The purified water also needs to be regularly tested to ascertain when it is time to replace the membrane. Wasa says they have taken samples once since the installation of the plants.

### Arsenic: a carcinogen

A 1999 study by the National Academy of Sciences in the US had declared arsenic as a carcinogen and a major cause of cancers of the bladder, lung and skin. It can also cause kidney and liver cancer. The study found that arsenic harms the central and peripheral nervous systems, the heart and blood vessels and causes skin diseases. It can also cause birth defects and reproductive problems.

According to the WHO website, drinking arsenic-rich water over a long period (5 to 20 years) can cause arsenicosis (arsenic poisoning). But according to the WHO, “absorption of arsenic through the skin is minimal and thus hand-washing, bathing, laundry, etc. with water containing arsenic do not pose human health risks.”

### How clean is your water?

#### 15 areas with arsenic levels above 50 ppb

Ghaziabad Main Bazaar (166.9)	Paracha Colony (103.6)	Majeed Park (92.9)
Yousaf Park (Farkhabad) (88.6)	National Town Raj Garh – 84.1	Jahangir Road, Mughalpura (82.8)
Corporation Colony (Ravi Road) – 79.7	Iqbal Park No 2 (69.3)	F& V market (68.9)
Raffiabad Darbar (66.6)	Block 6-A, Township (67.2)	Pattiala Ground, Anarkali (67)
Aziz Colony (62.6)	Kohlu Ghar New (62.5)	

#### 47 areas containing arsenic levels between 40 ppb and 50 ppb

##### Ganj Baksh Town

Shafiqabad (49.8)	DCO's Office (46.5)	Krishan Nagar
Nonarian (43.2),	Karim Block (40.4)	Masoom Ganj (40.4)

<b>Anarkali</b>	<b>Baghbanpura</b>	Mominpura (45.7)
Nasser Bagh (47.6)	Landa Bazaar (41.1)	Cattle Park (49.5)
<b>Near Shimla Pahari</b>	Royal Park (43.7)	Nisar Scheme (43.2)
Ghulam Muhd Bhatti Colony (40)	Press Club (40.5)	<b>Nishtar Town</b>
Abu Bakr Block (45.7)	<b>Garden Town</b>	M-Block (44.7)
Bhatta no1 (43.5)	Ahmad Block (45.4)	In Green Town:
<b>Ravi Town</b>	<b>Township</b>	II-B-1, Nishat Road (49.5)
Taxali Gate (44.1)	Chomala (43)	Mori Gate (44)
Iqbal Park No3 (42.3)	Shahi Qila (46.2)	Ali Park (49.2)
Fish Market (42.5)	Timber Market (40.7)	Lorry Ada (46.9)
Qazi Parkn(42.1)	<b>Shahdhara</b>	Saeed Park (48.8)
Latif Chowk (40.6)	Farkhabad:	Begum Kot New (41.5)
<b>Data Nagar</b>	Faisal Park (41.6)	Ghulam Hayat Park (41.1)
H-2 Block (48.7)	Khokhar Road (27.8)	<b>Sabzazar</b>
Wahdat Road (48.5)	<b>Ichhra</b>	Rahat Park (49.5)
Mustafabad near Shaukat Centre(40.2)	Campus View Town (47.8)	Mustafabad Town (44.6)
Kotli Peer Abdul Rehman (40.4)	L-Block(45.9)	<b>Mughalpura</b>
	Sehar Road (49.2)	Jamilabad (42.5)

A copy of the report can be viewed at <http://www.scribd.com/doc/108543965/Drinking-water-in-130-areas-of-Lahore-unsafe-for-consumption>

## Water, sanitation and hygiene are vital to all development outcomes



### Education

Children can go to school instead of collecting water, fewer girls drop out, educational outcomes improve.



### Health

Fewer children die, people are healthier and less vulnerable to disease, health facilities are safer and less crowded.



### Gender equality

Women are free to work and grow food rather than collecting water, and are less vulnerable to abuse and violence.



### Growth and employment

People are healthier and more productive, workplaces are safer, businesses can flourish.



### Environmental sustainability

Natural resources are better shared and protected for future generations.

Go to [www.wateraid.org](http://www.wateraid.org) or search #Everyone2030

# Rising water insecurities can propel conflicts in future: experts

Sonia malik

March 22, 2014

## Arsenic levels exceed Pakistan Standards and Quality Control Authority safe levels in 15 areas.

### Islamabad

There is a need for conservation and proper management of water resources in the country as rising water insecurities can propel conflicts in the future. The concern was shared by a number of experts and community members at a seminar 'Water for Future: Perspectives from Pakistan' organised on Friday to mark the World Water Day 2014. The speakers highlighted that there is no policy framework for water management in Pakistan. "Water variability is also high in the country; certain areas have higher availability of water resources while others continue to suffer from severe droughts. Policy frameworks should be developed at the provincial level, and should be consolidated into a

comprehensive framework for the country," said Executive Director of Strengthening Participatory Organisation (SPO) Naseer Memon. He said that equity and access to clean water and sanitation have become major issues for a number of local communities in the country.

Executive Director of Sustainable Development Policy Institute (SDPI) Abid Suleri said stressed the need for greater political wisdom to address policy gaps in water related issues. He said that the media and the civil society can play a key role in sensitizing policy-makers over crucial issues.

Shahid Ahmed from the International Union for Conservation of Nature (IUCN), said unless the sewage system is not properly managed in Pakistan, water related issues cannot be resolved. "Pakistan also lacks severely in water-borne transportation. The biogas produced from sewage can also be used as fuel for vehicles," he said.

He shared that water has become an increasingly scarce resource and as energy demand grows, conflicts over

water will increase.

"Competition over water resources is already on a rise among municipalities, farmers, industrial and power suppliers, as evident in many parts of the world including Pakistan."

Qamar Zaman, Senior Advisor Climate Change LEAD Pakistan, said climate change is a priority agenda globally.

"However, the issue is not given as much importance in Pakistan.

Pakistan's vulnerability to climate change has also been on the rise over the last few years, as evident by erratic movements in the frequency of rainfall. Pakistan's climate change policy should focus on adoption of frameworks being developed globally," he recommended.

Dr Fatah Murree, project director of Sindh Water Sector Improvement Project, said at micro level, we have water and sanitation issue, which should be address in local government law. He said that drinking water and health issue should also be resolved. Community from all over the country also shared their problems related to water shortage, floods and health

issues due to industrial wastage dumping in fresh water.

Shakeel Ahmed, head of Climate Change Study Centre, SDPI observed that water, energy and food securities are interdependent and a policy shift in one of the streams would affect others. There is

therefore a need to develop a policy framework that deals with all three of these issues in a holistic manner.

Muhammad Saleem Malik from the Pakistan Agricultural Research Council presented case studies on the use of alternative energy tools, including solar powered

pumps, for irrigation purposes in Pakistan. The event was organised by leading development sectors organisations including Oxfam, SPO, SDPI, IUCN, PARC, Indus Consortium and Mobilink.



Photo credit: Mustafah AbdulAziz

Women from the village work together to pull water up from the dug well Bewatoo Tharparkar Sindh



Village children collecting dirty water from an unprotected water source, in this fishing community there is no school or water and sanitation facilities available Thatta, Sindh.

Photo credits: Mustatah AbdulAziz



# SANITATION

**Water every year: KWI**

**Eliminated**



# 48 million Pakistanis have no loo

Amar Guriro

November 18, 2013

**KARACHI: On November 19 (tomorrow) as nations around the globe observe United Nations World Toilet Day to highlight the importance of toilets and sanitation; around 48 million Pakistanis will be defecating under the open skies.**

Pakistan, despite being a nuclear power, is still unable to provide basic sanitation to majority of the people.

A recent report issued by Pakistan Chapter of UK-based charity – WaterAid-Pakistan revealed that 97,900 people die annually in Pakistan due to unsafe water and improper sanitation.

Another joint report by World Health Organisation (WHO) and UNICEF stated that 54,000 children under the age of five die from diarrhoea every year in Pakistan. “By the year 2015,

under the Millennium Development Goal (MDG), Pakistan is committed to supply 93 percent and 64 percent of its population with safe water and adequate sanitation, respectively. As yet, only 45 percent people have access to improved sanitation facilities in Pakistan and at the current rate, the water target will be missed at least by seven years [by 2022] and the sanitation target by 13 years [by 2028],” it has been claimed in the report.

If the Pakistani government does not take urgent action, the country will fail to meet the MDG pledge it made to halve the proportion of people without sanitation by 2015, and this will have massive consequences for child mortality.

Not this alone, but another study – the Joint Monitoring Programme of WHO and UNICEF states that 71 percent of Pakistan's rural population does not have the facilities of improved sanitation, and 40 percent of the rural population resort to open defecation.

According to WaterAid, the poorest people in Pakistan, like other South Asian nations are being left behind and are 13 times less likely to have access to sanitation than the

rich.

“Pakistan has the worst sanitary conditions in South Asia and its total economic impact amounts to a loss of Rs 343.7 billion, which is equivalent to around 3.9 percent of Pakistan's gross domestic product (GDP),” reveals Media Scrap Book, a collection of around 100 selected stories published in print and electronic media, which is compiled by the WashMedia-South Asia – a representative body of journalists from Pakistan, Bangladesh, India, Nepal, and Sri Lanka working on water, sanitation and hygiene.

The scrap book further revealed that 52,000 children die annually due to diarrhoea in Pakistan and 14 million people still do not have access to safe drinking water and over 90 million are without improved sanitation. “48 million people – nearly one fourth of the total population – in Pakistan practice open defecation,” the book mentions.

Karachi, the largest city of the country and the commercial hub, suffers a lot due to the lack of proper inadequate sanitation. The official data reveals that the 42 percent of the city's total population live

in 539 slums, which have no access to a proper toilet and appropriate sanitation system.

One of the most alarming

consequences of poor sanitation is that, it is the biggest killer of children under the age of five around the

world. Some 9.7 million children die before reaching the age of five, 2.4 million of them due to poor sanitation.

## Health and sanitation: Sindh leads with highest diarrhoea cases, child mortality

Amar Guriro

January 13, 2013

KARACHI: Despite being in power for last six years, the Pakistan People's Party (PPP) in Sindh couldn't improve the health infrastructure in terms of clean water supply to the province. On the one hand contaminated water was supplied by state-run agencies in cities and towns of the province, a lack of proper sanitation also caused the province to suffer with waterborne diseases, especially diarrhoea.

According to the official record of Sindh Health Department, in 2013, 146,320 cases of diarrhoea were reported in the public sector hospitals of Sindh, whereas the number of people killed was 13 in the province.

Majority of these cases were reported in Hyderabad, Mirpurkhas and Khairpur districts. It is worth mentioning that Khairpur is the hometown of Sindh Chief Minister Qaim Ali Shah, who is enjoying his second

consecutive tenure.

Though Karachi, the provincial capital is the country's largest city of Pakistan in terms of population, fewer cases were detected from here. This was probably because of better water filtration and sanitation system.

"Most of the cases of diarrhoea and other waterborne diseases are being reported during summer and there are less cases in Karachi, as the city has much better sewerage system," said Dr Masood Solangi, Additional Secretary Sindh Health Department. "The Karachi Water and Sewerage Board (KWSB) ensures chlorination, and to some extent, proper water filtration; however in other districts, the drinking water quality is not better causing a higher number of waterborne diseases."

Moving on, Hyderabad, the second biggest city of Sindh, and Mirpurkhas, also a major city of the province, residents

of both the cities were being supplied unfiltered, raw water, causing several problems and extra load on Sindh Health Department's annual budget. "Last year, after the increased number of diarrhoea cases, a team of our department visited the filter plant in Hyderabad; I was part of the team, that discovered Hyderabad filter plant has been out of order for many years and the citizens are being supplied unfiltered raw water, without even chlorination. Spread of diarrhoea in such conditions is not unlikely," he said. Speaking about water sampling, he said the team collected water samples from Hyderabad and the laboratory results clearly stated that it was not fit for human consumption.

"Everywhere in the world, there is a rule that on one side of the road there would be water supply lines, whereas on the other side, the sewerage lines. In Sindh, we observed

that in almost every city both lines go together due to which sewerage water mixes up with drinking water, causing waterborne diseases.

Moreover, because of the lack of filter plants, the situation is worsening with the passage of time," added Dr Solangi.

On a query, Dr Solangi said the Health Department only treats the patients but it cannot fix water filtration. "It is primarily the duty of the district and local governments to manage water filtration and construct a proper sanitation system in the cities, towns and union councils, otherwise there are no chances for betterment," he said.

Many international studies suggest that besides contaminated drinking water, inadequate sanitation is the major cause of diarrhoea in the world. According to United Nations about 2.5 billion people do not have an access to adequate sanitation and about 1 billion people practice open defecation, which contributes to many diseases. Each year, more than 800,000 children under the age of five die from diarrhoea, many due to poor sanitation.

In Pakistan, diarrhoea is the leading cause of infant and child deaths. Unfortunately, Sindh leads with both the highest number of cases of diarrhoea as well as the highest number of deaths of under five (101 per 1,000), according to the study conducted by Aga Khan

University Hospital.

Ghulam Mustafa Zaor, General Manager Infrastructure Development & WASH at the Health And Nutrition Development Society (HANDS) said extensive sanitation services were largely non-existent in Pakistan.

Extensive sanitation services reduce chances of contamination. However, the situation in Pakistan is a source of serious environmental damage as rivers become highly contaminated effecting a large population of the country.

"We all pay regularly and dearly due to this situation; not only human beings but the fisheries and marine wildlife is also struggling to survive as ground-water becomes polluted," he said, adding that the lack of political will was the foremost reason behind the scenario.

"In Sindh, people have extremely low access to basic WASH services, whereas the natural habitat of the region is under grave threat. The majority of the population in rural areas practice open defecation as the principal means of sanitation. Women and girls continue to suffer the most from this practice as their dignity and privacy are compromised. We can easily gauge the interest level of the public sector toward the issue of sanitation that there is no sewage treatment in Sindh's secondary towns," he said. Zaor said HANDS had

conducted a study of all district headquarters of Sindh, a study which was partly designed to look into the prevailing urban situation in Sindh Districts Headquarters in the light of water and sanitation rights advocated by the UN, Pakistan's Constitution and the Millennium Development Goals.

"Although we are compiling the data at this stage but the initial analysis shows that large quantities of wastewater were generated by domestic users in big cities and towns. Other very significant contributors were commercial and industrial units. Wastewater includes household wastewater, wastewater from offices, hotels, hospitals, institutions, commercial establishments and, industrial units," he said, adding that during rainy seasons, large quantities of rainwater become available; these although categorised as storm water; also fall within the ambit of wastewater.

Therefore, in many towns and cities of Sindh same drains or sewers were used both for domestic, commercial and industrial effluent and, rain or storm water as well.

"SWM systems are generally non-existent or rudimentary in urban centres. About 37 percent of the population is served by garbage collection systems. No sanitary landfills exist. Solid waste collected is disposed by burning or illegal

dumping into open spaces or the drainage channels," he concluded. One of the most alarming

consequences of poor sanitation is that, it is the biggest killer of children under the age of five around the

world. Some 9.7 million children die before reaching the age of five, 2.4 million of them due to poor sanitation.

# Where does all the water go?

Kalbe Ali | M. Zaidi | Tanveer Shahzad

JULY 13, 2014

1. Natural streams flowing down the Margalla Hills into Islamabad territory look fresh and clean before they enter human settlements, like this one in Noorpur Shahan, which sits in the foothills. In some serene streams one can even see small fish swimming.



2. When the once fresh waterway emerges from Bari Imam, it has taken the look of an open drain, carrying dark coloured sludge.



3. This photograph shows the dry bed of one of the storm water drains behind the Prime Minister's House, situated on a mound on the edge of Noorpur Shahan. Domestic waste of the houses of ordinary people dumped in the dry ground turns it toxic and, when the rains come, it flows downstream.

4. In contrast, the water of this stream flowing through Sector G-6, is found clear even after it had travelled upto Khayaban-i-Suhrawardy. The reason is that a sewage trunk line carries all the domestic outflow of the densely populated area. Stream water is clean enough for the poor car washer seen in the photograph to earn his living.



5. Although the water of the stream passing through F-7 Markaz also is similarly clear but solid waste on its banks make it look dirty.



7. This natural stream was small but clean where it entered Sector F-6. But it grew in size, and its water turned murky and smelly, after skirting a katchi abadi in the sector.



6. Some irregular settlements along the natural streams, like this one in Sector F-7, have made it impossible for the CDA to repair or replace broken sewage trunk lines. All sewage trunk lines were laid along the natural streams when the new capital was built in the 1960s.



8. After decades of disregard for conserving nature, many of the once joyful streams have turned into rivers of garbage and stinking sludge as this ugly site at the Zero Point shows.

# World toilet day: Nowhere to go

Maha Mussadaq / Ali Usman / Ali Ousat / Umer Farooq / Kiran Shahid

November 19, 2013

## ISLAMABAD / LAHORE / KARACHI / PESHAWAR: Capital dump

The light bulb flickered weakly at a public toilet in a local market. The toilet was cleaned that morning but the nauseating blend of chlorine bleach and clogged pipelines warned you that this toilet is unsafe to use.

In the capital, the condition of public toilet facilities remains bleak. “Most of the toilets don't have water. No one files a complaint about their condition,” said Ali Mustafa, a tailor whose shop neighbours the toilet. “Drainage in Islamabad is an issue but I think the administration will wait for a disaster to happen before they really take some action.”

In a city where an estimated one million residents live, mushrooming new sectors are facilitating influx of population for which facilities available even now might not be sufficient. In this sprawling city, the total number of public toilets is 93. Of these, sanitary



While rural communities across the country continue to suffer, the lack of public toilet facilities and ensuing sanitation problems plague urban centres as well. DESIGN: KIRAN SHAHID

service for 61 is carried out through private contractors. Some 32 are being renovated and a proposal to construct 30 new restrooms is under consideration.

Speaking to *The Express Tribune* on condition of anonymity, a CDA official said that a complaint cell dealing with public toilets has been established in each sector. It

works 24 hours a day. On an average, 80 complaints regarding drainage and sanitation are being addressed every day. But what remains a challenge for the Capital Administration is where to dump the waste.

### What about the women?

When it comes to public restrooms, Lahore, the city with the history, does not cater too well to the bustling crowds. The most visited sites, including Lari Adda, Railway Station, Data Saaheb's shrine, and the Walled City, direly lack toilet facilities.

Iftikhar Mubarik, a human rights activist working on

The lack of public toilet facilities and ensuing sanitation problems plague urban centres as well.

issues of cleanliness, said these poor conditions must be urgently discussed from a gender perspective.

“You can observe men attending to calls of nature in public, but the women just can't do that,” he pointed out. “Some contractors run private toilets, charging Rs10 to Rs20, but they are in bad condition. Most women don't use them. The government must take action to address this.”

Data obtained by Central District Government Lahore (CDGL) revealed that there are less than 40 functional public toilets in a city that boasts a population of around 10 million.

According to Dr Mamoodul Hasan, a health consultant, the deleterious health effects should be underscored.

“If you pass by these busy spots, you are hit by foul smell,” he said. “The current condition is terrible, health-wise. Had the sanitation system been maintained properly, several stomach and skin diseases could have been prevented.”

Another CDGL official claimed that the Parks and Horticulture Authority (PHA) is responsible for providing public toilets but the facility remains undelivered. However, PHA spokesman Javaid Shaida refuted this, saying the authority maintains public toilets at its parks, but is not responsible for facilities in

other parts of the city.

### **Fighting for a basic right**

“Dirt on the floor, no water in the taps and non-functioning flushes make the few available public toilets a last option,” said Agha Syed Atta-u-Allah Shah, an activist from the NGO Raah-e-Raast.

**Under the sky**  
**43**  
**million people**  
**defecate in the**  
**open in Pakistan,**  
**according to**  
**unicef**

Availability of toilets must be ensured at every public place as it is a biological need for all human beings and should be declared a 'fundamental human right', said Shah in his petition filed with the Sindh High Court. In his petition Shah has stated that due to unavailability of toilets in public places, people are forced to relieve themselves in isolated parks, footpaths and under the trees.

“We have pinpointed 2,200 places for the public toilets across the city of Karachi. Such places include 182 graveyards, 33 markets, 42 thoroughfares and 77 parks,” he added. “Karachi Metropolitan Corporation and Cantonment boards have

public toilets at only 13 places; of these, only two – Karachi Zoo and Bin Qasim Park at Clifton – has toilets specifically for women.”

“I usually rush to nearby private properties to use the toilet. Sometimes I face sexual harassment when I need to use a public toilet” said a female activist.

Four months ago, the city administration had come up with the idea to establish 200 toilets at different locations. The idea has been shelved since then, officials said.

Commissioner of Karachi said that public toilets would be constructed soon. “We realise the need for public toilets in a city like Karachi. The project to establish public toilets would not be given up,” the commissioner promised on the World Toilet Day.

### **Students at a standstill**

Toilets in government-run schools across Peshawar are in too bad a shape.

For instance, Government Higher Secondary School No 3 students complain that most of the restrooms are perpetually blocked. The few that work are in bad shape too. They also have to use the private facilities in Khyber Bazaar.

“Toilets in the schools are too few and very filthy,” said an eighth-grader. “The least our government could do is to provide sufficient funds to keep the existing ones

usable.”

Residents in the city believe that toilet facilities maintained by private organisations, institutions and schools are far superior to the public ones. Most public toilets scattered in

different parts of the provincial capital charge money for use. They are in comparatively good condition but only few can use them.

“Yes, we expect payment for using of toilets,” said the

owner of a private toilet who charges Rs10 for a single use. “A small chunk of that is redirected to keep the toilet facilities clean.”

## World toilet day: Nowhere to go

MUHAMMAD RAMZAN CHANDIO

March 21, 2013



KARACHI: “Just \$0.53 has been received in water and sanitation aid for each person in Pakistan on average for the years 2010-2012”, unveiled a startling new report, Bridging the Divide, released by the international development charity WaterAid on the eve of World Water Day (22 March 2014) today on Friday. This is despite, 15.1 million

people in Pakistan (8% of the population) not having access to clean drinking water and 92.8 million (53% of the population) going without basic access to sanitation. The report argues that international water and sanitation aid is failing to reach those in greatest need, exacerbating global inequalities rather than

reducing them. Overall, Pakistan has received on average \$94.15 million per year in water and sanitation aid, for the years 2010-2012. While Mauritius, which has a smaller population of just 1.3 million, received a comparable \$73.8 million on average over this period, even though its rates of access to basic sanitation is over 90% and

access to clean drinking water is above 99%.

Mr. Siddiq Ahmed Khan, Country Representative, WaterAid in Pakistan said:

“The stated aim of international aid is to help the world's poor break out of poverty and to live healthy and productive lives – and to positively address our fundamentally unequal world. With over 40,000 children under the age of five dying every year in Pakistan because of a lack of access to clean drinking water, basic sanitation and hygiene why is not more water and sanitation aid being targeted at those who are desperately waiting for these essential services in our country?”

Over 400 people take part in World Walks for Water and Sanitation events in Lahore Pakistan on World Water day in solidarity with the people who are still forced to walk for water. During the side events with Legislators where 20 Parliamentarian of Punjab Assembly participated, they also vow to work to end water poverty and also supported in demanding universal and sustainable access to water and sanitation.

Despite globally 1 in 10 people lacking access to clean drinking water, and more than 1 in 3 without access to basic sanitation, most donors still allocate relatively low priority to aid spending to tackle this crisis, accounting in 2012 for

just 6% of overall donor aid.

In addition, much of the promised aid fails to be delivered. Over the past decade donors have failed – for reasons unclear – to pass on a third of the money they pledged to spend on water and sanitation aid, or US\$27.6 billion out of the US\$81.2 billion since 2002 that has been committed.

The WaterAid report comes ahead of crucial discussions at the World Bank in Washington in April (10-11) where the Sanitation and Water for All partnership will hold its third High-Level Meeting. Ministers from Pakistan alongside other developing and donor country Ministers will meet to discuss the water and sanitation crisis.

WaterAid in Pakistan is calling for a dedicated goal on universal access to water and sanitation, as part of the new global post-2015 Sustainable Development Goals so that everyone, everywhere has access to these life giving necessities no later than 2030.

Meanwhile, “*Bridging the Divide-using aid flows to tackle extremes in global water and sanitation scarcity*”, the analysis highlights six countries that fall into all six categories, which includes DR Congo, Ethiopia, Madagascar, Mozambique, Niger and Tanzania. Seven countries are

**Message of Ban-Ki-moon on World Water Day:** This year's observance of World Water Day focuses on the links between water and energy as both are critical for eradicating poverty. And they interact with each other in ways that can help – or hinder – our efforts to build stable societies and lives of dignity for all.

United Nations Secretary General, Ban-Ki-moon in his message on World Water Day 2014, said that Climate change driven in great part by the unsustainable use of energy will exacerbate water stress and scarcity in many regions. Efforts to provide universal access to water and energy will be undermined if the current warming trend continues.

The many strong links between water and energy demand coherent, integrated policies and innovative strategies. Water must be used -- and electricity must be generated and distributed -- equitably and efficiently, so all users get a fair share.

These are the goals of the ongoing work of UN-Water and of the Sustainable Energy for All initiative. These issues are also crucially important elements in our discussions on the post-2015 development agenda.

On World Water Day, let us pledge to develop the policies needed to ensure that sustainable water and energy are secured for the many and not just the few.

in five of the categories: Cote d'Ivoire, Kenya, Mali, Nigeria, Sudan, Uganda and India, and a further ten are in four of the six categories of need: Afghanistan, Bangladesh, Burkina Faso, Cameroon, Chad, China, Indonesia, Pakistan, Somalia and Yemen.

The report adds: "Safe drinking water and sanitation are human rights and critical determinants of development prospects, yet they remain distant, unattainable luxuries for hundreds of millions of the world's poorest citizens. Although World Water Day 2014 sees over six billion people enjoying daily access to improved drinking water and the 2015 Millennium Development Goal (MDG) target for water achieved ahead of schedule, the overall picture is one of a major divide: abundance, even excess for some, yet scarcity or complete absence of safe water for others".

Global report stated that the inequality of access is one of the enduring characteristics of the sector. A typical person among the 768 million trapped in water poverty in developing countries is forced to rely on five litres of unsafe water a day, yet her counterpart in a high-income European country is likely to consume up to 30 times that amount of clean, safe water.

This in turn leads to wide differences in the prevalence of water-related disease: diarrhoea is the second largest cause of child mortality in developing countries, responsible for over 800,000 deaths a year, yet it represents minimal risk and threat to children in high-income countries.

Inequality is also a strong feature within countries; in Southern Asia for example, only 7% of the lowest income section of the population has adequate sanitation, compared with 98% access among the wealthiest group, with the poorest quintile barely benefiting from progress.

India, the legacy of discrimination and funding shortages has left scheduled castes and tribes disproportionately affected. In Nepal, certain remote villages in the Himalayan region receive no funding for water and sanitation from the government, donors or non-governmental organisations. There is a major gender divide too. Women and girls bear the main responsibility for collecting water in Sub-Saharan Africa, shouldering over 70% of the burden.

The global report also carries recommendations, which include:

Commit to achieving universal access to drinking water,

sanitation and hygiene by 2030, with a dedicated goal in the post-2015 development framework: Water, sanitation and hygiene are essential for health, welfare and livelihoods. Yet too many people do not have these basic human rights. After 2015, we must do better, and the international community should commit to a dedicated goal on universal access to water and sanitation in the post-2015 development framework.

Target water and sanitation aid to regions, countries, districts and communities on the basis of poverty and need:

Inequality of access is one of the enduring characteristics of the sector. Sending high proportions of water and sanitation aid to middle income countries where access levels are already high is a sub-optimal use of existing resources. Donors can improve the impact of their aid by ensuring that the countries and people most in need are prioritised.

Address the extreme inequalities in the sector, by making equity considerations central to resource allocations:

The burden of dirty water and inadequate sanitation falls disproportionately on women and children, those on low income, and marginalised

and vulnerable groups, such as the very young or old, or those living with disabilities. National governments should tackle this by placing equity considerations at the heart of resource allocations and service delivery.

Tackle the non-functionality issues faced by the sector by investing in and building systems that can deliver long term sustainability:

Non-functionality of water points and infrastructure falling into disrepair are major barriers to ensuring the sustainability of services. This contributes to inequalities in access, and needs to be addressed as part of a comprehensive approach to service delivery by governments and utilities. The US Government has estimated that US\$150 per person is needed to ensure sustainable access to safe drinking water, sanitation and hygiene. This

can serve as an important benchmark for sustainability in the sector.

Double global aid flows to water, sanitation and hygiene to release an additional US\$10 billion per year, combined with technical support to address financial absorption constraints:

Aid flows at \$10 billion a year for water and sanitation play a vital role in the overall financing framework, but are nevertheless insufficient. The 2015 sanitation MDG target will almost certainly be missed by a large margin. Donors should respond to insufficient progress on sanitation by doubling aid from current levels.

Mobilise substantial additional development finance from a broad base of resources within a fair, open and accountable policy framework:

Achieving universal access to

water, sanitation and hygiene will require substantial mobilisation of funds from a broad base and within a well-regulated, fair, open and accountable policy framework.

It will also require new sources of financing, including financial transaction and carbon taxes to complement aid flows. An important lesson from the MDG framework is that many financing promises made by governments have not been kept, leading to uneven progress across the MDGs, across regions and countries. Successful mobilisation of resources for sustainable development and the SDGs will require the international community to commit to obligatory financing mechanisms, and to end harmful practices such as allowing tax havens to continue to flourish.

# Experts link poor sanitation to poverty

MUHAMMAD RAMZAN CHANDIO

July 2, 2013

KARACHI - Experts at a workshop, co-hosted by the United Nations Children's Fund (Unicef) and the Water and Sanitation Programme (WSP) of the World Bank, said

poor sanitation, hygiene and lack of safe drinking water trigger a downward slide into poverty in the country. A two-day national workshop was inaugurated on Monday



adequate sanitation facilities in the country, the workshop brings together all stakeholders to assess the current situation about access to sanitation and to deliberate upon the course of action up to 2015 and beyond.

The workshop provides a platform to the government, semi-government and non-government partners to share experiences in developing and implementing various model programmes under the Pakistan Approach to Total Sanitation (PATS). The Workshop will also deliberate upon the agendas for the forthcoming major events on sanitation including the South Asian Conference on Sanitation (SACOSAN-V) and Pakistan Conference on Sanitation (PACOSAN II).

"Poor sanitation, hygiene and lack of safe drinking water trigger a downward slide into poverty," said Maryam Aurangzeb, Member of the National Assembly and an environmentalist, who was the chief guest on the occasion. "Women and adolescent girls are disproportionately affected by lack of access to adequate

sanitation. While efforts made by UNICEF, WSP and other partners in the sanitation sector are highly appreciable, I urge all partners to join hands and strive harder towards achieving the sanitation related MDGs in Pakistan."

During the course of the workshop, UNICEF will share the findings and evaluations of a large scale sanitation programme concluded by the organisation under PATS and also launch the findings of a base line study from its ongoing programme, 'Sanitation Programme at Scale in Pakistan' (SPSP). UNICEF calls upon the Government of Pakistan, bilateral and multilateral donors to make further commitments to the water and sanitation sector," said Dan Rohrmann, UNICEF Representative in Pakistan. "In addition to necessary investments, coordination and harmonization is crucial both for sustainable development and humanitarian response. Improved sanitation for all in Pakistan is achievable. Let us make it a reality."

In collaboration with UNICEF, WSP has supported the provincial governments in designing large scale sanitation programmes in Pakistan. It has also contributed significantly to institutional capacity development of water and sanitation service providers in urban areas of the country. Inadequate sanitation causes Pakistan economic losses totaling US\$ 5.7 billion which is equivalent to PKR 343.7 billion each year," said Masroor Ahmed, Senior Water and Sanitation Specialist WSP. "This is equivalent to 3.9 per cent of the country's GDP as highlighted in a WSP report, The Economic Impacts of Inadequate Sanitation in Pakistan by the Water and Sanitation Program. All stakeholders need to work together to scale up the pilot programmes and translate the sanitation policy principles into action for achieving the sanitation related MDG." On the second and the last day, participants of the Workshop will put together recommendations for the future course of action.



**WaterAid calls for a dedicated Sustainable Development Goal on water and sanitation. Basic water, sanitation and hygiene for all by 2030 are essential to save lives and improve child health.**

Sources: WHO/UNICEF joint monitoring programme (JMP) Report 2014 update; prof Black R E MD et al (2014) Global, regional, and national cases of child mortality in 2000-13 with projection to inform post-2015 priorities: an update systematic analysis, The Lancet, early online publication, 1 October 2014, doi:10.1016/S0140-6736(14)61698. 2013 data. Children = under fives

# Pakistan among ten states in need of proper water, sanitation facilities

MUHAMMAD RAMZAN CHANDIO

July 2, 2013

## Islamabad

According to analysis of countries in need of water and sanitation most in the world, Pakistan is among ten countries that fall for four of the six categories of need that were used as an indicator by the water and sanitation experts.

The analysis was shared in a briefing paper 'Bridging the Divide' published by WaterAid on the occasion of World Water Day falling on March 22. The briefing paper identifies major inequalities that persist in the water and sanitation sector in the world today. It says that currently, there are 768 million people trapped in water poverty in developing countries.

The analysis of countries in need of water and sanitation most is based on six different categories including countries with the largest number of child diarrhoeal deaths, countries with the highest percentage and highest numbers without water and sanitation, and countries with the largest number of people defined by the Multidimensional Poverty Index as poor and deprived in

water and sanitation.

Six countries that fall into all six categories of need are DR Congo, Ethiopia, Madagascar, Mozambique, Niger and Tanzania. Seven countries are in five of the six categories of need including Cote d'Ivoire, Kenya, Mali, Nigeria, Sudan, Uganda and India whereas ten countries including Afghanistan, Bangladesh, Burkina Faso, Cameroon, Chad, China, Pakistan, Indonesia, Somalia and Yemen are among the countries that qualify for four among total six categories of need.

The briefing paper shows that the greatest volume of aid by donors rarely goes to the places where there is the greatest need. It mentions that Jordan, Mauritius and Montenegro all have access levels above 90 per cent for both water and sanitation, yet they receive US\$855, US\$588 and US\$256 respectively each year for each person without these essential services. Conversely, many least developed countries receive minimal amounts of support, despite their fragility and high levels of need. Madagascar

and Somalia receive less than US\$1 each year for each person without water or sanitation. The paper says that this imbalance exacerbates existing inequalities rather than reducing them.

It also mentions that over the past decade, donors have promised substantial amounts of aid that have not materialised. The briefing paper analyses the countries in which water and sanitation poverty is at its highest, and shows that, as international governments turn their attention to ending extreme poverty by 2030, there is a need to address significant fault lines in the way global aid to water and sanitation is targeted and delivered. The data indicate that aid could be substantially more effective in tackling water and sanitation poverty if it is directed more on the basis of need. It points out that issues that impact on decision-making for the targeting of aid mainly include geographical or strategic interests, historical links with former colonies, and domestic policy reasons.

The briefing regrets that safe drinking water and sanitation are human rights and critical determinants of development prospects, yet they remain distant, unattainable luxuries for hundreds of millions of the world's poorest citizens.

“Although World Water Day 2014 sees over six billion people enjoying daily access to improved drinking water and the 2015 Millennium Development Goal (MDG) target for water achieved ahead of schedule, the overall picture is one of a major divide: abundance, even excess for some, yet scarcity or complete absence of safe water for others,” it states.

Inequality of access is one of the enduring characteristics of the sector. A typical person among the 768 million trapped in water poverty in developing countries is forced to rely on five litres of unsafe water a day, yet her counterpart in a high-income

European country is likely to consume up to 30 times that amount of clean, safe water. This in turn leads to wide differences in the prevalence of water-related disease like diarrhoea. It is the second largest cause of child mortality in developing countries, responsible for over 800,000 deaths a year, yet it represents minimal risk and threat to children in high-income countries.

There is a major gender divide too. Women and girls bear the main responsibility for collecting water in Sub-Saharan Africa, shouldering over 70 per cent of the burden. Inadequate sanitation in schools disproportionately affects girls' attendance and performance due to menstrual hygiene management needs. Women are often vulnerable to harassment or violence when they have to travel long distances to fetch water, use shared toilets or practise open

defecation. In the Indian State of Bihar, the police said that in 2012 over 400 women would have 'escaped' rape had they had toilets in their homes.

The report says that the burden of dirty water and inadequate sanitation falls disproportionately on women and children, those on low income, and marginalized and vulnerable groups, such as the very young or old, or those living with disabilities. National governments should tackle this by placing equity considerations at the heart of resource allocations and service delivery. Aid flows at \$10 billion a year for water and sanitation play a vital role in the overall financing framework, but are nevertheless insufficient. The report recommends that donors should respond to insufficient progress on sanitation by doubling aid from current levels.



Water, sanitation and hygiene (WASH) for all is vital to end preventable child deaths and improve the health of children around the world. We need globally recognised goals to deliver change.



Set a dedicated goal on water and sanitation, and ambitious targets towards universal WASH by 2030.



Explicitly highlight the links between WASH and health, as well as other sustainable development objectives.



Ensure that targets on WASH are used to help monitor progress towards all aspects of health and universal health coverage.



Commit to universal targets for WASH that strive to leave no one behind, and focus on progressively eliminating inequalities.

Sources: WHO/UNICEF joint monitoring programme (JMP) Report 2014 update; prof Black R E MD et al (2014) Global, regional, and national cases of child mortality in 2000-13 with projection to inform post-2015 priorities: an update systematic analysis, The Lancet, early online publication, 1 October 2014, doi:10.1016/S0140-6736(14)61698, 2013 data. Children = under fives

# CDA pledges to implement solid waste management plan by June 30

MYRA IMRAN

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July 2, 2013

**Islamabad: The Capital Development Authority (CDA) has committed implementation of solid waste management plan for the city by June 30, 2014. The capital city produces 550 to 600 tons of waste every day with no permanent disposal system in place.**

The commitment was made in a second public hearing conducted by sub-committee of Senate Standing Committee on Human Rights. The hearing was convened by Senator Mushahid Hussain Sayed at the Parliament House and attended by Senator Farhatullah Babar, Senator Dr. Saeeda Iqbal, Senator Hidayatullah and MNA Maryam Aurangzeb.

Bringing to light practical measures for environmental protection in the capital, it was announced that an environmental hotline is available to report environmental violations to CDA on the number 1334. "Any citizen of Islamabad can report environmental violations witnessed by them by dialing the hotline at any time of the day and the CDA will take action within 24 hours," Senator Mushahid

Hussain stated. The hotline has been established as per instructions of Senator Mushahid Hussain Sayed.

Addressing the acute parking crisis in the city, Senator Mushahid Hussain called for specific parking garages to be allotted in every commercial area, given major expansions in the form of new plazas and malls. "Not only this, but there should also parking areas, pathways and washrooms for physically challenged segments of the society," the Senator added on a side note.

The convener along with other members of the hearing lauded CDA's "Green and Clean Islamabad" initiative as being timely and the need of the hour. "Pakistan is among the top 10 countries of the world listed to be environmentally vulnerable and has experienced intense weather aberrations with floods costing us US\$ 15 billion in losses," the Senator pointed out.

The members also noted that the critical nature of the issue which translates in to food and water security in the long run and committed full support on environmental

initiatives.

Furthermore, a complete elimination of plastic bags would be an integral part of the Green and Clean campaign on which the government, private sector and public will join hands.

With reference to the first public hearing, the CDA informed that all stone crushers will be demolished with the assistance of Rawalpindi administration and ICT. The Senator appreciated this and subsequently commissioned Sustainable Development Policy Institute with task of preparing compliance report on the 16 stone crushers.

The public hearing drew great enthusiastic participation from the civil society and common citizens of Islamabad, particularly the leader of the Green Movement Islamabad, Chris-tina Afridi and Dr. Dushka. Many complaints and violations were reported by these participants which were taken up on discussion with the CDA and the ministry. The next public hearing has been scheduled for February 25 which will follow up on the issues cited.

# Capital's water sources getting highly polluted

MYRA IMRAN

July 2, 2013

## Islamabad

The water sources of Islamabad get high pollution load due to discharge of domestic and industrial waste and leakages of municipal sewers.

According to data shared by Environmental Protection Agency (EPA) Director General Asif Shuja Khan, in a recent meeting of Senate Standing Committee on Human Rights, the capital has about 26 small and large freshwater streams, which take hill torrent-rainwater and pass through different residential sectors and finally converge into two main streams when they leave Islamabad.

In these streams, the dissolved oxygen after mixing of waste was found as low as 0.9 mg/l and biological oxygen demand (BOD) and chemical oxygen demand (COD) were found as high as 63.5 mg/l and 162.5 mg/l respectively.

The levels of heavy metals like lead and cadmium were also found exceeding the National Environmental Quality Standards (NEQS) as the streams pass down through the industrial area of sectors I-9 and I-10.

According to latest statistics shared by the director general, there are 9 steel furnaces, 16 steel-re-rolling, 5 oil and ghee mills, 31 marble cutting and polishing units, 9 plastic units, 10 pharmaceuticals and 23 metal cutting units operating in and around Islamabad.

Due to discharge of domestic waste and leakages of municipal sewers, these streams get high pollution load and in low rain season these streams stink and become breeding places for mosquitoes.

Similarly, the situation of major water source for people living in and around the capital city, the Rawal Lake is also very bad. A report prepared by Capital Development Authority (CDA) for feasibility of treatment plant at Barri Imam and Bhara Kahu shows that Rawal Lake receives waste from catchments area spread across 70,000 acres and included both Islamabad Capital Territory (ICT) and non-Islamabad Capital Territory. 65 per cent of waste comes from Barri Imam and Bhara Kahu. The environmentalists believe that illegal constructions on

Korang River around that area and dumping of waste had polluted the water source to a major extent.

Islamabad was designed to provide a healthy climate, pollution free atmosphere, plenty of water and lush green area. It includes eight basic zones; administrative, diplomatic enclave, residential areas, educational sectors, industrial sectors, commercial areas, rural and green areas and five parks including Fatima Jinnah Park, Rose and Jasmine Garden, Japanese Park, Chattar Park and Shakarparian. Each sector was kept separated through green belts, which also act as oxygen generator and no polluting industry was to be allowed in the area.

The EPA DG shared that population has risen from 0.340 million to 1.124 million within 25 years showing an overall increase of 230 per cent with an average annual growth of 6 per cent. The high rise buildings, residential apartments, housing schemes, educational institutions in residential areas, 'kachi abadis', unrecognised housing colonies (Bani Gala, Bhara

Kahu) created serious environmental issues and the green cover decreased due to cutting of trees and there is no proper waste disposal facility.

Main sources of pollution in Islamabad include Steel furnaces (9), re-rolling mills (16), Cement Plant (1), Stone Crushers (16), Fugitive Smoke like burning of waste, wild grasses, forest fires, animal sheds, vehicles etc.

Shuja shared that Islamabad has 300,000 vehicles with mix of petrol, CNG and diesel vehicles whereas about 90,000 heavy and light vehicles are diverted from GT Road, trespass through Kashmir Highway, half of them are diesel driven trucks. This traffic adds 377 tons of particulate matters in the air each year.

He said that, to cope with the situation, installation of sewage treatment plants in large buildings, housing schemes and projects by using EIA tool for new projects and issuance of Environmental Protection Order for existing projects has been made mandatory. CDA has two old and a new sewage treatment plant (17 MGD) but running under-capacity due to inadequate in flow. Siltation tanks were constructed by Marble industry.

About 450 sewage lines discharging waste water in Korang and fresh water streams were plugged by Pak-EPA and CDA. Two septic tanks and soakage pits were constructed by ICT for 103

toilets of Barri Imam Shrine and ICT has secured funds for construction of 2 more soakage pits in different areas. ICT and CDA have also submitted a PC-1 to Planning Division for installation of four sewage plants in Rawal Lake catchments area.

Despite these steps, he agreed that administration of Islamabad is not fully equipped to deal with expanding population and increasing pollution. He shared that future development of Islamabad includes construction of seven (7) hotels including one 7-star, an international airport,

new roads, around 40 large and small housing schemes, number of high rise commercial and residential towers and other development schemes.

Ministry of Petroleum and Natural Resources awarded petroleum concession in the Margalla Hills to a private oil exploration company. Coal operated power plants are expected to be installed in Islamabad. "With completion of these projects, not only the natural beauty of Islamabad will be impacted but the pollution load will further enhance."

Two billion people a year are infected with parasitic infections caused by a lack of sanitation and hygiene.



Exposure to pathogens, due to a lack of sanitation, within the first 1,000 days of life affects a child's development and health.

In 2012, one in four children worldwide had stunted growth.



1/4 of stunting can be attributed to five or more instances of diarrhoea before the age of two.

Sources: WHO/UNICEF joint monitoring programme (JMP) Report 2014 update; prof Black R E MD et al (2014) Global, regional, and national cases of child mortality in 2000-13 with projection to inform post-2015 priorities: an update systematic analysis, The Lancet, early online publication, 1 October 2014, doi:10.1016/S0140-6736(14)61698, 2013 data. Children = under fives





# Case Studies

### Water to city through Kinjhar project may be delayed further

By Staff Reporter

KARACHI, Aug 29: Water to the city through the Kinjhar project may be delayed further, as the provincial government has decided to postpone the project for the current fiscal year.



people of the Thar area of Sindh. Whether it is a tube well or a dug well, the problem remains the same, the sewage and wastewater, which rapidly infiltrates the ground. Besides that, water is contaminated with fluoride and becomes unfit for drinking.

Hanifa, resident of a small desert village Bhumblye Bhasel, about 10 kilometers out of Amroket town, met this scribe at a well, which is located near a road. He was carrying an earthen jar and a plastic water cooler to get water for his family. He said that almost all the wells in the area are brackish and contaminated with pollution, so the villagers have to walk miles to fetch potable water but even then their attempts sometimes fail.



The project would provide water at their doorstep. An official of the Amroket District Government said the project is almost ready and would be functional within next one month. He also said that besides storage of the water, the project would also filter water.

### of drought-hit Thar

The official data of KWSB states that the total water requirement of the Thar area is about 734 million gallons (MIGD). However, KWSB can provide 37 MIGD of water, the rest is supplied by other sources.

The official data of KWSB states that the total water requirement of the Thar area is about 734 million gallons (MIGD). However, KWSB can provide 37 MIGD of water, the rest is supplied by other sources.

### water every year: KWR

Water is a commodity, for which several people have rented shops and built huge tanks inside their shops to store water and sell it to the local people. The residents said that they buy this contaminated water for their daily needs.





# Hoping to land a govt job, Meeko supplies water to farmers voluntarily for 30 years

Hafeez Tunio

July 17, 2013

**QAMBER-SHAHDADKOT / KARACHI:** There are few men as dedicated as Arbab Bhangar, popularly known as Meeko, who has been supplying irrigation water to farmers voluntarily for the past 30 years – all with the hope of securing a government job one day.

Wearing a knee-length dhoti, Meeko rides his bicycle from one canal to another to make sure the farmers have enough water for their crops. Meeko, 50, who belongs to Bhangar Acha village of Kamber Shahdadt district, always wanted to be a beldar, a helper at the irrigation department who checks the flow of irrigation water in



Meeko has been supplying water to farmers voluntarily for 30 years. Photo: EXPRESS

as farmers used to plead to him to release water for their crops,” he said. “I wanted to become a beldar so I started working at a very tender age.”

Initially, Meeko met the Chief Engineer of Larkana and requested him for a job. “He

financially at the time of the harvest but it is not sufficient.”

During the Khareef season, especially between June and August, Meeko spends 24 hours on the embankments of the canals to prevent any

“I am the only beldar in the area who they see working in the field. Sometimes, it feels I have spent my whole life being useless”

**Volunteer Meeko**

watercourses and canals and strengthens their embankments.

“When I was child, I saw that the beldar was very influential

suggested that I start working as a volunteer till the government announces a vacant post,” he recalled.

“The farmers try to help me

breach. “All irrigation officials posted at district headquarters know this very well and they even call me in case of an emergency,” he

said, regretfully adding that they turn him down whenever he asks for a job. "I am the only beldar in the area who they see working in the field. Sometimes, I feel I have spent my whole life being useless."

The farmers receiving Meeko's services value him. "Meeko travels miles with water to supply it from the main canals to the water courses, which is a really hectic process," said Rafique Channa, one of the growers. Channa pays Meeko around 80 kilogrammes of his harvest every year but feels like the government should help him more.

According to Qurab Khoso, who grows sugarcane, Meeko saved his crop from flooding in 2010 by informing him about the breach. "It was midnight when Meeko came shouting to my door," Khoso recalled. "If he had not informed me,

I would have lost my crop spread over 30 acres."

### **Job prospects**

Though Meeko has almost reached the official retirement age, he still dreams of a government job. "I have earned honour in my area and people respect me but I need a job to run my house."

With all the applications he has submitted to the higher authorities mentioning his past contributions as a volunteer safely filed, Meeko has knocked the doors of chief engineers and irrigation secretaries but all in vain. "When chief minister Qaim Ali Shah visited Benazir Bhutto's mazaar in 2008, I handed him my application but nothing happened."

Tariq Ahmed, an engineer at the irrigation department in Qamber-Shahdada district,

agrees Meeko is a valuable asset. "When I took charge about two years ago, I found him to be a very hard worker," he recalled. "Later, I appointed him on a contract and paid him for six months but our senior officer objected."

For their part, the irrigation department said there are certain rules for government jobs that Meeko doesn't qualify. "We can consider his case for honorarium or some sort of compensation if officials from the relevant district send us a proposal," he added.

After spending 30 years in the fields, Meeko's only dream now is to ensure his son achieves what he failed to. "Whether or not I get a government job, I will try my best to get my son appointed as an engineer in the irrigation department."

# Sacred waters: Katasraj lake being rehabilitated

Sonia Malik

July 22, 2012

**Work has been started to rehabilitate a lake considered sacred by the Hindu community at the Katasraj Temple Complex.**

A committee was formed a month ago by the chief

secretary to expedite the restoration of the 10 temples in the complex. The work is due to be finished by August.

Earlier, the pond, which measured 200 ft by 90 ft, had shrunk to 5 ft by 4 ft over the

last five months. This was blamed on two pumping stations set up near the temple complex to supply water to Choa Saida Shah city and Wahula villages, around three kilometers away. Some of the

water was also being used by three cement factories in the area.

The Hindu temples, built between 650 and 950 AD, witness a large number of pilgrims during early spring and autumn. The pilgrims bathe in the pool as part of an ablution ritual to 'wash off sins'. According to Hindu mythology, two lakes – Katasraj and Kushkar, near Ajmer, India – were formed when god Shiva shed tears over the passing away of goddess Sita.

Saeed Iqbal Wahla, the Environment Secretary who is heading the committee, told The Express Tribune the Chakwal TMA had stopped pumping water from near the lake.

He said excessive water pumping had also affected subsoil water level in the area. He said two other pumping stations situated about four kilometers from Katasraj had been reactivated to supply water to nearby areas.

He said he had met Asmat Tahira, Director General of the Punjab Archaeology department, and the secretary of the planning and development department, to discuss progress on the restoration of the temples.

He said with no more water being pumped, the lake was expected to grow larger during the monsoon rains.

Wahla said the project to restore the temple complex was started in 2009 and will



Water level rises after three pumping stations are demolished.

be completed by 2013.

The work includes restoration of pavements leading to the temples; lining of the pool and a stairway.

He said facilities for pilgrims were also upgraded. The work is about 80 per cent complete.

Syed Faisal Maqsood, the Chakwal DO (environment), said the lake is being de-silted in two phases. In the first phase, the sides of the lake were mechanically de-silted by workers provided by a cement factory to a depth of five feet, he said. Last Monday, workers of NESPAK, TMA and the cement factory started de-silting the middle of the lake to a depth of around 12 feet. The cement factory around two kilometers from the area.

He said the three water pumping stations in the proximity had been removed. He said the around 7,000 residents of Wahula village

were getting water from a local well, closer to the village. Similarly, residents of Choa

Saiden Shah were drawing water from two pumping stations situated two kilometers from Katasraj.

“These pumping stations were abandoned a year ago since they had no generators to pump water during outages,” he said. The TMA has made a temporary arrangement and the Chakwal DCO has directed them to purchase a 50KVA generator for them within four weeks.

“The de-silting has helped restore the lake. The lake area at the surface level has increased to around 10-12 ft from 4-5 ft,” he said.

For the last four years, the Archaeology Department has been working on restoration of seven temples, built during the Hindu Shahi period, and three temples, built during the 19th and early 20th century. Three Sikh havelis are also being restored nearby.







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