

Conserve every drop

Was Samuel Taylor Coleridge foretelling the impending water crisis in the 21st century when he penned “Water, water, every where,/ Nor any drop to drink” more than two centuries ago in ‘The Rime of the Ancient Mariner’?

The grave water situation in Cape Town in South Africa is a wake-up call to everybody across the globe — from policymakers to the common man — that it cannot be business as usual when it comes to water usage. A similar crisis is looming large in other cities in the world as people continue to be reckless in their use of water.

The situation is so worrisome that 12 world leaders — 11 heads of state and a special adviser of a high-level panel on water — wrote an open letter to global leaders a week ago warning that the world is facing a water crisis and issued a New Agenda for Water Action. Observing that we need to make “every drop count”, they called for a new approach: rethinking how we understand, value and manage water as a precious resource, and catalysing change and building partnerships to achieve the water-related goals of the 2030 Agenda for Sustainable Development.

The social, cultural, economic and environmental values of water to society need to be reassessed, the panel said. “Water needs to be allocated in ways which maximize overall benefits to our societies,” it observed. The panel also mentioned the need to put in place policies that will allow for at least a doubling of water infrastructure investment in the next five years. It called for governments, communities, the private sector, and researchers to collaborate.

In India, we can't be complacent any more. A growing population, lack of adequate planning, crumbling infrastructure, indiscriminate drilling of borewells, large-scale consumption of water, and a false sense of entitlement in using water carelessly are causing water shortages. Unless drastic measures are taken to minimise water usage, the day may not be far off when authorities will be forced to ration water supply in cities like Bengaluru, which has been ranked second in the list of 11 global cities which might face the imminent threat of running out of drinking water. Already, water is being supplied on alternate days in certain cities, and for a limited duration in some places.

The World Bank's Water Scarce Cities Initiative seeks to promote an integrated approach to managing water resources and service delivery in water-scarce cities as the basis for building resilience against climate change. The demand for water in urban areas is projected to increase by 50-70% in the next three decades.

India's current water requirement is estimated to be around 1,100 billion cubic metres per year, which is projected to touch 1,447 billion cubic metres by 2050.

Water conservation cannot brook delay any longer in India. According to a forecast by the Asian Development Bank, India will have a water deficit of 50% by 2030. India's water needs are basically met by rivers and groundwater. Water scarcity can lead to disastrous consequences impacting food production as most of the farming is rain-fed. With ground water catering to about 60% of the country's irrigation, 85% of rural water drinking requirements, and 50% of urban water needs, replenishing the aquifers has to be accorded top priority. Millions across India still do not have access to safe drinking water and this problem has to be tackled on a war footing.

The oceans make up for about 97% of the Earth's water. Less than 3% of Earth's water is freshwater and most of it is not accessible. According to the U.S. Geological Survey, over 68% of the freshwater on Earth is found in icecaps and glaciers, while just over 30% is found in

groundwater.

According to the United Nations, 2.1 billion people lack access to safely managed drinking water services; water scarcity already affects four out of every 10 people; 90% of all natural disasters are water related; 3.4 lakh children under five die every year from diarrhoeal diseases; agriculture accounts for 70% of global water withdrawal; and 80% of wastewater flows back into the ecosystem without being treated or reused. In 2010, the UN General Assembly recognised the right of every human being to have access to sufficient water for personal and domestic uses (between 50 and 100 litres of water per person per day). It has to be safe, acceptable and affordable (water costs should not exceed 3% of household income) and also physically accessible (within 1,000 metres of home).

I am glad that the government has come up with a 6,000-crore World Bank-aided Atal Bhujal Yojana with community participation to ensure sustained groundwater management in overexploited and ground water-stressed areas in seven States. It has been found that 1,034 blocks out of the 6,584 assessed blocks in the country are overexploited.

According to the annual report of the Ministry of Drinking Water and Sanitation, about 77% of rural habitations in India have achieved a fully covered status (40 litres per capita per day) under the National Rural Drinking Water Programme, and 55% of the rural population have access to tap water. It was mentioned that the Ministry has also taken special steps to address the issue of water quality. A sub-mission programme is being implemented to eliminate the problems of water quality in about 28,000 habitations affected by arsenic and fluoride by 2020.

Another important issue that needs to be addressed, particularly in urban areas, is the leakage of pipes providing water. We cannot allow this to continue any longer. Putting in place an efficient piped supply system has to be top on the agenda of policymakers and planners.

Although India receives an average rainfall of 1,170 mm per year, it is estimated that only 6% of rainwater is stored.

Before the situation turns more alarming, we have to collectively act — now and here. We should remember that ancient India had well-managed wells and canal systems. In fact, our culture always believed in treating nature with reverence and most of our rivers are considered sacred. The Indus Valley Civilization had a well-managed canal system, while Chanakya's *Arthashastra* also talks of irrigation. In the ancient past, different types of indigenous water harvesting systems were developed across the subcontinent and such systems need to be revived and protected at the local level. Micro irrigation practices like drip and sprinkler systems have to be promoted in a big way for efficient use of water for agriculture. Both in urban and rural areas, digging of rainwater harvesting pits must be made mandatory for all types of buildings.

Conscious efforts need to be made at the household level and by communities, institutions and local bodies to supplement the efforts of governments and non-governmental bodies in promoting water conservation. Sustained measures should be taken to prevent pollution of water bodies, contamination of groundwater and ensure proper treatment of domestic and industrial waste water. Reduce, reuse, and recycle must be the watchwords if we have to handover a liveable planet to the future generations.

Venkaiah Naidu is the Vice-President of India

The India-Japan economic relationship remains underwhelming in relation to strategic ties

END

crackIAS.com