DAWN

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‘Pakistan will become a water-scarce country by 2025’

KARACHI: Experts at a conference on environmental issues afflicting the country said water had already reduced by five times as compared to what was available to Pakistan less than 70 years ago; a further 14 per cent of the available water would diminish by 2025.

These issues were highlighted at a national conference on environment and sustainable development organised by the environmental science department of the Sindh Madressatul Islam University (SMIU) at the varsity on Friday.

Prof Imran Hashmi of the National University of Sciences and Technology (NUST) spoke over the issues relating to water in Pakistan. About water availability, he said 5,260m3 were available with the country in 1951 which had decreased to 1,000m3 in 2016.

Dr Hashmi said it was expected that the available water would drop to about 860m3 by 2025, marking “our transition from a water-stressed to a water-scarce country”.

About surface water he said river flows were heavily dependent on glacial melt (41pc), snowmelt (22pc) and rainfall (27pc). He added 50 MAF of groundwater extracted from the aquifers and had already crossed the sustainable limit of safe yield.

“Water losses are estimated to be 46 MAF annually.”

Lack of access to drinking water

The seminar was informed that 84pc of the population did not have access to safe drinking water.

“Pakistan is among top 10 countries with greatest number of people living without access to clean drinking water.”

He said 72pc of water supply schemes were functional, and 84pc of those had water that was not fit for consumption.

Dr Atif Mustafa of the NED University of Engineering and Technology spoke over the nature-based solutions (NBS) to existing environmental problems.

He said green space availability could be related to people’s perceived happiness and general health, while having green space nearby appeared to reduce the incidence of illness, such as heart disease, obesity and depression.

“In England, the benefits of urban green spaces for physical and mental health have been estimated to reduce treatment costs by £2.1 billion.”

He proposed green walls and wall surfaces; green roofs referred to any type of roof that had green technology incorporated in it. He added that constructed wetlands can be defined as engineered water-saturated areas in which the natural removal processes for the water pollutants were reproduced and enhanced to optimise the purification process.

Karachi under threat

Dr Samiuzzaman of Global Environmental Lab spoke over various problems afflicting Karachi.

He said continuous increase in population due to urbanisation, concentration of industries, lack of civic facilities and treatment plants for industrial and domestic waste, and lack of implementation of environmental laws posed serious hazards to the country's largest urban landmass.

"There is a continuous migration from other areas to Karachi. Town planning is not possible due to continuous increase in population, thus all the resources are under heavy stress, and lack of responsibility in civic agencies."

He said though there were three treatment plants for domestic waste, none was functioning. Besides, there was no treatment plant for industrial effluent while untreated industrial effluent were polluting the sea and damaging marine life.

Prof Tasneem Gul Kazi of University of Sindh said Tharparkar was one of the most food-insecure regions in Pakistan.

"The groundwater that people consume is saline to brackish, and has a high concentration of various salts and minerals, which are dangerous for human as well as livestock health."

Only 4.4pc of Thar was urban, while more than 90pc of the people live in more than 2,000 rural villages.

She said around 454 children had died in Thar in 2018, while 450 children died in the region in 2017; 479 in 2016 and 398 children lost their lives in 2015.

"The health department further revealed that around 1,500 children die due to malnutrition each year as a result of infections and a shortage of proper medical services in the remote part of the province."

She spoke about the water disaster of Thar due to arsenic and fluoride contamination, adding that during a normal day, villagers spent around four to six hours on average to fetch four to five pots (50 to 60 litres) of water from dug wells. However, during the dry period, they collect water throughout the day, including at night. At various places in Thar, continuous use has depleted groundwater reserves.

Vice Chancellor of SMUI, Dr Mohammad Ali Shaikh, said environment was an extremely important subject and "we have to leave a legacy of solving environmental issues so that our children live in a safe place".

He said the university would establish a state-of-the-art facility regarding environmental science in the varsity's Malir campus in addition to the existing department in SMIU's city campus. "We will establish an environmental laboratory equipped with modern facilities".

Earlier in the inaugural session of the conference, Dr Syed Asif Ali of SMIU thanked the research scholars who attended the conference. Dr Hashim Zubairi, Dr Aliya Rehman among others also spoke.

The Newspaper's Staff Reporter