NEXT IAS

DAILY CURRENT AFFAIRS (DCA)

Time: 45 Min

Date: 30-04-2024

Table of Content

HEATWAVES

In News

- Recently, large geographical areas in India experienced heatwave conditions.

Heat wave

- **Qualitatively**, a heat wave is a condition of air temperature which becomes fatal to the human body when exposed.

- **Quantitatively**, it is defined based on the temperature thresholds over a region in terms of actual temperature or its departure from normal.

Criterion

- Heat wave is considered if the maximum temperature of a station reaches at least 40°C or more for Plains and at least 30°C or more for Hilly regions.

a) **Based on Departure from Normal**

Heat Wave:	Departure from normal is 4.5^{0}C to 6.4^{0}C
Severe Heat Wave:	Departure from normal is >6.4^{0}C

b) **Based on Actual Maximum Temperature**

Heat Wave:	When actual maximum temperature ≥ 45^{0}C
Severe Heat Wave:	When actual maximum temperature ≥47^{0}C

- **For coastal stations in India :** When maximum temperature departure is 4.50°C or more from normal, Heat Wave may be described provided the actual maximum temperature is 37°C or more.

Favourable conditions

- **Transportation / Prevalence** of hot dry air over a region (There should be a region of warm dry air and appropriate flow pattern for transporting hot air over the region).

- **Absence of moisture** in the upper atmosphere (As the presence of moisture restricts the temperature rise).

- **The sky should be practically cloudless** (To allow maximum insulation over the region).

- **Large amplitude anticyclonic** flow over the area.

- **El Niño** leads to extreme heat in many parts of the world and the ocean.

Areas in India are prone to heatwaves

- The Core Heatwave Zone (CHZ) spanning central, north, and peninsular India between Gujarat and West Bengal is prone to heatwave conditions every year, during the summer season March to June and occasionally in July.

- Rajasthan, Punjab, Haryana, Chandigarh, Delhi, West Madhya Pradesh, Uttar Pradesh, Chhattisgarh, Odisha, Vidarbha in Maharashtra, parts of Gangetic West Bengal, coastal Andhra Pradesh, and Telangana are the most heat-wave-prone states or regions.

Impacts

- Population exposure to heat is increasing due to climate change

- The health impacts of Heat Waves typically involve dehydration, heat cramps, heat exhaustion and/ or heat stroke

- Heatwaves can burden health and emergency services and also increase strain on water, energy and transportation resulting in power shortages or even blackouts.

- Food and livelihood security may also be strained if people lose their crops or livestock due to extreme heat.

- affect agricultural output, cause water scarcity, increase the demand for energy, and affect ecosystems and air quality.

Initiatives

- Governments at various levels — State, district, and city — have prepared **heat action plans (HAPs).**
  - HAPs aim to increase preparedness and lower the adverse impacts of extreme heat by outlining strategies and measures to prepare for, address, and recover from heat waves.

- The **National Disaster Management Authority and IMD** are reported to be working with 23 States to develop HAPs.

- The Election Commission of India has issued an advisory to manage the impact of heat waves during voting, including carrying a water bottle and protecting oneself from direct sunlight.

Suggestions

- The focus should be given to passive cooling inside buildings through better ventilation, window shading, reflective paints, suitable building materials, and traditional methods.

- Understanding heat hotspots, increase in green-blue structures, access to cool spaces, support for suitable adaptation measures, and multisectoral health-centric heat action plans are relevant.

- Assessing patterns of socio-economic, demographic, and environmental factors, access to basic services, disease distribution, existing institutional mechanisms, and preparedness helps to take stock of the situation and to prioritise resource allocation for vulnerable populations, and strengthen institutional responses.

Source: IE

GUIDELINES FOR THE ELIMINATION OF CORPORAL PUNISHMENT IN SCHOOLS (GECP)

Context

- The **Tamil Nadu School Education Department** has issued **Guidelines for the Elimination of Corporal Punishment in Schools (GECP).**

About

- The GECP includes safeguarding the mental well-being of students and conducting awareness camps to familiarise stakeholders with guidelines of the **National Commission for Protection of Child Rights (NCPCR) for effective implementation.**
- It also includes measures such as:
  - Promptly addressing any complaints related to corporal punishment,
  - extending the focus beyond eliminating corporal punishment to address any form of harassment or situations impacting students' mental health
  - and establish monitoring committees at each school comprising school heads, parents, teachers and senior students to oversee the implementation of guidelines and address any issues, were also part of the GECP.

Corporal Punishment

- Corporal punishment is the **use of physical force against a child** as a **'corrective' form** of enforcing discipline.
  - Usually, teachers who are unable to discipline their students take recourse to physical assault.
- Children are subject to corporal punishment in schools; institutions meant for care and protection of children such as hostels, orphanages, ashram shalas, and juvenile homes; and even in the family setting.
- Currently, there is **no statutory definition** of corporal punishment of children in Indian law.

- In keeping with the provisions of the RTE Act, 2009, corporal punishment could be classified as **physical punishment, mental harassment and discrimination.**

Perceptions on Corporal Punishment

- Punishing children is **regarded as normal and acceptable in all settings** – whether in the family or in institutions.
  - It is often **considered necessary** in order that children grow up to be competent and responsible individuals.
- It is **widely used by teachers and parents** regardless of its evident lack of effectiveness, and potentially deleterious side-effects.
- This follows from the belief that **those in whose care children are entrusted in school or other institutions are 'in loco parentis'** and will therefore always act in the interests of the child.
- This notion needs to be reviewed in the **light of the widespread violence that exists in all institutions occupied by children.**

Consequences of Corporal Punishment

- **Impact on Development of Child:** It is now globally recognised that punishment in any form or kind in school comes in the way of the development of the full potential of children.
  - When adults use corporal punishment it teaches their children that hitting is an acceptable means of dealing with conflict.
- **Normalising Violence:** Corporal punishment leads to adverse physical, psychological and educational outcomes – including increased aggressive and destructive behaviour.
  - Children subjected to punishment prefer aggressive conflict resolution strategies with peers and siblings and they do not consider it a violation of their rights.
- **Social Concerns:** It can lead to poor school achievement, poor attention span, increased drop-out rate, school avoidance and school phobia, low selfesteem, anxiety, depression, suicide and retaliation against teachers – that emotionally scar the children for life.

Status of Corporal Punishment in India

- Section 17 (1) of the Right of Children to Free and Compulsory Education Act, 2009 expressly **bans subjecting a child to mental harassment or physical punishment.**

- **Cruelty to children is also prohibited under the Juvenile Justice (Care and Protection of Children) Act, 2000.**
  - These laws hold teachers and adults liable for assault or Corporal punishment of children.
- **Article 37 (a) of the United Nations Convention on the Rights of the Child,** to which India is a signatory, says that no child should bear any torture, cruelty, or inhuman punishment.

Relevant Constitutional Provisions

- Violence against children is a violation of the right **to live with dignity** which is integral to the **right to life under Article 21.**
- Further, Corporal punishment serves as a deterrent to children from attending school and contributes to dropout rate.
  - This goes against the **Right to Education as a Fundamental Right guaranteed under Article 21-A of Constitution of India.**
- **Article 39 (e)** of the Constitution directs the State to work progressively to ensure that the tender age of children are not abused.
- **Article 39 (f)** of the Constitution directs the State to work progressively to ensure that "children are given opportunities and facilities to develop in a healthy manner and in conditions of freedom and dignity and that childhood and youth are protected against exploitation and against moral and material abandonment."

Government Initiatives

- **The Juvenile Justice (Care and Protection of Children) Act, 2000** is an important statute that **criminalises** acts that may cause a child mental or physical suffering.
- **Some provisions of the Scheduled Castes and Tribes (Prevention of Atrocities) Act, 1989** can be used to prosecute an adult in the general category who inflicts corporal punishment upon a scheduled caste or scheduled tribe child.
- **Various provisions of the Protection of Civil Rights Act, 1955** can be used to prosecute a person/ manager/trustee as well as warrant resumption or suspension of grants made by the Government to the educational institution or hostel on the ground of untouchability.
- **The National Commission for Protection of Child Rights (NCPCR) and the State Commissions for Protection of Child Rights (SCPCRs)** have been entrusted with the task of monitoring children's right to education under Section 31 of the Right of Children to Free and Compulsory Education Act, 2009.

Suggestions

- The school should maintain the **student-teacher ratio** at the level as prescribed under the RTE Act, 2009, in order to avoid overcrowding and unmanageable class, leading to the practice of corporal punishment.
- All children should be informed through campaigns and publicity drives that they have a **right to speak against physical punishments, mental harassment and discrimination.**
- **The teachers should be trained** in the skills required to positively engage with children who are different in order to understand their predicaments.
- The conduct of the teacher and administration should be such that it fosters a **spirit of inclusion, care and nurturing.**
- **A mechanism for children to express their grievances** both in person and anonymously should be provided.

Source: TH

CORPORATE GOVERNANCE CHARTER FOR STARTUPS

Context

- **Confederation of Indian Industry (CII)** launched a **corporate governance charter for startups,** including a **self-evaluative scorecard.**

About

- It will provide **suggestions on corporate governance tailored for startups** and offer guidelines suitable for **different stages of a startup** which is aiming to **enhance governance practices.**
  - It comes at a time when startups such as Byju's, BharatPe, and Zilingo have raised concern over governance standards in the past 12-18 months.
- **Corporate governance in India** is a set of rules, practices and processes by which a company is guided and controlled.

- **Self Evaluative Governance:** The charter includes an online self-evaluative governance scorecard that startups can use to evaluate their current governance status and its improvement over time.
    - The tool allows startups to measure their governance progress, with score changes indicating improvements in governance practices as assessed against the scorecard from time to time.
- **Startups will be structured across four key stages:** inception, progression, growth and going public.
    - **At the Inception stage,** the startups must focus on board formation, setting the tone at the top, compliance monitoring, accounting, finance, external audit, policies for related-party transactions, and conflict resolution mechanisms.
    - **In the Progression stage,** a startup may additionally focus on the expansion of board oversight, monitoring key business metrics, maintaining internal controls, defining a hierarchy of decision-making, and setting up an audit committee.
    - **For the Growth stage,** the startups must also focus on building stakeholder awareness towards the vision, mission, code of conduct, culture, and ethics of an organisation, form board committees, ensure diversity and inclusion on the board and fulfill statutory requirements, according to the Companies Act 2013 and other applicable laws and regulations.
    - **At the Going Public stage,** a startup must expand its governance in terms of monitoring the functioning of various committees, focus on fraud prevention and detection, minimise information asymmetry, plans for succession, and evaluate board performance.
- **Valuation:** Startups may strive for long-term value creation rather than short-term valuations. The valuations of businesses should be kept as realistic as possible.
- **Long Term Goals:** The needs of the business entity should be separated from the personal needs of its founder(s), but at the same time, the goals and needs of the founders, promoters, and initial investors should be aligned with the long-term goals of the business.

- **Separate Legal Entity:** The startup should be maintained as a separate legal entity with the organisation's assets distinct from the founders' assets.

> **Confederation of Indian Industry (CII)**
> - The Confederation of Indian Industry (CII) is a **non-government, not-for-profit, industry-led and industry-managed business association organization** playing a proactive role in India's development process.
> - Founded in **1895**, CII has members from the private and public sectors, including small and medium-sized enterprises and multinational corporations, and an indirect membership of enterprises from national and regional sectoral industry bodies.
> - CII charts change by working closely with governments and thought leaders and enhancing efficiency, competitiveness and business opportunities for industry.

What is Corporate Governance?

- Corporate governance is the **system of rules, practices, and processes** by which a company is directed and controlled.
- It involves **balancing the interests of a company's stakeholders** i.e. shareholders, customers, suppliers,, the government, and the community.
- Corporate Governance consists of;
    - Explicit and implicit contracts between the company and the stakeholders for distribution of responsibilities, rights and rewards.
    - Procedures for reconciling the conflicting interests of stakeholders in accordance with their duties, privileges and roles.
    - Procedures for proper supervision, control, and information that flows to serve as a system of checks and balances.

Regulatory Framework for Corporate Governance in India

- **The Companies Act, 2013:** It contains provisions like Composition of Board of Directors, Admitting Woman Director and Independent Director, Directors Training and Evaluation, Constitution of Audit Committee, Risk Management Committee, Subsidiaries Companies Management etc.

- **Securities and Exchange Board of India (SEBI):** SEBI is a regulatory authority to curb the malpractices in the financial market and protect the interest of its investors. It regulates the activities of Stock Exchange and to ensure the healthy development in the financial market.

- **Standard Listing Agreement of Stock Exchanges:** It is the basic document which is executed between companies and the Stock Exchange when companies are listed on the stock exchange. The main purpose of it is to ensure that companies are following good corporate governance.

- **Institute of Chartered Accountants of India (ICAI):** It issues accounting standards for disclosure of financial information.

- **Institute of Company Secretaries of India (ICSI):** It issues secretarial standards as per the provision of the Companies Act,2013.

Challenges in Corporate Governance In India

- **Getting the board right:** In India, it is a common practice for friends and family of promoters to be appointed as board members.

- **Performance evaluation of directors:** To achieve the desired results on governance practices, there is often a call for results of performance evaluation to be shared in public. But corporate firms do not share it sometimes to avoid public scrutiny and negative feedback.

- **Removal of Independent Directors:** In most of the cases, the major issue in corporate governance arises as independent directors were easily removed from their positions by the promoters if they do not side with promoters' decisions.

- **Founders Control and Succession Planning:** In India, founders' ability to control the affairs of the company has the potential of derailing the entire corporate governance system. Unlike developed economies, in India, the identity of the founder and the company is often merged.

- **Risk Management:** The board is only playing an oversight role on the affairs of a company. However there is a need for framing and implementing the risk management policy.

Committees for Resolving Issues

- **Kumar Mangalam Birla Committee:** It was set up to suggest suitable recommendations for the Listing Agreement of Companies with their Stock Exchanges.

  - The Committee evolved a Code of Governance which was accepted by SEBI and a new Clause 49 was inserted into the Listing Agreement of Companies with their Stock Exchanges.

- **N R Narayan Murthy Committee:** Based on the recommendations of this committee SEBI published a revised Clause 49 which included amendments /additions to provisions relating definition of independent directors, strengthening the responsibility of Audit Committees and requiring Boards to adopt a formal Code of Conduct.

Importance of corporate governance

- **Strengthens investors confidence:** Strong corporate governance maintains investors' confidence in the financial market, as a result of which companies can raise capital efficiently and effectively.

- **International flows of capital:** It enables companies to reap the benefits of the global capital markets which will contribute to economic growth.

- **Increased Productivity:** It also minimizes wastages, corruption, risks and mismanagement.

- **Brand Image:** It helps in brand formation and development of a company.It ultimately increases capital flows from foreign institutional investors (FII) and foreign direct investment (FDI).

> ### Startups in India
>
> - An entity shall cease to be a Startup on **completion of ten years** from the date of its incorporation/ registration or if its **turnover for any previous year exceeds one hundred crore rupees.**
>
> - There are over **99000+ startups** recognized by the government of India as of 2023.
>
>   - **49%** of them have a base in Tier 2 - Tier 3 cities.
>   - These startups are spread over 669 districts from 36 States and Union Territories of India.
>
> - As of 2023, India is home to 108 unicorns with a total valuation of $ 340.80 Bn.
>
>   - Unicorn is a term used in the venture capital industry to describe a **privately held startup company with a value of over $1 billion.**

Source: BS

G7 COUNTRIES AGREE TO END USE OF COAL POWER BY 2035

Context

- Energy and climate ministers from the G7 group of industrialized nations have agreed to phase out by 2035 the use of coal power where the emissions have not been captured.

About

- The non-governmental organization had called for the G7 to set an earlier 2030 phaseout date for power generation by coal, and a 2035 deadline for gas-fired supplies.
- Together the G7 makes up around 38 percent of the global economy and was responsible for 21 percent of total greenhouse gas emissions in 2021.

Coal Sector in India

- **Coal Reserves:** India has significant coal reserves, and it is one of the world's largest coal producers.
  - The major coal fields in India are located in the eastern states of Jharkhand, Odisha, and West Bengal, as well as in central states like Chhattisgarh and Madhya Pradesh.
- **Coal Production:** India is among the top 3 leading coal producers globally. The Coal India Limited (CIL) is the state-owned coal mining company and the largest government-owned-coal-producer in the world.
- **Coal Consumption:** The power demand in India is surging. In 2022, the requirement grew about 8 - 9%.
  - Industrial and commercial activity are among the biggest consumers of energy in the country.
- **Import and Export:** Despite being a significant coal producer, India has also been importing coal to meet the growing demand.
  - This is due to issues such as transportation challenges and the need for specific types of coal for certain industries.

Concerns in phasing Out of Coal Power Plants

- Currently, out of the total energy produced in the country, only **22%** is from renewable sources. Fossil fuels, mainly coal, still provide **75%** of India's power supply.

- **Dependency on Natural Factors:** Energy sources like solar and wind are variable as they rely on natural factors like sunlight, wind and water availability.
  - To ensure a steady supply, India has to heavily invest in battery storage.
- **Concerns in Hydropower Projects:** Numerous hydropower projects are under construction or in the planning stages in the Himalayan region.
  - But they have come under fire as the projects have caused ecological damage and raised concerns about the potential conflicts over water resources in the area.
- **Nuclear Energy:** The country's plans to generate energy with the help of nuclear power plants have not really taken off.
  - During 2021-22, the plants produced about 3.15% of the total electricity generated in India.
- **Infrastructure Development:** The transition to renewable energy requires significant infrastructure development.
  - The speed and scale of this infrastructure development can be a challenge for a country as large and diverse as India.
- **Grid Integration:** Integrating renewable energy into the existing power grid is a complex task.
  - The grid must be flexible and capable of handling fluctuations in supply.

Steps Taken by Government for Transition to Renewable Energy Sources

- **India aims** to reach **500 GW of renewable energy capacity by 2030,** about three times the current capacity of about 180 GW.
- **National Solar Mission (NSM):** It was launched in **2010,** it has set ambitious targets for solar capacity installation, including grid-connected and off-grid solar power projects.
- **Green Energy Corridors:** The Green Energy Corridor project focuses on enhancing the transmission infrastructure to facilitate the integration of renewable energy into the national grid.
- **Renewable Purchase Obligation (RPO):** This requires power distribution companies and large electricity consumers to procure a certain percentage of their power from renewable sources, encouraging the demand for renewable energy.

- **Pradhan Mantri Kisan Urja Suraksha evam Utthaan Mahabhiyan (PM-KUSUM):** It includes the installation of solar pumps, solarization of existing grid-connected agricultural pumps, and the establishment of solar power plants on barren or fallow land.

- **International Solar Alliance (ISA):** India played a key role in establishing the International Solar Alliance, a coalition of solar-resource-rich countries to address their energy needs through the promotion of solar energy.

Concluding Remark

- The agreement marks a significant step in the direction indicated last year by the COP28 United Nations climate summit for a transition away from fossil fuels, of which coal is the most polluting.

- It helps accelerate the shift of investments from coal to clean technology in particular in Japan and more broadly in the whole Asian coal economy, including China and India.

Group of Seven (G7)

- **It is an intergovernmental organization** of seven countries that are the world's most industrialized and developed economies.

- **Member:** France, Germany, United Kingdom, Italy, United States of America, Canada and Japan.

- **History:** It traces its origin to an informal meeting of the Finance Ministers of France, West Germany, the US, Great Britain and Japan (Group of Five) in the wake of the 1973 oil crisis.

  - **Canada** joined the group in **1976** and the **European Union (EU)** began attending the meetings from **1977.**

  - It was called the G8 after the original seven were joined by Russia in 1997 and it returned to being called G7 when Russia was expelled as a member in 2014 following the latter's annexation of the Crimea region of Ukraine.

Source: **TH**

WARMING OF INDIAN OCEAN

Context

- According to the Indian Institute of Tropical Meteorology (IITM), From 1950-2020, the Indian Ocean had become warmer by 1.2°C and climate models expect it to heat up a further 1.7°C–3.8°C from 2020–2100.

Key Highlights

- **Marine heatwaves:** Marine heatwaves are expected to increase tenfold from the current average of **20 days per year to 220–250 days per year.** The tropical Indian Ocean will likely be in a "near-permanent heatwave state.

  - It causes habitat destruction through coral bleaching, seagrass loss and the degradation of kelp forests, adversely affecting the fisheries sector.

- The **heat content** of the Indian Ocean, when measured from surface to a depth of 2,000 meters, is currently increasing at the rate of 4.5 zetta-joules per decade, and is predicted to increase at a rate of **16–22 zetta-joules per decade** in the future.

  - Joule is a unit of energy and one zetta-joule is equal to one billion-trillion joules (10^{21}).

- **Thermal expansion:** Rising heat content causes the volume of water to increase, called the thermal expansion of water.

  - It is responsible for more than half of the sea-level rise in the Indian Ocean -larger than the changes arising from glacier and sea-ice melting.

- The **frequency of extreme dipole events** is predicted to increase by 66% whereas the frequency of moderate events is to decrease by 52% by the end of the 21st century.

What are marine heat waves?

- A marine heat wave is an extreme weather event. It occurs when the surface temperature of a particular region of the sea rises to **3 or 4 degree Celsius** above the average temperature for **at least five days.** MHWs can last for weeks, months or even years.

- Marine heatwaves can occur in summer or winter - they are defined based on differences with expected temperatures for the location and time of year.

Consequences of extreme heating

- It has significant repercussions for the **southwest monsoon season**, which provides about 70 per cent of India's annual rainfall.

- The warming could also lead to more **frequent and intense extreme weather** events, such as tropical cyclones and floods, as well as a rise in sea levels due to thermal expansion.

- he **Indian Ocean Dipole (IOD)**, is also expected to change due to the warming of the Indian Ocean.
  - **In the positive phase of the IOD,** when the western parts of the Indian Ocean are warmer than the eastern parts, monsoon rainfall generally increases across many regions in India and the rest of South Asia.
  - **In the negative phase,** when the western parts of the ocean are cooler than the eastern parts, less than normal rainfall is observed during the post-monsoon period in northwestern India.
- The pH levels of the ocean's waters are projected to decrease from about 8.1 currently to **7.7** by the end of the century.
  - Changes in pH may be detrimental since many marine organisms are sensitive to the change in ocean acidity.

Way Ahead

- Addressing the impending challenges in the Indian Ocean demands a multifaceted approach. Reducing GHG emissions and building climate-resilient infrastructure are the most effective strategies to mitigate the current and future impacts of warming.
- Conserving marine ecosystems through sustainable practices and improving forecasting capabilities can strengthen the region's resilience to extreme weather events.

Source: TH

NEWS IN SHORT

CHAKISAURUS NEKUL

Context

- Paleontologists from Argentina announced the discovery of a dinosaur, named **Chakisaurus nekul.**

About

- Chakisaurus nekul was a new **medium-sized herbivorous dinosaur** and lived about 90 million years ago in the **Late Cretaceous period** in present day Patagonia.
- It was found in the **Pueblo Blanco Natural Reserve,** in the southern province of Río Negro, an area rich in fossils.

- It is estimated that the largest Chakisaurus reached **2.5 or 3 meters long** and was **70 centimeters high.**
- The dinosaur was a **fast runner** and had its **tail curved** unusually downward.

Source: TH

SALMONELLA CONTAMINATION

Context

- The United States authorities have refused Indian spice-related shipments **over salmonella contamination.**

About

- **Salmonella** is a **group of bacteria** that can cause **gastrointestinal illness and fever called salmonellosis.**
- Salmonella **naturally lives in animals' intestines** and can be found in their feces (poop).
- The bacteria then spread to humans if they come in contact with **salmonella-infected animals or items in their environment.**
- People infected with Salmonella might have **diarrhea, fever, and stomach cramps.**
- Some people—especially children younger than 5 years old, adults 65 years and older, and people with weakened immune systems—may experience more severe illness that requires medical treatment or hospitalization.

Source: IE

PARADOX OF THRIFT

About

- The concept was popularized by British economist **John Maynard Keynes** in his 1936 book **The General Theory of Employment, Interest, and Money.**
- **The paradox of thrift,** also known as the paradox of savings, refers to the theory that a **rise in the savings rate** of individuals can cause a fall in the overall savings in an economy.
- This is in contrast to the belief that a rise in individuals' savings rates will cause a rise in the overall savings in the economy.
- So even though savings may be good for an individual household, it is believed that it may not be good for the wider economy.

Source: TH

BISPHENOL A

In News

- Plastics have caused serious concerns associated with the chemicals that leach out from plastics during use including bisphenol A (BPA).

About Bisphenol A (BPA)

- It is a chemical produced in large quantities for use primarily in the production of polycarbonate plastics.
- It is found in various products including shatterproof windows, eyewear, water bottles, and epoxy resins that coat some metal food cans, bottle tops, and water supply pipes.
- The primary source of exposure to BPA for most people is through the diet.
  - While air, dust, and water are other possible sources of exposure, BPA in food and beverages accounts for the majority of daily human exposure.
- Bisphenol A can leach into food from the protective internal epoxy resin coatings of canned foods and from consumer products such as polycarbonate tableware, food storage containers, water bottles, and baby bottles.
- BPA is known to disrupt endocrine function and has been associated with reproductive disorders, obesity, and increased risk of certain cancers.

Source: DTE

ARTICLE 31(C) OF INDIAN CONSTITUTION

In News

- Recently, it was found that the 'Article 31c' of the Indian Constitution is currently under scrutiny by the Supreme Court of India in a case concerning the acquisition and redistribution of private property.

Genesis of Article 31C

- The introduction of Article 31c was a response to the Supreme Court's judgement in the Bank Nationalisation Case (Rustom Cavasjee Cooper vs Union Of India, 1970), where the court struck down the **Banking Companies (Acquisition and Transfer of Undertakings) Act, 1969.**
- The court held that the **'right to compensation'** was not appropriately ensured by the Banking Act.

- The government, through the **Constitution (Twenty-fifth Amendment) Act, 1971,** sought to 'surmount the difficulties placed in the way of giving effect to the Directive Principles of State Policy'.

Article 31C

- It protects laws enacted to ensure the **'material resources of the community'** are distributed **to serve the common good (Article 39 (b))** and that wealth and the means of production are **not 'concentrated' to the 'common detriment' (Article 39 (c)).**
- It lists certain DPSP, which are meant to be guiding principles for the enactment of laws, but are not directly enforceable in any court of law.
- These particular directive principles (Articles 39 (b) and 39 (c)) cannot be challenged by invoking the Right to Equality (Article 14) or the Rights under Article 19 (freedom of speech, right to assemble peacefully, etc.).

Source: IE

RAMPAGE MISSILE

Context:

- Recently, the Indian Air Force (IAF) and the Indian Navy have inducted a new weapon into their arsenal - the **Rampage missile.**

About the Rampage Missile

- It is a long-range, supersonic, air-to-ground missile capable of hitting targets up to 250 kilometres away.
- Known as the **High-Speed Low Drag-Mark 2 Missile** in the Indian Air Force, it was extensively used by the **Israeli Air Force** in recent operations against Iranian targets.

Integration with Fighter Aircraft

- The Rampage missile has been integrated into the Russian-origin aircraft fleet of the **Indian Air Force**, including the Su-30 MKI, MiG-29, and Jaguar fighters.

- The **Indian Navy** has inducted the missile into its MiG-29K naval fighter jets.

- This integration allows for the firing of multiple long-range air-to-ground missiles, including the over 400 Km strike range BrahMos supersonic missiles.

Procurement Under Emergency Powers

- The procurement of the Rampage missiles was part of the emergency powers granted by the Defence Ministry to the armed forces, *enabling them to equip themselves with critical weapons and equipment* following the standoff with China in 2020.

- These missiles offer a **longer range than the Spice-2000s**, which were used in the Balakot air strikes in 2019.

Source: TOI

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