

## UPSC Daily Current Affairs| Prelim Bits 13-02-2025

### J. C. Bose Grant (JBG)

#### Why in News?

*J. C. Bose Grant (JBG) was launched by the Anusandhan National Research Foundation (ANRF).*

- **Launched by** - Anusandhan National Research Foundation (ANRF).
- **Nodal Ministry** - Ministry of Science & Technology.
- **JBG** - It is a restructured form of the *J. C. Bose Fellowship*.

*J. C. Bose Fellowship under the Science and Engineering Research Board (SERB) is awarded to active scientists in recognition of their outstanding performance.*

- **Aim** - To recognize the outstanding performance and contributions of **senior Indian scientists and engineers** through this extra-mural funding opportunities to enhance their research in cutting-edge scientific and technological areas.
- **Objectives** - To support senior-level researchers who have demonstrated exceptional achievements, with evidence of excellence such as:
  - Publications records
  - Research outcomes
  - Patents
  - Technology transfers
  - Awards
  - Grants
- The researcher's achievements include across various domains of science and technology (S&T) including agriculture, medicine, humanities and social sciences at the interfaces of S&T.
- **Eligibility** - Participants must be active, senior Indian scientists or researchers with a proven track record of excellence.
- Holding at least a Professor-level position or equivalent at an Indian institution/university.
- **Selection** - It will be conducted once a year by a **Search-cum-Selection Committee** as per the broad guidelines.
- **Grant** - It provides an annual research funding of Rs. 25 lakhs.
- An annual overhead of Rs. 1.0 lakh will be provided to the implementing institution.
- **Duration** - **5 years**.
- **In case of PI** - Principal Investigator (PI) superannuates, during the term of the grants, it can be continued subject to the host institutions willingness to host the PI

and can be availed *until the age of 68*.

## References

1. [PIB| J. C. Bose Grant \(JBG\)](#)
2. [ANRF| J. C. Bose Grant \(JBG\)](#)

## Unani Medicine

### Why in news?

*International Conference that was organised by Central Council for Research in Unani Medicine concluded recently.*

- **About Unani** – Unani system is one of the oldest systems of medicine, based on the teachings of Hippocrates.

**Hippocrates** is known as the "Father of Medicine" because he established medicine on a scientific basis and raised ethical standards.

- It is an extensive medical system that deals with various states of the body (healthy and disease).
- The system is integrated in nature and offers preventive, promotive, curative and rehabilitative healthcare.
- UNANI is derived from the word IONIAN which indicates its genesis in the present day Greece (Unan) and TIBB means medicine.
- **World Health Organization (WHO)** – Recognized it in **1976**.
- **Umure Tabiya** – In Unani system of medicine, human body is based on seven natural principles, known as "Umure Tabiya".
- These are the very factors responsible for the existence of the human body and are considered responsible for the maintenance of health.
- The loss of any one of these components could lead even to death of the individual.
- **Hippocratic theory** – Unani system is based on the Hippocratic theory which postulates that a perfect balance of "Arkan" (elements), "Akhlat" (humors) and "Mizaj" (temperament) keeps the body and mind healthy.
- The theory presupposes the presence of four humours in human body, which are:
  1. Dam
  2. Balgham
  3. Safra (Yellow bile)
  4. Sauda (black bile)
- **Diagnosis** – The most important aspect for the diagnosis of diseases are three in number, and they are Nabz (pulse), examination of baul (urine) and Baraz (stool).
- The surroundings and the ecological conditions are very much responsible for the state of health of a person.
- **International Conference** – Was recently organised by Central Council for Research in Unani Medicine.
- The conference was on the topic "Innovations in Unani Medicine for Integrative Health

Solutions – A way forward”.

## References

1. [PIB - Unani Medicine](#)
2. [Directorate of AYUSH - Unani Medicine](#)

## International Thermonuclear Experimental Reactor (ITER)

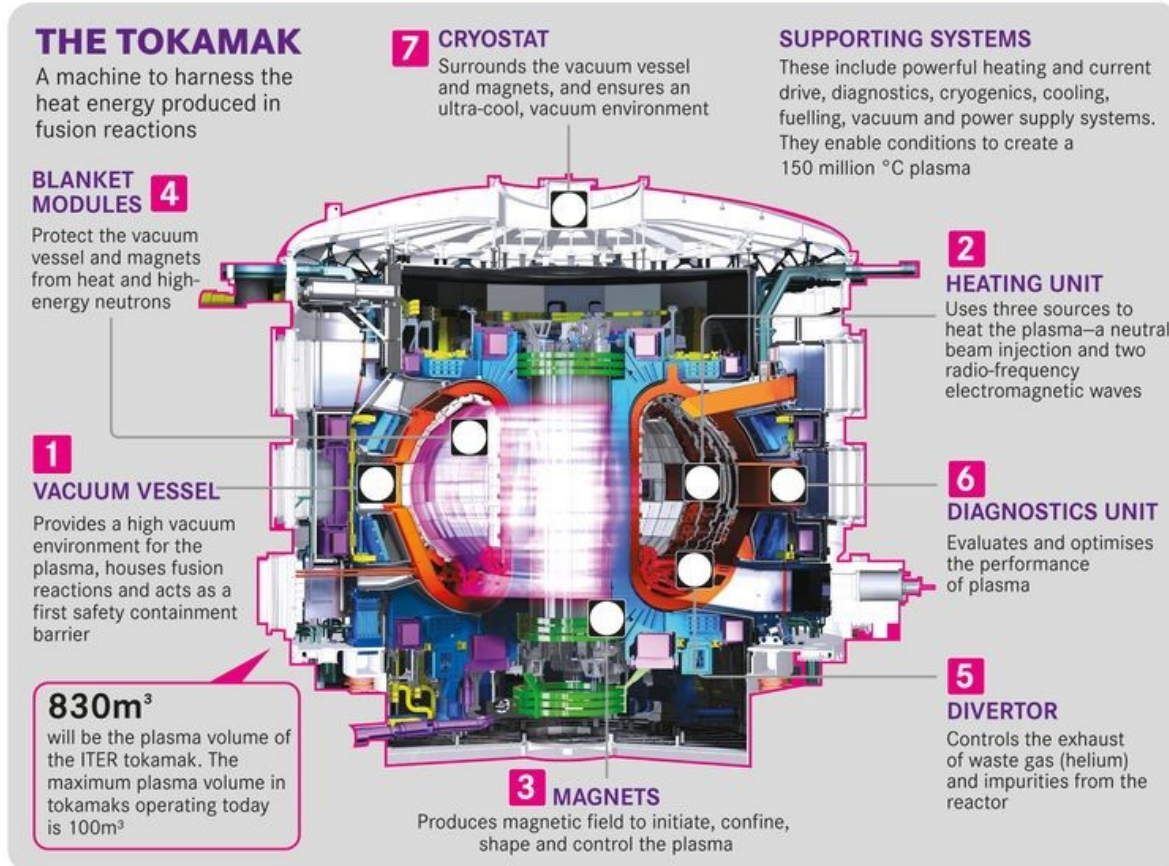
### Why in news?

*Prime Minister Shri Narendra Modi and the President of France, H.E. Mr. Emmanuel Macron, jointly visited the International Thermonuclear Experimental Reactor (ITER) in France recently.*

- **ITER** – Is a large-scale scientific experiment intended to prove the viability of fusion as an energy source by building the world's largest tokamak.
- **Tokamak** – A magnetic fusion device that has been designed to prove the feasibility of fusion as a large-scale and carbon-free source of energy based on the same principle that powers our Sun and stars.
- **Location** – ITER is currently under construction in the south of France.

***Fusion** is the nuclear reaction that powers the Sun and the stars, is a promising long-term option for sustainable, non-carbon-emitting energy.*

- **ITER Council** – Is the governing body that supervises the work of the ITER Organization.
- The ITER Council is responsible, in accordance with the ITER Agreement, for the promotion and overall direction of the ITER Organization.
- **ITER Organization** – Is an intergovernmental organization that was created by an international agreement signed in 2006, and formally established on 24 October 2007 after its ratification by all Parties.
- **ITER Members** – China, European Atomic Energy Community (Euratom), **India**, Japan, Korea, the Russian Federation and the United States of America.
- **India** – Is among the seven ITER members contributing to the project over the last two decades.
- Around 200 Indian scientists and associates, as well as notable industry players such as L&T, Inox India, TCS, TCE, HCL Technologies, among others, are engaged in the ITER project.



## SUPER FIGURES



**1,00,000**km niobium-tin (Nb3Sn) superconducting strands are necessary for ITER's toroidal field magnets



**150 million °C** will be the temperature in the reactor core (*ten times the temperature at the sun's core*)



**23,000** tonnes will be the weight of the ITER machine (*as heavy as three Eiffel Towers*)



**60** meganewtons will be the force of the **1,000**-tonne electromagnet at the centre of the machine (*twice the thrust of a space shuttle lift-off*)

## References

1. [PIB - ITER](#)
2. [Official website - ITER](#)

## Climate Risk Index

### Why in News?

According to a climate risk index report, India was the 6<sup>th</sup> most affected by extreme weather events over the last 3 decades from 1993 to 2023.

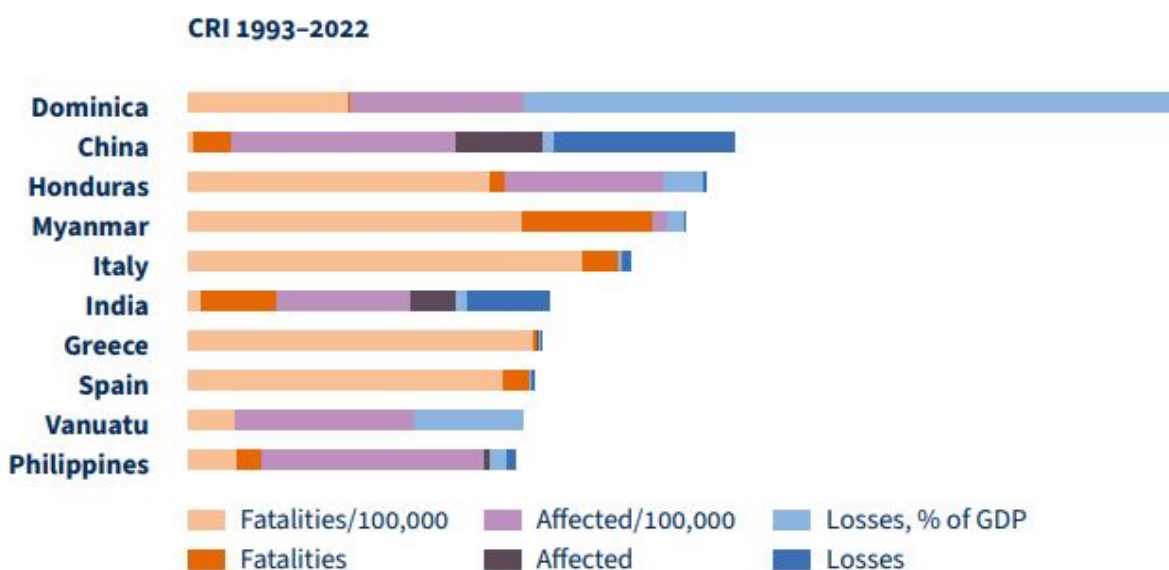
- **Published since** - 2006.
- **Published by** - *German watch*, a non-profit organization.
- **Climate Risk Index** - It is one of the longest running **annual climate impact-related indices**.

- **It uses the data from:**
  - Emergency Events Database (EM-DAT) international disaster database.
  - World Bank.
  - International Monetary Fund (IMF).
- **Methodology** - It analyses climate-related extreme weather events' impacts via 3 hazard categories:
  1. Hydrological
  2. Meteorological
  3. Climatological
- It visualizes such events' degree of effect at 2 years before the index's publication and over the preceding 30 years.
- **6 key indicators** - Economic loss, fatalities, and affected people with each in absolute and relative terms.

### Indicators

<span style="color: #8B4513;">■</span> Fatalities, relative	22,50 %
<span style="color: #FFDAB9;">■</span> Fatalities, absolute	7,50 %
<span style="color: #654321;">■</span> Affected, relative	15,00 %
<span style="color: #DDA0DD;">■</span> Affected, absolute	5,00 %
<span style="color: #00008B;">■</span> Economic losses, relative	37,50 %
<span style="color: #ADD8E6;">■</span> Economic losses, absolute	12,50 %

- **Ranking** - It is based on the countries economic and human impacts (fatalities as well as affected, injured, and homeless).
- **Countries most affected in last 3 decades (1993-2022)** - The top 10 countries that are most affected are Dominica, China, and Honduras were the most affected countries followed by Myanmar, Italy and India (6<sup>th</sup> most affected).



- **India** - It ranks 6<sup>th</sup> among the top 10 countries which shows high absolute fatalities and economic losses.

- India has faced a variety of increasingly frequent extreme weather events, including floods, heat waves, cyclones, and drought.

*More than 400 extreme weather events in the 3 decades, causing losses of nearly USD 180 billion (inflation-adjusted) and at least 80,000 fatalities.*

- Floods and landslides resulting from heavy monsoons displaced millions and damaged agriculture.
- Cyclones devastated coastal areas, underscoring India's diverse climate risks.

Notable catastrophic events in India	
1998	Gujarat Cyclones
1999	Odisha Cyclones
2014 & 2020	Cyclones Hudhud and Amphan
1993	Floods in northern India
2013 & 2019	Uttarakhand severe floods
1998, 2002, 2003 and 2015	Recurring and unusually intense heat waves, all with temperatures around 50°C, claimed many lives.

## References

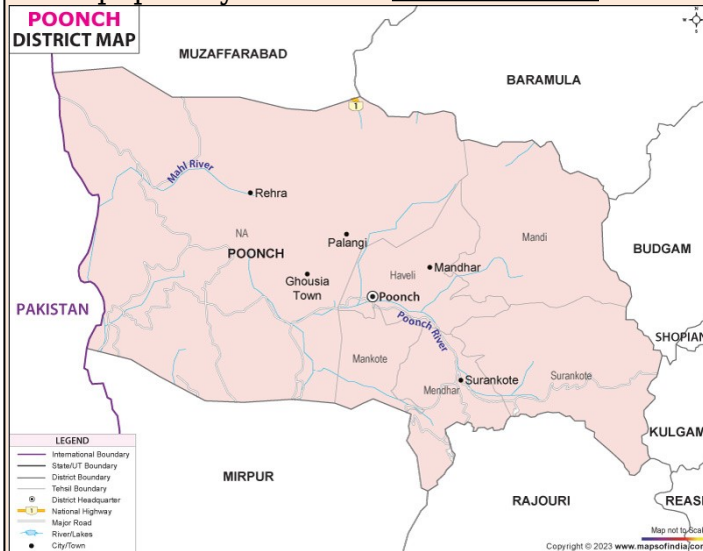
1. [Down to Earth| India among Top 10 Countries](#)
2. [Germanwatch| Climate Risk Index 2025](#)
3. [Germanwatch Pdf| Countries Most Affected in Last 3 Decades](#)

<b>One Liners 13-02-2025</b>
<b>Geography</b>



## Poonch District

- It is a border district of J & K situated on the Line of Control (LoC).
- **Located in** - West of State bordering Punjab and Himachal Pradesh.
- **Major part** - Occupied by Pakistan which is a part of Azad Kashmir territory.
- **Separated from** - Kashmir Valley by gigantic Pir Panjal range.
- **Trade** - Poonch holds a prominent place on the world map for trade along the LoC, particularly at the Chakka-Da-Bagh crossing.
- It is popularly known as Mini Kashmir.



## Polity & Governance

### Launched 41 new books under PM YUVA 2.0 (Pradhan Mantri Young, Upcoming and Versatile Authors)

- **Launched in** - 2022.
- **Initiated by** - Ministry of Education.
- **Part of** - India@75 Project (Azadi Ka Amrit Mahotsav).
- **Theme** - Democracy (institutions, events, people, constitutional values - past, present, future).
- **Aim** - An author mentorship programme to train young and budding authors (below 30 years of age) to promote reading, writing & book culture in the country and Indian writings globally.
- **National Book Trust** - It will be translated into other Indian languages ensuring the exchange of culture and literature, thereby promoting '**Ek Bharat Shreshtha Bharat**'.

### Market Intervention Scheme (MIS)

- **Launched in** - 1983.
- **Initiated by** - Ministry of Agriculture & Farmers Welfare.
- **Umbrella scheme** - [Pradhan Mantri Annadata Aay Sanraks Han Abhiyan \(PM-AASHA\)](#).
- **Aim** - To procure perishable agricultural product like tomatoes, onions, potatoes & fruits, where the MSP does not apply.
- **Procurement limit of crops** - Increased from the existing 20%-25%.

### Prime Minister Employment Generation Programme (PMEGP)

- **Launched in** - 2003.
- **Initiated by** - Khadi and Village Industries Commission (KVIC).
- **Nodal Ministry** - Ministry of Micro, Small and Medium Enterprises (MSME).
- **PMEGP** - It is a major credit-linked subsidy programme.
- **Aims** - To Generate jobs by creating micro-enterprises in both rural and urban areas and connect traditional artisans with unemployed youth for local self-employment.
- **Timeline** - 5 years (2021-2026).

### **DND 3.0 (Do Not Disturb) App**

- **Launched by** - Telecom Regulatory Authority of India (TRAI).
- **Updated Features** - An intelligent *spam detection engine* (for SMS only) to assist the subscriber in reporting.
- **Key Features**
  - Crowdsourcing data to quickly detect unregistered telemarketers.
  - Updates on actions taken regarding complaints within the App.
  - Improved interface and setup for user convenience.

### **National Cooperative Consumers' Federation of India Ltd. (NCCF)**

- **Established on** - 1965.
- **Nodal Agency**- Ministry of Consumer Affairs, Food and Public Distribution.
- **Registered under** - Multi-State Co-operative Societies Act, 2002.
- **NCCF** - It is an *apex organization* for the Consumer Cooperatives.
- **Functions** - The organization aims to enhance the consumer cooperative movement.

## **Security**

### **Aero India 2025**

- **Organized by:**
  - Ministry of Defence
  - Defence Exhibition Organisation.
  - Department of Defence Production.
- **Theme** - The Runway to a Billion Opportunities
- **Aero India** - It is a *biennial air show and aviation exhibition* held in Bengaluru.
- **Venue** - Yelahanka Air Force Station.
- It is India's premier aerospace and defence exhibition where global aero vendors and the Indian Air Force (IAF) thrill the spectators with back-to-back aerobatic flying displays.

### **Manthan 2025**

- **Part of** - Aero India 2025, Bengaluru.
- **Organized by:**
  - Innovations for Defence Excellence - Defence Innovation Organisation (iDEX-DIO)
  - Department of Defence Production.
- **Manthan** - It is a flagship *annual defence innovation event*.

## **Science**

### **CE20 Cryogenic Engine**

- **Developed by** - Liquid Propulsion Systems Centre of ISRO.
- **CE20** - It is an indigenous cryogenic engine powering the upper stage of LVM3 ( 3 stage medium-lift launch vehicle).
- With a multi-element igniter under vacuum conditions, which simulates the engine ignition in the vacuum condition of space.
- **ISRO Test** - It also conducts *successful sea level hot test* of this engine, which paving the way for future missions.

## **Miscellaneous**

### **World Radio Day**

- It is celebrated on the *13<sup>th</sup> of February* each year.
- **Theme of 2025** - Radio and Climate Change.
- **Aim** - To raise awareness about the importance of radio in all its forms, particularly in rural and underserved areas.
- **Celebrated** - To acknowledge and celebrate the significance of radio in shaping society and culture globally.
- **Recognize** - The importance of radio in promoting information, education, and entertainment across diverse communities.





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