

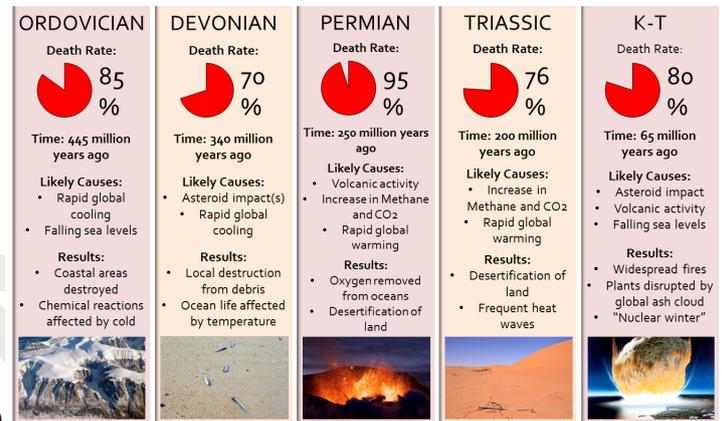
# NEWS TODAY

## EARTH IS WITNESSING ITS SIXTH MASS EXTINCTION, HUMANS TO BE BLAMED: STUDY

- A recent study states that earth is going through its sixth mass extinction.
  - Mass extinction event is usually defined as about **75% of the world's species being lost in a 'short' amount of geological time** - less than 2.8 million years.
- There have been **five mass extinctions so far** (see infographic).
  - However, **all of those were caused by natural phenomena**. This time, it is being **caused entirely by humans** and hence referred to as **Anthropocene extinction**.
- Evidence of 6th mass extinction**
  - More than 400 vertebrate species went extinct** in the last century.
  - 29,400 species of terrestrial vertebrates are on the brink of extinction** because they have fewer than 1,000 individuals.
  - More than 30% of animals with a backbone fish, birds, mammals are **declining in both range and population**.
- Causes of mass extinction:**
  - Rising climate change activities** i.e., extreme temperature changes, rising or falling sea levels, depletion of oceanic oxygen etc.
  - Geologic catastrophes** (volcanic eruptions, asteroid hitting Earth)
  - Invasive species.**
  - Overconsumption** of resources.
  - Agriculture, leading to diminishing wild spaces** and driving out species from their natural habitats.

### MASS EXTINCTIONS:

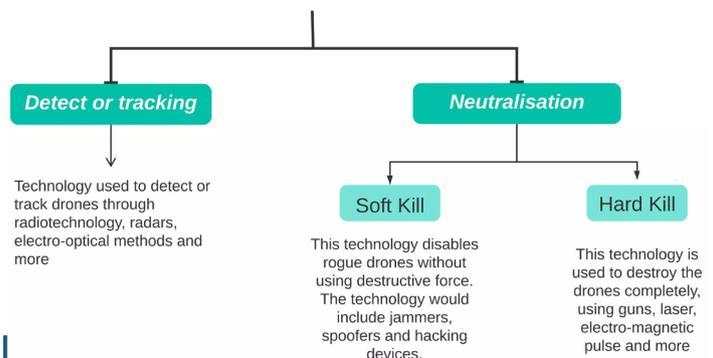
The biggest disasters in history



## GOVERNMENT SETS NORMS FOR GUNS TO COUNTER DRONES

- The **guidelines are for anti-drone guns to be deployed by security forces for neutralising rogue drones** in border areas.
- Major Guidelines:**
  - Anti-drone guns will be required to **destroy UAVs** or groups of UAVs (swarm attack) from **at least 1,000 metres for nano UAVs and 2,500 metres for large UAVs**.
  - Technology should be capable of **neutralising the flying objects** (like copters, fixed wing UAVs and radio-controlled UAVs in different categories in specified range) and **jam all-operating GPS, standard remote-control frequency of the UAV**.
- Anti-Drone technology in India:**
  - In October 2019, Civil Aviation ministry had issued **National Counter Rogue Drones Guidelines** to deal with possible security challenges from rogue drones to key installations like nuclear power plants and military bases.
  - Defence Research and Development Organisation (DRDO) has developed a **detect-and-destroy technology** for drones.
- Drone or unmanned aircraft system (UAS) is an aircraft that can operate autonomously or **can be operated remotely without a pilot on board**.
  - These are increasingly used for smuggling, reconnaissance, or to carry out various types of attack, targeting crowded areas or other aircraft, dropping explosives by terrorists causing security concerns.

### Anti/counter-drone system



# NATIONAL MISSION ON INTERDISCIPLINARY CYBER-PHYSICAL SYSTEMS (NM-ICPS)

● Through the NM-ICPS, **new and emerging technologies are being developed** at 25 Technology Innovation Hubs (TIHs) across the country **to provide solutions to people-centric problems.**

➤ CPS **combines digital/ cyber elements with physical objects** (e.g., autonomous vehicles) and data with capabilities of communication, data collection & processing, computing, decision making and action.

## ● About NM-ICPS:

➤ Mission aims **to create a strong foundation and a seamless ecosystem for Cyber Physical Systems (CPS) technologies** by coordinating and integrating nationwide efforts.

➤ Approved in 2018, it is implemented by the **Department of Science & Technology (DST).**

## ➤ Mission goals:

➤ Make India a leading player in CPS technologies.

➤ Achieve translation of CPS technologies for societal and commercial use, nurture startups and increase in the job market.

➤ Produce next generation technocrats in CPS technologies.

➤ **Four major activities of NM-ICPS:** Technology Development, Human Resource & Skill Development, Innovation, Entrepreneurship & Start-Up Ecosystem and International Collaborations.

➤ Mission is expected to **act as an engine of growth that would benefit national initiatives** in health, education, energy, environment, agriculture, strategic cum security, and industrial sectors, Industry 4.0, SMART Cities, Sustainable Development Goals (SDGs) etc.



# MINISTRY OF ELECTRONICS & IT RELEASES 2ND VOLUME OF VISION DOCUMENT ON ELECTRONICS MANUFACTURING

● The document titled “**\$300 bn Sustainable Electronics Manufacturing & Exports by 2026**” is released, in association with ICEA (India Cellular & Electronics Association).

➤ First volume titled “Increasing India’s Electronics Exports and Share in Global Value Chains” was released in November 2021.

➤ Opportunity in the electronics sector is driven by **growth of digital consumption and growth and diversification of global value chains.**

● The 5-part strategy is based on an “**all of the government**” approach, sharply focuses on broadening and deepening electronics manufacturing in India.



## ● Challenges faced by electronics industry

➤ Cost disabilities vis-à-vis China and Vietnam.

➤ Lack of **electronic component ecosystem.**

➤ **Lack of Free Trade Agreements** with developed economies.

➤ **Compliance requirements and scrutiny** impact business environment and acts as an obstacle to attracting investments.

➤ **High import tariff** on electronic components.

## ● Recommendations

➤ **Focus on aggregate domestic value addition** in the electronics sector.

➤ **Nurture and promote domestic champions** that are capable to compete at a global level.

➤ **Address issues of sustainability** and ease of doing business.

➤ **Address cost disabilities** and promote exports from the country.

➤ Encourage design ecosystem in India.

# MARITAL RAPE CAN'T BE LOOKED AT FROM MICROSCOPIC ANGLE: CENTRE SEEKS TIME IN DELHI HC

## ● Marital rape in India

➤ In India, **marital rape is not defined** in any statute or law.

➤ **Section 375 of IPC** - which defines rape, states that forcible sexual intercourse by a man with his wife is not rape, unless the wife is below 15 years of age (increased to 18 years by Supreme Court in 2017).

➤ This is based on assumption that once a **woman is married consent is presumed** and continuous for duration of marriage.

## ● How it impacts women?

➤ According to **National Family Health Survey-4, 5.4% of women all-India reported that they had been forced into sex** by their husbands.

➤ Has **adverse and long-term consequences** on women's (and children's) health and well-being including injuries, unwanted pregnancies, poor mental health etc.

● In 2013, the **UN Committee on Elimination of Discrimination Against Women recommended that the Indian government should criminalize marital rape.**

➤ **JS Verma committee** set up in the aftermath of Nirbhaya case had also recommended the same.

➤ In 2021, in a landmark judgement, **Kerala HC recognised marital rape as a ground for divorce.**

# COLD WAVE TO INTENSIFY OVER NORTH INDIA

- India Meteorological Department (IMD) has **predicted severe cold day conditions** in several states for the next two to three days.
- IMD defines **cold wave as a rapid fall in temperature within 24 hours** accompanied by "a marked cooling of the air, or with the invasion of very cold air, over a large area".
- **Criteria used to determine cold wave**

<b>For Hill stations</b>	<ul style="list-style-type: none"> <li>• When the <b>minimum temperature is less than or equal to 0 degree Celsius</b> and the minimum temperature is 4.5 degrees to 6.4 degrees below the normal.</li> </ul>
<b>In plains</b>	<ul style="list-style-type: none"> <li>• <b>When the minimum temperature is equal to or less than 10 degrees Celsius and -</b> <ul style="list-style-type: none"> <li>➢ <b>Temperature is 4.5 degrees to 6.4 degrees below the normal temperature</b> for that period or when the minimum temperature is less than or equal to 4 degrees Celsius.</li> </ul> </li> </ul>
<b>For coastal areas</b>	<ul style="list-style-type: none"> <li>• When <b>minimum temperature departure is less than or equal to 4.5 degrees</b> below normal and actual minimum temperature is less than 15 degrees.</li> </ul>

- **Factor for occurrence of Cold Wave**
  - Two **continuous phases of western disturbances in December 2021 and a jet stream over northwest Asia**.
  - **La Nina** can spur an increase in the amount of moisture over the Indian subcontinent, leading to excess snowfall and rainfall, hence colder conditions.
  - **Snowfall and rainfall over the western Himalayan region** — brought clouds of moist easterly winds over the region.
- **Impact of Cold Waves:** Impacting vulnerable people (infants, pregnant women, elderly, people with chronic diseases), it causes damage to rabi crops and reduces visibility etc.
- **NDMA Strategy for Cold Wave Management**
  - Identification of risk and vulnerability assessment;
  - Establish qualitative early warning, and forecasting
  - Inter-agency coordination
  - Public awareness and research & development
  - Impact Assessment

## ALSO IN NEWS

 <p><b>Centre mull panel to explore Scheduled Caste (SC) benefits to Muslim and Christian dalits</b></p>	<ul style="list-style-type: none"> <li>• Currently, <b>Hindu, Sikh and Buddhist Dalits enjoy SC status</b> while <b>Christian or Muslim dalits do not</b>, as per <b>presidential order issued under Article 341</b> in 1950 and amendments thereafter.</li> <li>• Under <b>Article 341(1)</b>, the President, after consultation with the Governor, may specify, "the castes, races, tribes or parts of groups within castes or races, which shall be deemed to be SCs".</li> <li>• Under <b>Article 341(2)</b>, the Parliament of India by law can include or exclude the above-mentioned groups from the list of the SCs.</li> </ul>
 <p><b>Pradhan Mantri Rashtriya Bal Puraskar (PMRBP)</b></p>	<ul style="list-style-type: none"> <li>• It is awarded by Government of India to <b>children between the ages of 5 and 18</b> to recognise their exceptional abilities and outstanding <b>achievement</b>.</li> <li>• <b>It is given in six fields</b> of innovation, scholastic achievements, sports, art and culture, social service and bravery.</li> <li>• Each awardee of PMRBP is given a <b>medal, a cash prize of Rs 1 Lakh and a certificate</b>.</li> <li>• Formerly known as the National Child Award for Exceptional Achievement, it is <b>India's highest civilian honour for exceptional achievers under the age of 18</b></li> <li>• It has <b>two categories</b> – <b>Bal Shakti Puraskar</b> and <b>Bal Kalyan Puraskar</b>.</li> <li>• Award is administered by <b>Ministry of Women and Child Development</b>.</li> </ul>
 <p><b>One District One Product Scheme (ODOP)</b></p>	<ul style="list-style-type: none"> <li>• Department for Promotion of Industry and Internal Trade (DPIIT) held State Conference to promote ODOP Initiative.</li> <li>• ODOP was <b>first launched in Utter Pradesh</b> to create <b>product-specific traditional industrial hubs across 75 districts</b> of the state.</li> <li>• It is being <b>adopted all over India</b> to realise the true potential of each district.</li> <li>• It was operationally <b>merged with 'Districts as Export Hub' initiative</b> being implemented by Directorate General of Foreign Trade.</li> </ul>

 <p><b>Central Government Health Scheme (CGHS)</b></p>	<ul style="list-style-type: none"> <li>Ministry of Health and Family Welfare launched the <b>revamped website of CGHS</b>.</li> <li>CGHS is the <b>nodal healthcare provider to Central government employees, pensioners</b> and certain other categories of beneficiaries and their dependents enrolled under the scheme.</li> <li>Revamped website along with App will <b>enable delivery of healthcare services without venturing out</b> and is an innovative step during the ongoing pandemic.</li> </ul>
 <p><b>National Girl Child Day</b></p>	<ul style="list-style-type: none"> <li>Government marked the celebration of National Child Day on 24 January 2022.</li> <li>It was <b>first observed in 2008</b>, with the objective of <b>raising the consciousness of the society towards the girl child</b>.</li> <li>It is celebrated to <b>raise awareness</b> among people regarding inequalities, discrimination, exploitation faced by the girls in society.</li> </ul>
 <p><b>AT4 Weapon</b></p>	<ul style="list-style-type: none"> <li>Indian armed forces have selected <b>Sweden's Saab's AT4</b> as their new single-shot weapon.</li> <li>AT4 systems are <b>combat-proven, lightweight, single-shot, fully disposable</b> system and characterised by its <b>ease of use and handling</b>.</li> <li>It weighs around 9 kg and has an <b>effective range of 200m</b>.</li> <li>It is designed to be <b>effective against tanks and combat vehicles, landing craft, helicopters, aircraft, and armoured vehicles</b>.</li> </ul>
 <p><b>Non- Fungible Tokens (NFTs)</b></p>	<ul style="list-style-type: none"> <li>NFTs are <b>one-of-a-kind assets in the digital world</b> that can be bought and sold like any other piece of property, but they have no tangible form of their own.</li> <li>NFTs are <b>unique cryptographic tokens that exist on a blockchain and cannot be replicated</b>.</li> <li><b>Examples of the assets that NFTs can represent</b> include in-game items like avatars, digital and non-digital collectibles, domain names, and event tickets.</li> </ul>
 <p><b>Bhandari Co mmunity</b></p>	<ul style="list-style-type: none"> <li>It is <b>Goa's largest caste</b> group and is placed in the Other Backward Class (OBC) category in Goa.</li> <li>Community's traditional occupation was <b>toddy-tapping and distilling</b>, farm tilling and working in orchards.</li> <li>The community is <b>spread across Goa and Maharashtra's Konkan belt</b>.</li> </ul>
 <p><b>Places in News</b></p>	<p><b>Madagascar</b></p> <ul style="list-style-type: none"> <li>The Island nation is facing <b>one the most acute water shortages</b> where water became more expensive than food. <ul style="list-style-type: none"> <li>Though blessed with abundant water, Madagascar has undergone change in its hydrological cycle, due to global warming, leading to drought and famine.</li> </ul> </li> <li><b>Physical location and geographical features:</b> <ul style="list-style-type: none"> <li>It lies <b>off the southeastern coast of Africa</b> in the Indian Ocean and is <b>separated from the African coast by the 400-km wide Mozambique Channel</b>.</li> <li>It is the <b>fourth largest island in the world</b></li> <li>Highest point: <b>Maromokotro</b></li> <li>Longest river: <b>Mangoky</b></li> </ul> </li> <li>The island was ruled by the French from 1895 to 1957.</li> </ul> 

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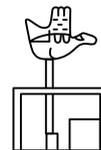
HYDERABAD



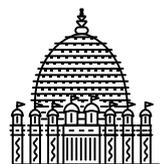
PUNE



AHMEDABAD



CHANDIGARH



GUWAHATI