

Water and Virus

Why in news?

Recently NITI Aayog reported that over 70% of India's contaminated surface and groundwater is likely to carry virus.

How can water transmit virus?

- Today animals are locked together for mass production of meat which creates an artificial environment for mutations in erstwhile dormant viruses.
- These viruses can proliferate in wastewater and remnants of such virus are detected in raw sewage across Sydney.
- In England, Wales and Scotland, several wastewater samples carry traces of SARS-CoV-2.
- This water is often discharged into Indian water bodies and there is a high chance that these water bodies can be the host for viruses of different kinds on which they can mutate and strike.
- Water-transmitted viral pathogens are astrovirus, hepatitis A and norovirus can affect huge section of Indian population.
- This is because Indian people use polluted water from sources like rivers, lakes or groundwater for drinking.

What are the measures taken?

- Despite the poor water quality in India, Nal se Jal scheme was announced to provide drinking water connections to every rural household by 2024.
- Decontaminating Indian water bodies and groundwater could take several decades.
- Reverse osmosis technique can purify decontaminated water but it takes out all the healthy minerals required for the human body.
- Though ultraviolet aqua guard treatment neutralises the virus and doesn't remove minerals it is a costlier process to adopt.

What is the solution?

- There are two unpolluted fresh water sources left in the country.
- One is the water lying below our forests and other is the aquifers that lie

below the floodplains of rivers.

- Both these sources provide natural underground storage of water which is renewable.
- These aquifers can be used to provide healthy mineral water for drinking purposes to our cities and towns and Yamuna floodplains in Delhi provide water to a million people each year.
- Hence these forests and floodplains must be declared as water sanctuaries.

What can be the way forward?

- There is no technological substitute for living natural resources like pristine natural water and soil which should be conserved.
- The water beneath our forests is as good as natural spring water and it must be safeguarded for our own lives and for future generations.
- It is important to remember that these evolutionary resources, once lost, will be lost forever.
- If we don't realise this, it will only be our loss.

Source: The Hindu