European Drought worst in 500 years

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<u>In news</u>— The recent drought in Europe has been billed as the worst in 500 years.

Why is it the worst drought in 500 years?

- It is being said that never has a European summer been so dry since 1540, when a year-long drought killed tens of thousands of people.
- The dry spell of 2022 follows a record-breaking heatwave that saw temperatures in many countries rise to historic highs.
- Earlier European droughts such as those in 2003, 2010,
 and 2018 too were compared to the 1540 event.
- Much like now, the 2018 drought was described as the "worst in 500 years".
- But recently, a senior scientist at the European Commission's Joint Research Centre said 2022 could turn out to be worse than 2018, though data were still being analysed.
- Rainfall has been scanty in several countries. The UK had its driest July since 1935, and France since 1959.
- As per an "analytical report" of the Global Drought Observatory (GDO), an agency of the European Commission, about 64% of the continent's landmass was experiencing drought conditions, as per data available till August 10.

Reasons for Europe's worst drought-

- Droughts are part of the natural climate system, and are not uncommon in Europe.
- The extraordinary dry spell has been the result of a prolonged and significant deviation from normal weather

patterns.

 In addition, unusually high temperatures have led to increased evaporation of surface water and soil moisture.

What is Drought?

TYPES OF DROUGHT

Drought is a rainfall-scarce period, affecting the availability of water for irrigation, drinking, etc. They are classified into three types.

METEOROLOGICAL drought is a prolonged dry spell in periods when rainfall is expected

HYDROLOGICAL drought is when scarcity of water begins to hit normal supplies in the system

AGRICULTURAL drought is when scarcity of water begins to affect the agricultural production

In Europe, all three kinds are being observed currently, varying in degrees in different areas.

Drought in India-

- Eighteen meteorological and 16 hydrological droughts occurred in India between 1870 and 2018.
- The most severe meteorological droughts were in the years 1876, 1899, 1918, 1965, and 2000, while the five worst hydrological droughts occurred in the years 1876, 1899, 1918, 1965, and 2000.
- Drought-prone districts in India comprise nearly 1/6th of this country in terms of area. These areas receive an annual rainfall of around 60 cm or less.
- According to a study by the Council for Energy, Environment and Water (CEEW), 74% of India's districts are vulnerable to extreme drought situations. The data shows that 27 out of 35 states and union territories are in the risk zone.
- Assam, Andhra Pradesh, Maharashtra, Karnataka and Bihar are the five states most vulnerable to droughts, floods,

- cyclones, or a combination of the three.
- The most vulnerable districts are Dhemaji and Nagaon (Assam), Khammam (Telangana), Gajapati (Odisha), Vizianagaram (Andhra Pradesh), Sangli (Maharashtra) and Chennai (Tamil Nadu).