

UPSC Daily Current Affairs | Prelim Bits 02-11-2020

Strategic Policy & Facilitation Bureau

- Union Ministry of AYUSH and M/s Invest India will form a collaboration to set up a strategic policy unit called "Strategic Policy & Facilitation Bureau (SPFB)".
- It aims to facilitate planned and systematic growth of the Ayush Sector.
- This Bureau will support the Ministry in strategic and policy making initiatives that shall help pave the way to reach the full potential of the Sector and stimulate growth and investment.
- The activities to be undertaken by the SPFB would include :
- 1. Knowledge Creation and Management,
- 2. Strategic & Policy-Making Support,
- 3. State Policy Bench marking,
- 4. Investment Facilitation,
- 5. Issue Resolution.
- The Ministry of AYUSH would assist the Bureau in responding to investment proposal, issue and queries and fund Invest India for undertaking activities assigned.
- The Ministry will also support the Bureau in building links with various stakeholders such as industry associations, affiliate bodies of Ministry and Industry representation.

Mansar Lake Development Plan

- Surinsar Lake and Mansar Lake are considered to be twin lakes.
- Surinsar is rain-fed without permanent discharge, and Mansar is primarily fed by surface runoff and partially by mineralized water through paddy fields, with inflow increasing in the rainy season.
- Mansar is of immense importance from Pilgrimage as well Heritage point of view beyond being the most scenic attraction due to vast Mansar Lake and its flora and fauna.
- It is one of the 26 Ramsar Sites designated as Wetlands of International importance located in Jammu & Kashmir.
- The Surinsar Mansar Wildlife Sanctuary is nestled in the midst of both the lakes.

- The site is socially and culturally very important with many temples around owing to its mythical origin from the Mahabharata period.
- Union government has recently inaugurated the Mansar Lake Development Plan in Jammu and Kashmir.
- The project is eyed to attract almost 20 lakh tourists every year and create employment for 1.15 crore man-days with an income generation of ₹800 crore per year.

La Nina

- La Niña means the large-scale cooling of ocean surface temperatures in the central and eastern equatorial Pacific Ocean, together with changes in the tropical atmospheric circulation, namely winds, pressure and rainfall.
- It has the opposite impacts on weather and climate as <u>El Niño</u>, which is the warm phase of the <u>El Niño Southern Oscillation (ENSO)</u>.
- La Niña will result in sea surface temperatures between two and three degrees Celsius cooler than average.
- La Niña could last into 2021, affecting temperatures, precipitation and storm patterns in many parts of the world.
- The La Niña of 2020 is expected to be moderate to strong.
- According to World Meteorological Organization, La Niña weather phenomenon is back in the central and eastern equatorial Pacific Ocean after nearly a decade's absence.
- In India, La Niña means the country will receive more rainfall than normal, leading to floods.

Global Seasonal update

- Global Seasonal Climate Update is prepared and released by World Meteorological Organization.
- It is based on an ensemble of global prediction models run by WMOaccredited centres around the world.
- It includes data on Global-scale seasonal forecasts, including those of precipitation and surface temperature, which take into account ENSO as well as other climate drivers.
- There are now 13 WMO Global Producing Centres of Long Range Forecasts, whose products are consolidated by a Lead Centre of Long Range Forecast Multi Model Ensemble

Released norms on NOx Emissions

- NOx or Oxides of nitrogen are a criteria pollutant emitted on burning coal.
- NOx is harmful, it also triggers the formation of ground level ozone and leads

to secondary particulate matter worsening health risks and needs to be controlled.

- Coal-based power plants, besides the transport sector, are a major source of this pollutant.
- There were no limits placed to control emissions of NOx from power plants before 2015.
- The MoEF&CC introduced limits of 300 mg / Nm3.
- Recently Union Ministry of Environment, Forest and Climate Change (MoEF&CC) has relaxed NOx emission norms.
- It has been relaxed to 450 mg / Nm3, from 300 mg / Nm3, for power stations commissioned between 2003 and 2015.
- The relaxations were brought about as the power sector strongly lobbied watering down the norms, alleging it was not possible to meet the 300 mg / Nm3 standard at all loads.
- Boiler companies assured government that a NOx emission level of 450 mg / Nm3 can be achieved by combustion modification.
- To meet emissions below it would mean installation of slightly expensive pollution control equipment like selective non-catalytic reactors (SNCR) will be required.

BANDHU Website

- Union Minister of State for Education launched a self-help website Bandhu for students of IIT Bombay.
- Project Bandhu was initiated by alumni of the Class of 1992, as a part of their silver jubilee reunion in 2017.
- They pledged to support IIT Bombay and help students enhance their emotional well-being.
- The self-help website is one of the first steps in this direction.
- Features of the website are as follows
- 1. It has been designed in conjunction with the counsellors at IIT Bombay along with external experts.
- 2. It addresses challenges ranging from adjustment to college life, academic stress, and mental health.
- 3. Bandhu has curated reads, motivational alumni journeys, expert podcasts and tools for self-exploration.

UV resistant Water Bears

- Tardigrades, small aquatic creatures known as water bears, can survive extreme heat, radiation, and even the vacuum of outer space.
- Recently scientists have discovered a new species of tardigrade that can

endure ultraviolet (UV) light so lethal, it is regularly used to get rid of hardto-kill viruses and bacteria.

- When reddish brown species of water bears exposed to a dose of UV radiation all survived.
- When the researchers upped the dose four times, about 60% of the reddish brown bears lived for more than 30 days.
- The researchers realized they had found a new species of tardigrade, part of the Paramacrobiotus genus.
- To their surprise, under the UV light, the reddish tardigrades became blue in colour creating a UV shield.
- Fluorescent pigments, likely located under the tardigrades' skin, transformed the UV light into harmless blue light.
- Researchers extracted the fluorescent pigments and used them to coat H. exemplaris and several Caenorhabditis elegans earthworms.
- Animals with the jury-rigged shields survived at almost twice the rate of animals without the shields.
- It's likely, scientists say, that the tardigrades evolved fluorescence as a means to tolerate the high doses of UV typical for hot summer days in southern India.

Source: PIB, the Hindu, Down To Earth

