

Editorial

Contaminated Water Still a Major Threat

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Around 40 per cent of all reported diseases and deaths in Pakistan are attributed to poor water quality in the country and also the leading cause of deaths in infants and children up to 10 years of age.

The population of Pakistan is now estimated to be more than 160 million. With the present growth rate of 1.5 per cent, the population of the country is expected to be doubled by the year 2025. Per capita decline of water availability from 5600m to 1,000m has seriously raised the water quality and quantity concerns, according to a report carried out by Pakistan Council of Research in Water Resources.

In developing countries, it is common for water collectors, usually women and girls, to walk several km daily to fetch water. Filled pots and jerry cans weighing as much as 20 kilograms. By 2015, the international community hopes to reduce, by half, the proportion of people who are unable to reach, or afford, safe drinking water.

An extensive study of water quality in the country's rural areas has revealed that as many as 82% water sources in 24 districts provide unsafe water to the people of Pakistan. This well below standards set by Pakistan Standards and Quality Control Authority and a major cause of diseases and deaths.

Safe drinking water is the most basic service a government can provide its people. In Pakistan, even this fundamental provision remains elusive. The Science and Technology Ministry's Pakistan Council of Research in Water resources report prepared after a 5 years study noted that water related diseases cause annual losses of at least Rs.25 billion and that

2,50,000 children in Pakistan die in every year due to diarrhea related diseases alone. The information gathered by the study has verified research studies done earlier by International Agencies and concluded that only 25.61% of the country's 159 million inhabitants have excess to save a sufficient drinking water. The water monitoring study selected 14000 water sources from as many as 2807 villages of 1567 union councils from 80 tehsils of 24 districts.

Islamabad faces severe water quality problems. Data from the recent study shows that 40% of the collected sample were contaminated with total coliforms, 33% with nitrate and 11% had high levels of total dissolved solid. Hence, 59% water samples from rural areas in the Federal capital were found unsafe and only 41% were found safe for the purpose of drinking water.

In Rawalpindi the situation was even worse, 73% samples were contaminated, 29% with nitrate and 15% with dissolved solids. Attock, Bahawalpur, Faisalabad, Gujranwala, Gujrat, Kasur, Lahore, Multan Sialkot, Sheikhupura, Sargodha and Rawalpindi were selected for sampling in Punjab. Abbottabad, Mangora, Mardan and Peshawar in KPK. Hyderabad, Karachi and Sukkar in Sindh and Khuzdar, Loralari, Quetta and Ziarat in Balochistan.

In the above-said research, 5 main water quality problems were seen bacteriological 64% dissolved solids, 25% turbidity 14%, nitrate 9% and fluoride 7%.

Lahore, the second largest city of Pakistan has shown an alarming situation of drinking water contamination as all 16 of its sources are supplying unsafe water due to the bacteriolog-

ical (50 per cent) and arsenic (100 per cent) contamination.

38-79 per cent for Faisalabad, 52-76 per cent for Bahawalpur, 29-71 per cent for Gujranwala, 56-100 per cent for Gujrat, 40-50 per cent for Kasur, and 37-63 per cent for Lahore.

As far other cities are concerned, bacterial contamination in Multan is 31-87 per cent, 53-87 per cent for Rawalpindi and 75-83 per cent for Mardan.

22 water samples including 6 dams, 9 rivers, 2 canals, 4 lakes and one drain, Left Bank Outfall Drain. Right Bank Outfall Drain (Sukkar) from 23 selected surface water bodies were also collected and analyzed for 28 water quality parameters.

All samples (22) were found microbiologically contaminated. Only 3 samples (14 per cent) showed high values. Detailed data analysis has identified 4 major water quality tribulations in drinking water sources of Pakistan which is bacteriological (68 per cent), arsenic (24 per cent), nitrate (13 per cent) were found safe and the remaining 312 (87 per cent) were unsafe for drinking purpose.

The outcome of the report has led to the realization that the federal and provincial governments need to take immediate initiatives for the provision of safe drinking water to the public in order to prevent the onslaught of water born diseases.

Provision of safe drinking water to the public has only been a slogan of different governments. Advocacy efforts for the awareness and education of the general public, regarding the water quality testing and treatment are required.