

## This Global Water audit Should Not Gather Dust

Mint

Paper - III  
(Environment)

- ❖ The WMO has issued a report on water resources that can guide global climate adaptation and nudge countries with glaring crisis hotspots, like India and Pakistan, to take action.

In expert estimation as well as the popular imagination, we must brace for a water crisis as the fumes we emit warm up the world. Adapting to climate change, thus, requires us to track global water resources. The release this week of a report on these by the Geneva-based World Meteorological Organization (WMO), the first audit of its kind, tells us how we are placed. Or, rather, how precariously so.

### In This Report

The report offers an overview of river-flow volumes, apart from major floods and droughts, and also identifies 'hotspots' of change in freshwater storage, with our cryosphere of snow and ice in the spotlight for its vulnerability to melting in the global heat trap created by our gas emissions. Since shrunken polar caps and rising sea levels have been familiar tropes, last year's data might seem a bit out of place at first glance. In 2021, large parts of the planet were unusually dry, according to the report. Some of this can be pinned on La Niña, an oddity that pops up every few years to disrupt wind and rain patterns, but is largely an outcome of global warming, whose deprivations of water could get extremely severe as we go along.

### World Meteorological Organization (WMO)

The World Meteorological Organization (WMO) is an intergovernmental organization with a membership of 192 countries. The WMO is descended from the International Meteorological Organization (IMO), which was established after the Vienna International Meteorological Congress of 1873. India is also a member country of the World Meteorological Organisation. By ratification of the WMO Convention on 23 March 1950, meteorology (weather and climate), operational hydrology and related geophysical sciences became the specialized agency of the United Nations. It is headquartered in Geneva, Switzerland and World Meteorological Day is celebrated every year on 23 March all over the world.

## Availability Of Water

For countries like India, too little water could turn out to be a bigger worry than too much of it over the next few decades. Indeed, in terms of the multitudes faced with water scarcity, this can be considered a great big threat. As of now, the WMO says 3.6 billion people have insufficient access to water for at least one month per year, a figure projected to exceed 5 billion by 2050. This means that more than three people would be short of water for every person at risk of floods by that point. Little wonder that CoP-27 held at Sharm el-Sheikh, Egypt, urged governments to place high-priority emphasis on tackling dry-ups as part of their climate adaptation plans. While the WMO admits possible gaps in its water mapping, given its patchy access to verified hydrological data to validate what it gleaned from remotely sensed and modeled readings, it has enough data points to present a bleak picture.

## Status Of Major Rivers Of The World

African rivers saw weaker stream flow last year, with the Niger, Volta, Nile, and Congo all affected, with a similar squeeze seen in parts of Russia, west Siberia, and Central Asia, while above-usual discharge was observed in southern Africa's Zambezi and Orange rivers, as also a clutch of American, Chinese and north Indian rivers, with basins of the latter two particularly prone to floods.

## World Meteorological Organization (WMO) report titled 'State of Global Water Resources' :-

### Other Points:

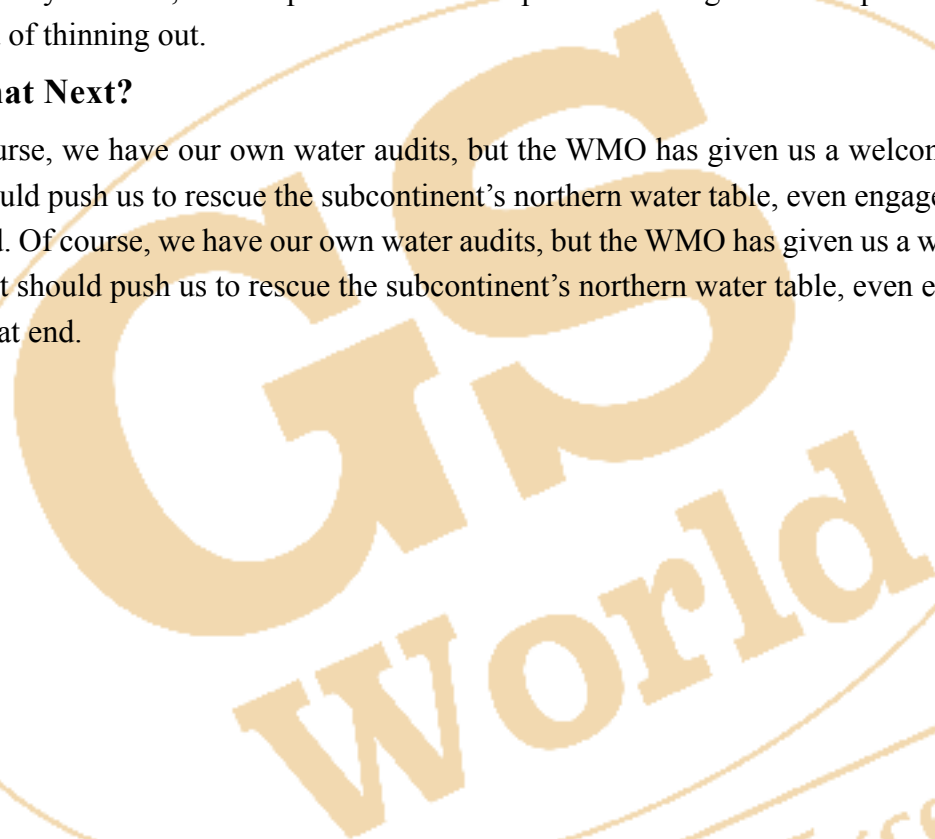
1. According to this report, among the areas that saw exceptionally dry conditions is the Rio de la Plata region of South America, which has been affected by drought since 2019.
2. Three billion 600 million people worldwide have inadequate access to water for at least one month of the year.
3. The effects of climate change are often felt through water, said Peteri Taalas, Secretary-General of the UN Meteorological Agency. For example, drought and flood events increasing in intensity and frequency, erratic rainy seasons, and glaciers. accelerated melting of
4. These events have had cascading effects on economies, ecosystems and all aspects of human life.
5. The UN Water Agency reported that between 2001 and 2018, 74 percent of natural disasters were water-related.
6. The first edition of this report measured the amount of water flowing through the river channel at any one time, and also reviewed terrestrial water storage.
7. The data policy of the UN Meteorological Organization emphasizes the need to accelerate efforts to make available and share hydrological information.
8. Apart from fluctuations in the flow of rivers, terrestrial water storage is also estimated to be below average.
9. The UN agency has warned that changes in water resources in the cryosphere have implications for food security, human health, and ecological integrity, with profound consequences for economic and social development.
10. According to the UN agency, the purpose of this study is to support the monitoring and management of global fresh water resources at a time when demand is increasing and supply is limited.

## Lack Of Rain

Meanwhile, rainfall deficiency cast its gloom in Ethiopia, Kenya, and Somalia last year. India did not suffer much dryness, but monsoon coverage going awry could yet prove painful in time to come. The scarcity dashboard that we must watch closely is that of terrestrial water storage (i.e. on the land's surface and just under it). Last year's data clubs, north India and Pakistan among the regions marked as 'below normal' in comparison with their 2002-2020 average, with a vast zone of severe groundwater depletion common to both. The Gangetic and Indus systems also feature on the WMO's 'hotspot' list of rapid deterioration. Both originate in the Himalayas, but differ in their cryospheric outlook: the former system's flow is fed mostly by rain and far less by ice melt, which spells both less scope for warming-led river spates in the future and a lower likelihood of thinning out.

## Now What Next?

Of course, we have our own water audits, but the WMO has given us a welcoming wider view. Its new report should push us to rescue the subcontinent's northern water table, even engage Islamabad in aqua talks to that end. Of course, we have our own water audits, but the WMO has given us a welcoming wider view. Its new report should push us to rescue the subcontinent's northern water table, even engage Islamabad in aqua talks to that end.



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### Expected Question

**Que. 'Momentum for Change: Climate Neutral Now' is an initiative launched by?**

- (a) Inter-governmental panel on climate change
- (b) UNEP Secretariat
- (c) UNFCCC Secretariat
- (d) World Meteorological Organization

**Answer : C**

### Mains Expected Question & Format

**Que.: In the light of the recently released 'Global Water Resources Status Report' by the World Meteorological Organization (WMO), highlight the water problem prevailing in the world including India and suggest measures to deal with this problem?**

**Answer Format :**

❖ **Introduction (40-50 words)**

Give a brief description of WMO 'State of the Global Water Resources Report'.

❖ **Main Body (150-160 words)**

Explain the water problem prevailing in the world including India with examples.

❖ **Conclusion (30-40 words)**

Explain the measures to deal with the water problems.

**Note:** - The question of the main examination given for practice is designed keeping in mind the upcoming UPSC mains examination. Therefore, to get an answer to this question, you can take the help of this source as well as other sources related to this topic.