

03 – 01 – 2022

News: Air quality ‘severe’; rain likely this week

- The IMD has forecast that temperatures will stay below normal for the next two days, after which the minimum temperature will rise and the maximum will fall under the **influence of a ‘western disturbance’** that is likely to bring rain.
- **System of Air Quality and Weather Forecasting and Research (SAFAR) in its forecast** said that prevailing cold wave conditions in the north-west region with moderate winds blowing from west/north-west direction led to degradation in the air quality.

Western Disturbance

- Western Disturbance (WD), labeled as an **extra-tropical storm originating in the Mediterranean**, is an **area of low pressure that brings sudden showers, snow and fog in northwest India**.
- The meaning of WD lies in its name.
- The **disturbance travels from the “western” to the eastern direction**.
- These travel eastwards on high-altitude westerly jet streams - massive ribbons of fast winds traversing the earth from west to east.

- Disturbance means an area of “disturbed” or reduced air pressure. Equilibrium exists in nature due to which the air in a region tries to normalise its pressure.
- In the term “extra-tropical storm”, storm refers to low pressure. “Extra-tropical” means outside the tropics. As the WD originates outside the tropical region, the word “extra-tropical” has been associated with them.
- A WD is associated with rainfall, snowfall and fog in northern India.
- It arrives with rain and snow in Pakistan and northern India.
- The moisture which WDs carry with them comes from the Mediterranean Sea and/or from the Atlantic Ocean.
- WD brings winter and pre-monsoon rain and is important for the development of the Rabi crop in the Northern subcontinent.
- The WDs are not always the harbingers of good weather.
- Sometimes, WDs can cause extreme weather events like floods, flash floods, landslides, dust storms, hailstorms and cold waves killing people destroying infrastructure and impacting livelihoods.

System of Air Quality and Weather Forecasting

(SAFAR)

- **System of Air Quality and Weather Forecasting and Research (SAFAR)** is a national initiative introduced by **Ministry of Earth Sciences (MoES)** to **measure the air quality index of cities**, by measuring the overall pollution level & the location specific air-quality of the city.
- The system is indigenously developed by **Indian Institute of Tropical Meteorology, Pune** & is operationalized by **India Meteorological Department**.
- It has a **giant true color LED display** that gives out **real-time Air-quality Index based on color code along with 72 hour advanced forecast**.
- The ultimate objective of the project is to increase awareness among the general public regarding the air quality in their city so that appropriate mitigation measures and systematic action can be taken up.
- It organizes awareness drive by educating the public (prompting self-mitigation), and it also helps the policy-makers to develop mitigation strategies keeping in mind the nation's economic development.
- SAFAR is an integral part of India's first Air Quality Early Warning System operational in Delhi.

- In addition to regular air quality parameters like PM 2.5, PM 10, Sulphur Dioxide, Ozone, Nitrogen Oxides, Carbon Monoxide, the system will also monitor the existence of Benzene, Toluene and Xylene.
- It monitors all weather parameters like temperature, rainfall, humidity, wind speed and wind direction.

News: Draft National air sports policy

- Recently, the Government of India has released draft national air sports policy.

National air sports policy

- The policy will cover activities like aerobatics, aeromodelling, amateur built and experimental aircraft ballooning, drones, gliding hang gliding, paragliding, microlighting, paramotoring, skydiving and vintage aircraft.
- The entities providing these services and their equipment will be required to be registered, as well as be liable for penalties.
- The policy proposes a two tier governance structure for air sports in the country, which will include an apex governing body called the Air Sports Federation of India (ASFI) and associations for each air sport.

- The ASFI will be an autonomous body under the **Ministry of Civil Aviation** and will **represent India at the Lausanne headquartered Fédération Aéronautique Internationale (FAI) and other global platforms related to air sports.**
- It will provide governance over various aspects of air sports, including **regulation, certification, competitions, awards and penalties.**
- Each **air sports association will lay down its safety standards for equipment, infrastructure, personnel and training, and specify the disciplinary actions to be taken in case of non-compliance.**
- Inability to do so may lead to penal action by the ASFI.
- All persons and entities providing air sports services will be required to register as members of the respective air sports associations.
- Key equipment used will also have to be registered.
- It is proposed that **popular air sports attractions in the country such as Bir Billing in Himachal Pradesh, Gangtok in Sikkim, Hadapsar in Maharashtra and Vagamon in Kerala can be declared as a “control zone” for air sports in order to ensure the safety of other manned aircraft.**
- **Schools and colleges will be encouraged to include air sports in their curriculum** and their students will have the opportunity to participate in the FAI’s international competitions.

- The draft policy also aims to promote domestic design, development and manufacturing of air sports equipment under the Atmanirbhar Bharat Abhiyan; waive import duty on equipment for a few years; as well as request the GST Council to consider rationalising the GST rate on air sports equipment to 5% or less.