

WHAT IS HEAT INDEX?

Recently, the Union Minister of Earth Sciences informed that the India Meteorological Department (IMD) has launched the Heat Index on experimental basis.



About Heat Index:

- It provides **information about the impact of humidity on the high temperatures** and thus provides a feel like temperature for human beings which can be used as an indication for human discomfort.
- It provides guidance towards additional care to be taken by people to reduce discomfort.
- **Colour codes** used for Experimental Heat Index are as follows:
 - **Green:** Experimental heat Index less than 35° C
 - **Yellow:** Experimental heat Index in the range 36-45° C
 - **Orange:** Experimental heat Index in the range 46-55° C
 - **Red:** Experimental heat Index greater than 55 °C
- The Heat Index is implemented on experimental basis only across the entire country including the State of Andhra Pradesh.
- At present, heat index is derived using the heat index equation similar to what is used by National Weather Service, National Oceanic and Atmospheric Administration (NOAA), USA.

Key facts about IMD

- It is the main agency responsible for **meteorological observations, weather forecasting and seismology in India.**
- It operates hundreds of observation stations across India and Antarctica.
- Regional offices are in Chennai, Mumbai, Kolkata, Nagpur, Guwahati and New Delhi.
- It has the responsibility for **forecasting, naming and distributing warnings for tropical cyclones** in the Northern Indian Ocean region, including the Malacca Straits, the Bay of Bengal, the Arabian Sea and the Persian Gulf.
- **Nodal Ministry:** Ministry of Earth Sciences.

WHAT IS ZOMBIE FIRE?

As global temperatures rise, fires are also spreading farther north and into the Arctic , which is causing an increase in "Zombie Fires."



About Zombie fire:

- It is a fire from a previous growing season **that can smoulder under** the ground which is made up of **carbon-rich peat**.
- These smouldering fires also produce more smoke because of their lower temperature of combustion.

Why it occurs?

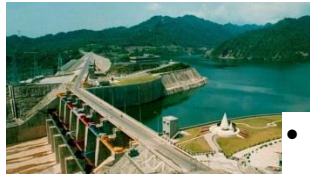
- As the **organic-rich Arctic soils** dry up because of changing climate conditions, they can burn slowly and release vast amounts of smoke into the atmosphere.
- One major culprit is the **rising temperature**: The Arctic is warming nearly four times faster than the rest of the world, a phenomenon known as Arctic amplification.
- Among the changing conditions that favour wildfires are **changes in atmospheric circulation** that create periods of extreme heat, dry out vegetation and reduce moisture in soils, and, importantly, lead to more frequent lightning strikes that can spark blazes.

What is the Impact?

- As the Arctic warms and fires move farther northward, peat soils rich in dead plant material burn at an accelerated rate.
- The **burning peat also removes the layer insulating permafrost**, the region's frozen carbon-rich soil.
- Northern ecosystems store twice as much carbon in their peat and permafrost as the atmosphere, and both are increasingly vulnerable to fire.

RANJIT SAGAR DAM (RSD)

The Ranjit Sagar Dam (RSD) project has achieved a new record of 153.97 lakh units in single-day power generation from its four units.



About Ranjit Sagar Dam (RSD):

- The Ranjit Sagar Dam, also known as the **Thein Dam**, is a major water reservoir and hydroelectric power project located on the **Ravi River** in the state of Punjab.
- It is located about **24 kilometres (15 miles)** from the international border with Pakistan.
- The dam was constructed to harness the waters of the Ravi River and was **completed in 2000**.
- It is a **concrete gravity dam** with a height of about **162 meters (531 feet)** and a length of approximately **518 meters (1,699 feet)**.
- The dam creates a vast reservoir known as the **Ranjit Sagar Lake** or **Thein Lake**. The reservoir has a storage capacity of around **0.97 billion cubic meters (789,000 acre-feet)** and helps regulate water flow for various purposes.
- It has an installed capacity of **600 megawatts (MW)**.

Key facts about Ravi River:

- **Origin:** It originates in the western Himalayas in the Multhan tehsil of **Kangra district** of **Himachal Pradesh**.
- It then flows through the Indian state of Punjab and enters Pakistan, where it eventually joins the **Chenab River** in the province of Punjab.

Length: The total length of the Ravi River is approximately **720 kilometres (447 miles)**. Around **158 kilometres (98 miles)** of the river's course lie in **India**, and the remaining **562 kilometres (349 miles)** flow through Pakistan.

- **Tributaries:** The Ravi River is fed by several tributaries, including the **Bhadal**, the **Ujh**, the **Tarnah**, and the **Basantar rivers** in **India**, and the **Aik**, the **Bara**, and the **Beas** rivers in Pakistan.

CINEMATOGRAPH (AMENDMENT) BILL 2023



The Government recently introduced the Cinematograph (Amendment) Bill, 2023 in Rajya Sabha.

About Cinematograph (Amendment) Bill 2023:

- It seeks to amend the Cinematograph Act 1952.
- It has provisions for **harsher punishment for film piracy** and the **introduction of new-age categories for classifying films**.
- **Film Classification:**
 - It has provisions to **classify films on the basis of age group instead of the current practice of rating them** "U" (unrestricted public exhibition), "A" (restricted to adult audiences), and "UA" (unrestricted public exhibition subject to parental guidance for children below the age of 12).
 - The amendments **seek to add new classifications** – 'UA-7+', 'UA-13+', and 'UA-16+' in place for 12 years.

Stricter Laws Against Piracy:

- The Bill holds **stricter punishment for those responsible for piracy**. This includes **three years of imprisonment and Rs 10 lakh penalty** for those engaged in piracy.
- Once the Bill is released, the **act of piracy will be considered an offence legally and will include even transmitting pirated content punishable**.

What is the Cinematograph Act 1952?

- It was enacted by the Parliament to **ensure that films are exhibited in accordance with the limits of tolerance of Indian society**.
- It establishes **Central Board of Film Certification (CBFC, popularly known as the censor board) appointed by the Central Government to sanction and certify films**.
- The Board **scrutinizes the film in its entirety** and based on the contemporary standard of Indian society following the procedure laid down under the Act.

- Board can **either make a speaking order of rejection or grant the certificate**, which shall be **valid for ten years**.
 - The Act also **authorizes the police to conduct search and seizure if the film is being exhibited in contravention** of any of the provisions of the Act.
-

TOMATO-NOMICS: WHY ARE TOMATO PRICES STILL HIGH?

Why in News?

- Various governments are trying to provide tomatoes at subsidised prices (of around Rs. 80 a kg), even as market prices are now closer to Rs 200 a kg.
- But quite interestingly, the inflation rate in tomato prices is negative - suggesting that tomato prices are crashing.

What are Inflation, Hyperinflation and Deflation?

- **Inflation is a quantitative measure** of how quickly the price of goods in an economy is increasing.
 - Inflation is caused when goods and services are in **high demand/ low supplies**, thus creating a drop in availability.
- **Hyperinflations** occur when the increase in monthly prices exceeds 50% over some period of time.
- **Deflation:** Deflation occurs when too many goods are available or when there is not enough money circulating to purchase those goods. As a result, the price of goods and services drops.

How is Tomato Produced in India?

- Tomato production is **concentrated regionally in the States** of Andhra Pradesh, MP, Karnataka, Odisha, and Gujarat, **which account for close to 50% of total production**.
- There are two major crops of tomato annually - **Kharif** (hits the market between March and August) and **Rabi** (September).
- Tomato production peaked at **21.18 million tonnes (MT)** in 2019-20 and has been **declining since** (20.69 MT in 2021-22 and 20.62 MT in 2022-23).

Issues with Current Tomato Prices in India:

- In the first half of June 2023, the modal price (rates at which most trades take place) in retail markets was **₹20 per kg**. On the last day of the month, it peaked at **₹100 per kg**.
- However, **Tomato prices fell by a whopping 35% in June 2023** (as against the prices in June 2022).
- In fact, tomato prices have been **experiencing “deflation”** (the opposite of inflation) since November 2022.

What is Fuelling the Price Rise?

- **Dip in overall tomato production this year:** Two key reasons being **extreme weather conditions and low commercial realisation of the crop for farmers**.
- **Pest attacks in tomato crops:** The heatwaves and high temperatures in April and May along with delayed monsoon showers in southern India and Maharashtra led to pest attacks.
- **Low prices (₹6 to ₹11 per kg) between Dec 2022 and Apr 2023:** A lot of farmers resorted to selling whatever crop they had at these prices while some abandoned their crops. This led to a crunch in supply.

What can be done to Avoid such Spikes?

- **Boost India’s ability to store its produce:** The ability to store excess produce will **not only help consumers** (during phases when supply slumps) **but also help farmers** earn more.
- **Improve value and supply chains:** Since tomato is highly **perishable**, an organised value chain involves producing, processing and market products and services in an effective and efficient manner.
- **Eliminating middlemen and encouraging FPOs:** To sell produce directly to the consumers, as well as amending rules of Agricultural Produce Market Committees to reduce commission and other fees.
- **Encouraging cultivation in poly houses and greenhouses:** It will improve tomato yields (from 25 tonnes per hectare < global average of 37 t/ha) and can control pest attacks.

INDIA'S DATA PROTECTION LAW NEEDS REFINEMENT

Context

- The government is likely to table India's fresh data protection law in the ongoing monsoon session of Parliament, which is its third recent attempt at drafting a data protection law.
- As the government may present a Bill that is largely like previous versions, **critical gaps may affect its implementation and overall success.**

The Digital Personal Data Protection Bill, 2022 (DPDP)

- **In November 2022**, the Ministry of Electronics and Information Technology introduced a revised Bill for the protection of digital personal data. It replaced the Personal Data Protection Bill, 2019.
- This bill has been introduced to provide for the processing of digital personal data in a manner that recognizes both:
 - The right of individuals to protect their personal data and
 - The need to process personal data for lawful purposes.

Suggestions to Make the 2022 Bill a Future Proof Legislation

- **Introduction of a Penal Provision:** A penal provision in the Bill that provides for financial penalties on data-processing entities for the re-identification of non-personal data into personal data will be an effective solution to provide citizens with a meaningful legislation.
- **Empowerment of Data Protection Board on the Lines of CCI**
 - The Competition Commission of India, which is responsible for the enforcement of India's antitrust law, **has the power to initiate inquiries on its own (and utilises it frequently).**
 - An individual may have little resources or incentive to approach the data protection board.
 - Therefore, like CCI, **the data protection board should be empowered** to initiate complaints on its own.

INTERNATIONAL CRIMINAL COURT (ICC)

• **About**

- The International Criminal Court is a permanent court to prosecute serious international crimes committed by individuals.
- It tries crimes such as genocide, war crimes, crimes against humanity, and aggression.
- The court was established to fight global impunity and bring to justice criminals under international law, regardless of their rank or stature.
- It is different from the United Nations' International Court of Justice, also at The Hague.

HQ

- The Hague, The Netherlands

Statute

- Before the ICC became functional in 2002, its founding treaty was adopted by the UN General Assembly in 1998 in Rome, Italy, thereby making it the Rome Statute.

Membership

- To become a member of the ICC or State party to the Rome Statute, countries have to sign the statute and ratify it under their respective legislatures.
- 123 countries are currently members of the ICC, with African countries making up the largest bloc.
- Notably, countries including India, China, Iraq, North Korea and Turkey never signed the Rome Statute.
- Others including the US, Russia, Israel and Syria signed, but never ratified it.

How does the ICC function?

• **Judges & Prosecutors**

- The court carries out its investigations through the Office of the Prosecutor and has 18 judges.
- Both the judges and prosecutors hold non-renewable nine-year terms.

Process

- There are pre-trial, trial, and appellate benches in the ICC.
- The prosecutor conducts a preliminary examination in a matter, before seeking permission from pre-trial judges to open a full investigation.
- The initial examination must conclude that the crimes in question are of sufficient gravity.

Ways to open investigations

- The prosecutor can open an investigation in three ways:
 - when a case is referred by a member country in its own territory;
 - when a case is referred by the UN Security Council; and
 - when the prosecutor takes up a case proprio motu or on his own.
 - Non-member states can also be investigated in three ways:
 - if alleged crimes were perpetrated by non-members in member states,
 - if the non-members accept the court's jurisdiction, or
 - when the Security Council authorises it.
-