

## DAILY CURRENT AFFAIRS (DCA)

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## INTER-GOVERNMENTAL FRAMEWORK AGREEMENT

### Context

- The **Union Cabinet** gave its Ex-post facto approval to the **Inter-Governmental Framework Agreement (IGFA)**.

### About

- It was signed in February, 2024 during the **High Level visit** between **India and the United Arab Emirates** on Cooperation for the empowerment and operation of the **India-Middle East Europe Economic Corridor (IMEC)**.
- **Aim:** To enhance the bilateral relations and to further strengthen the relations between the two countries in the **Ports, Maritime and Logistics sectors**.
  - ♦ The cooperation will be based on a set of **mutually agreed upon principles, guidelines and agreements** consistent with the relevant rules and regulations of the countries' jurisdiction.

### What is IMEC?

- **Members:** On the sidelines of the G20 Leaders' Summit, Leaders of **India, European Union, France, Germany, Italy, Saudi Arabia, UAE and US** announced the India-Middle East-Europe Economic Corridor (IMEC).
- **Aim:** Integration of Asia, Europe and the Middle East.
- **The IMEC will comprise of two separate corridors:**
  - ♦ The east corridor connecting India to the West Asia/Middle East and
  - ♦ The northern corridor connecting West Asia/Middle East to Europe.



- **Connectivity:** The corridor will provide reliable and cost-effective cross-border ship to rail transit networks to supplement existing maritime routes.

### Significance

- **Economic Development:** By linking Asia, West Asia, the Middle East and Europe through enhanced connectivity and economic integration, the corridor aims to give a boost to economic development in the regions.
- **Connectivity:** The corridor will include a rail line, which, upon completion, will provide a reliable and cost-effective cross-border ship-to-rail transit network.
  - ♦ The rail line will supplement the existing multi-modal transport routes enhancing trans-shipment of goods and services from South East Asia through India to West Asia/Middle East and Europe.
- **Eco-friendly Infrastructure:** It places emphasis on developing environmentally friendly infrastructure.
- **Transformative Integration:** It intends to increase efficiency, reduce costs, secure regional supply chains, increase trade accessibility, enhance economic cooperation, generate jobs and lower greenhouse gas emission, resulting in a transformative integration of Asia, Europe and the Middle East (West Asia).

Source: PIB

## INDIA'S ATMOSPHERIC RESEARCH TESTBED

### Context

- The first phase of **India's Atmospheric Research Testbed** in Central India (ART-CI) was inaugurated in **Sehore district, Madhya Pradesh**.

### About

- It is funded by the **Ministry of Earth Sciences (MoES)** and will house **25 high-end meteorological instruments**.
- The **Indian Institute of Tropical Meteorology (IITM)**, Pune, is in charge of the operations.
- It will study **vital cloud processes** associated with the monsoons over central India's Monsoon Core Zone (MCZ).

### Atmospheric Research Testbed (ART)

- The ART is an **open-field, focused observational and analytical research** programme.
- **Aim:** To conduct **ground-based observations of weather parameters** like temperature, wind speeds, etc. and in-situ (on-site) observations of the **transient synoptic systems** – like low-pressure areas and depressions that form in the

Bay of Bengal – during the southwest monsoon season from June to September.

- **Application of the Study:** Studying these systems will be used to generate high volumes of data over a long period.
  - ♦ It will be compared with the existing weather models so that improvements can be made to obtain accurate rainfall predictions.
  - ♦ The setup at ART will also be used for calibrating and validating various satellite-based observations, part of weather predictions and forecasting.
- **First Phase:** Under the first phase, remote sensing-based and in-situ measurements using 25 meteorological instruments have commenced.
- **In the second phase,** ART will deploy instruments such as a radar wind profiler and balloon-bound radiosonde, and soil moisture and temperature measuring equipment.

#### Why is ART Established in Madhya Pradesh?

- The ART has been established at Silkheda, a location that falls directly in line with the path of major rain-bearing synoptic systems. **This will facilitate direct monitoring and tracking.**
- The locality is pristine and free of anthropogenic and other pollutants, making it the best site in central India for setting up **sensitive, high-end meteorological instruments and observatories for recording data.**

#### Significance of Data about Monsoons over Central India

- **Rainfall Forecasts:** The India Meteorological Department (IMD) issues rainfall forecasts for the country's four homogeneous regions – north, west, east and south peninsular India.
  - ♦ In addition, it issues a special rainfall forecast for the Monsoon Core Zone (MCZ), which is **considered India's food bowl.**
  - ♦ However, there is still limited understanding about the role of these synoptic systems, their associated cloud physics, cloud properties and their overall role in enhancing the monsoon rainfall.
- **Natural Laboratory:** Central India, therefore, acts as a natural laboratory for scientists and meteorologists to perform a study of the Indian monsoons.

Source: IE

## VOCAL FOR LOCAL INITIATIVE TO PROMOTE GRASSROOTS ENTREPRENEURSHIP

### Context

- The NITI Aayog launched the **'Vocal for Local'** initiative as part of the Aspirational Blocks Programme.

### About

- The initiative aims to bolster local economies and promote grassroots entrepreneurship.
- It is being implemented in partnership with **Government e-Marketplace (GeM)** and **Open Network for Digital Commerce (ONDC)** platforms.

### Vocal for Local initiative

- Vocal for Local is a concept that urges Indians to back native products, stimulating economic advancement and self-sufficiency.
- It asks citizens to prioritize and advocate for goods produced locally, thereby strengthening domestic industries.

### Benefits of Vocal For Local Initiative

- Encouraging the purchase of locally made products stimulates **economic growth** by supporting local businesses, artisans, and manufacturers.
- **Small and medium-sized enterprises** are the backbone of India and Vocal for Local helps in strengthening these enterprises by providing them with increased visibility and market access.
- Local production often implies **reduced transportation and carbon footprint**, contributing to environmental sustainability.
- Many locally made products in India are deeply rooted in the country's rich cultural heritage and traditions. The initiative helps **preserve indigenous crafts** and traditions, safeguarding cultural diversity.
- Vocal for Local fosters a sense of **community empowerment** by encouraging people to take pride in their local products and businesses.

### The Aspirational Blocks Programme (ABP)

- The Aspirational Blocks Programme (ABP) was launched in **2023**.
- **Objective:** ABP focuses on improving governance to enhance the quality of life of citizens in the most difficult and relatively underdeveloped blocks of India.



- ◆ **500 blocks** from 329 districts across 27 states and 4 Union Territories of India are part of the programme.
- **The Programme strategy** is based on convergence of existing schemes, defining outcomes, and monitoring them on a constant basis.
- **40 key performance indicators (KPIs)** were chosen to measure progress of the blocks which have been grouped into 5 themes.

### Government e-Marketplace (GeM)

- GeM is the **Public Procurement Portal** for procurement of goods and services for all Central Government and State Government Ministries, Departments, Public Sector Units (PSUs) and affiliated.
- GeM endeavors to make the public procurement process **transparent, efficient and inclusive**.
- It is a **100 percent government owned company** set up under the aegis of Department of Commerce, Ministry of Commerce and Industry.
- It provides the tools of e-bidding, reverse e-auction and demand aggregation to facilitate the government users

### Open Network for Digital Commerce (ONDC)

- **ONDC is a network** based on open protocol and will enable local commerce across segments, such as mobility, grocery etc to be discovered and engaged by any network-enabled application.
- It is an initiative of the Department for Promotion of Industry and Internal Trade (DPIIT) under the **Ministry of Commerce and Industry**.
- **Objective:** The platform aims to create new opportunities, curb digital monopolies and by supporting micro, small and medium enterprises and small traders and help them get on online platforms.

Source: AIR

## LEVELS AND TRENDS IN CHILD MORTALITY: UN REPORT

### Context

- **Global child deaths reached a historic low in 2022**, according to the latest estimates by the **United Nations Inter-agency Group for Child Mortality Estimation**.

### About

- The report noted the **annual number of global under-five deaths in 2022 declined by more than half** from the 2000 estimate — from 9.9 million to 4.9 million.
- However, the numbers are still bad. Globally,
  - ◆ **neonatal deaths**, or the death of a baby within 28 days of birth, happened every 14 seconds;
  - ◆ **a child aged under five** died every six seconds and
  - ◆ **an adolescent (ages 10 to 19)** died every 35 seconds in 2022, the report found.

### Major highlights of the report

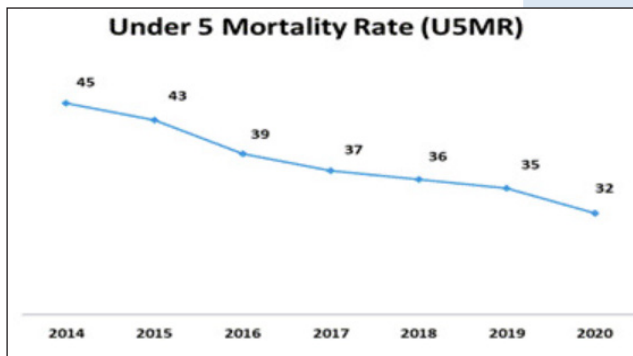
- **Decline in child deaths:** The report noted a **62 per cent decline in child deaths** from the 1990 estimates.
  - ◆ However, it warned that “these averages mask **persistent and entrenched inequities among vulnerable populations** of children.”
- **Neonatal deaths:** While the larger trend shows a decline, **the trend of under-five deaths has increased in the neonatal period** from 41 per cent in 2000 to 47 per cent in 2022.
  - ◆ The slower decline in neonatal deaths is due to **factors like population change and differences in the cause-of-death structure by age**.
    - Mortality among 1–59-month-olds is generally more responsive to **basic public health interventions**, while neonatal mortality relates more to **complications around the time of birth**.
- **Sub-saharan Africa:** Sub-Saharan Africa, where annual neonatal deaths have stagnated at about 1 million, bears the greatest burden of under-five deaths in the world.
  - ◆ The mortality rate for children aged 28 days was **46 deaths per 1,000** children in the region, more than two times higher than the **global average of 20 deaths per 1,000 children** aged 28 days.
- **Leading causes:** Prematurity, pneumonia, trauma, malaria and diarrhoea are among the leading causes of death for newborns and children, all preventable causes.
  - ◆ **These illnesses could have been prevented** with vaccinations, availability of skilled health personnel at birth, support for early and continued breastfeeding.
- **Survival factors:** The child’s survival largely depends on the place of birth; whether the child

belongs to a low-income or high-income country, and also on the inequity within countries.

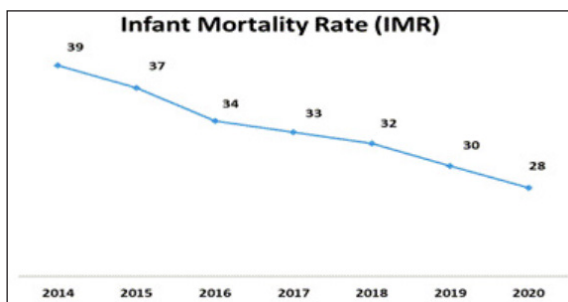
- ♦ On average, **children living in rural areas are at a higher risk** of death before age 5 compared to their urban counterparts.
- **Predictions:** The report estimates that **35 million children** under the age of 5 will lose their life before 2030 and sub-Saharan Africa will bear most of the death toll.
- ♦ It further warned that under current trends, **59 countries will miss the SDG under-five mortality target and 64 countries will miss the neonatal mortality target.**

### Child Mortality in India: Status and Trends

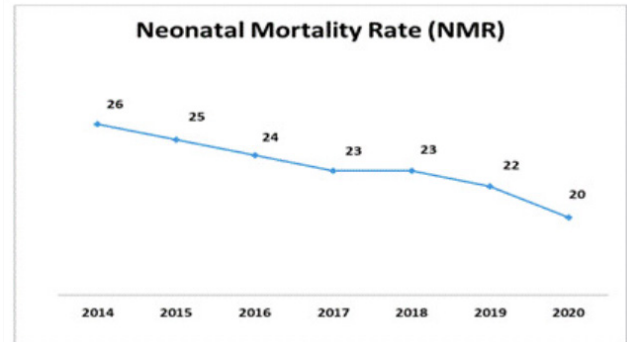
- As per the **Sample Registration System (SRS) Statistical Report 2020 released on 22nd September 2022** by Registrar General of India (RGI), the country has been witnessing a **progressive reduction in IMR, U5MR and NMR since 2014** towards achieving the Sustainable Development Goals (SDG) targets by 2030.
- **Under 5 Mortality Rate (U5MR)** for the country has shown a significant decline of 3 points from 2019 (32 per 1000 live births in 2020 against 35 per 1000 live births in 2019).
- ♦ It varies from 36 in rural areas to 21 in urban areas and U5MR for females is higher (33) than male (31).



- **Infant Mortality Rate (IMR)** has also registered a 2-point decline to 28 per 1000 live births in 2020 from 30 per 1000 live births in 2019 (Annual Decline Rate: 6.7%).
- ♦ The Rural-Urban difference has narrowed to 12 points (Urban 19, Rural-31).



- **Neonatal Mortality Rate** has also declined by 2 points from 22 per 1000 live births in 2019 to 20 per 1000 live births in 2020 (Annual Decline Rate: 9.1%).
- ♦ It ranges from 12 in urban areas to 23 in rural areas.



### Major Causes of Child Mortality in India:

- **Preterm Birth Complications:** Low birth weight, respiratory problems due to underdeveloped lungs.
- **Birth Asphyxia:** Lack of oxygen during delivery, leading to brain damage or death.
- **Neonatal Infections:** Sepsis, pneumonia can overwhelm a newborn's weak immune system.
- **Pneumonia:** The leading cause, often linked to malnutrition and air pollution.
- **Diarrhoea:** Dehydration caused by infectious diseases like rotavirus.
- **Malnutrition:** Stunting and wasting weaken a child's immune system and increase vulnerability to infections.

### Measures to Reduce Child Mortality:

#### Improving Maternal Health:

- **Prenatal Care:** Regular checkups, proper nutrition for pregnant women to prevent complications and low birth weight.
- **Skilled Birth Attendance:** Deliveries by trained midwives or doctors to ensure safe childbirth.
- **Postnatal Care:** Monitoring the well-being of mothers and newborns after delivery.

#### Combating Childhood Illnesses:

- **Immunization Programs:** Ensure universal access to vaccinations for preventable diseases like measles, pneumonia, and diarrhea.
- **Improved Sanitation and Hygiene:** Promote handwashing with soap, access to clean drinking water, and proper sanitation facilities.
- **Pneumonia Control:** Early diagnosis and treatment with antibiotics.

- **Diarrhoea Management:** Oral rehydration therapy (ORT) with clean water and electrolytes to prevent dehydration.

#### Addressing Malnutrition:

- **Nutritional Programs:** Promote breastfeeding for newborns, provide access to nutritious food for mothers and children, especially during the crucial first 1000 days of life.

#### Public Awareness:

- **Educate families:** Importance of good hygiene, breastfeeding, timely medical care for children, and recognizing danger signs of illness.

#### Additional Measures:

- **Invest in Healthcare Infrastructure:** Equip health facilities, especially in rural areas, with necessary supplies and train healthcare workers.
- **Address Social Determinants:** Poverty, lack of education, and gender inequality significantly contribute to child mortality.
- **Empowering Women:** Education and economic empowerment of women lead to better health outcomes for themselves and their children.

#### Way Ahead

- **By tackling causes behind the child mortality and implementing required measures,** India can significantly reduce child mortality and ensure a healthier future for its young generation.

Source: DTE

## MOU BETWEEN INDIA AND BHUTAN

#### Context:

- The Union Cabinet recently gave its approval for the signing of **Memorandum of Understanding between the Government of India and the Royal Government of Bhutan.**

#### About:

- The MoU signed between the two countries is on **General Supply of Petroleum, Oil, Lubricants (POL) and related products from India to Bhutan.**
- It aims to **benefit India and its citizens with improved economic and commercial linkages with Bhutan** irrespective of any gender, class or income bias, particularly in the area of hydrocarbon sector.

#### Expected Benefits of MoU:

- The Memorandum of Understanding will **promote bilateral trade** in the hydrocarbon sector and

will ensure secured and long term supply of petroleum products to Bhutan.

- Since, exports play a crucial role in realizing Aatmanirbhar Bharat. The MoU will give **thrust towards self-reliant India.**
- The MoU will be a **strategic fit as Energy Bridge** in India's **Neighborhood First Policy.**

#### India-Bhutan relations: An Overview

- **Diplomatic relations between India and Bhutan were established in 1968** with the establishment of a special office of India in Thimphu.
  - ♦ Before this our relations with Bhutan were looked after by our **Political Officer in Sikkim.**
- The basic framework of India- Bhutan bilateral relations was the **Treaty of Friendship and Cooperation signed in 1949** between the two countries, which was **revised in February 2007.**
- The India-Bhutan Friendship Treaty not only reflects the **contemporary nature of our relationship but also lays the foundation for their future development** in the 21st century.

#### Major areas of Cooperation

##### Hydropower Cooperation

- Hydropower projects in Bhutan are an example of **win-win cooperation**, providing a reliable source of inexpensive and clean electricity to India, generating export revenue for Bhutan and cementing our economic integration.
- The ongoing cooperation between India and Bhutan in the Hydropower sector is covered under the **2006 Agreement on Cooperation in Hydropower and the Protocol** to the 2006 agreement signed in March, 2009.
- So far, the Government of India has constructed **three Hydroelectric Projects (HEPs) in Bhutan** totaling 1416 MW (336 MW Chukha HEP, 60 MW Kurichhu HEP and 1020 MW Tala HEP), which are operational and exporting surplus power to India.
  - ♦ About **three-fourth of the power generated is exported** and the rest is used for domestic consumption.

##### Bilateral Trade

- The **India-Bhutan Agreement on Trade, Commerce and Transit – which was first signed in 1972** and revised most recently for the fifth time in 2016 – **establishes a free trade regime** between the two countries.
- India is **Bhutan's largest trading partner.** Since 2014, India's **merchandise trade with Bhutan has almost tripled** from USD 484 million in 2014-

15 to USD 1422 million in 2021-22, accounting for about **80% of Bhutan's overall trade**, with the balance of trade in India's favour.

- ♦ In 2021-22, **India's bilateral trade with Bhutan was USD 1422 million**, of which India's exports to Bhutan amounted to USD 877 million and India's imports from Bhutan were USD 545 million.

### Border Management

- There is a **Secretary-level mechanism** on border management and security related matters. There is also a **Border District Coordination Meeting Mechanism** between the bordering States and the Royal Government of Bhutan to facilitate coordination on border management and other related matters.

### Water Resource Management

- There is a **Joint Group of Experts (JGE) on flood management** between India and Bhutan to discuss/ assess the probable causes and effects of the recurring floods and erosion in the southern foothills of Bhutan and adjoining plains in India and to recommend appropriate measures to both Governments.

### Educational and Cultural Cooperation

- A large number of college going Bhutanese students are studying in India. It is estimated that approximately **4000 Bhutanese are studying in Under Graduate courses** in Indian Universities on a self-financing basis.

### ITEC Training Programme Scheme

- Every year GoI provides 300 training slots under ITEC programme and a further 60 slots under TCS Colombo Plan in various fields to Bhutanese for upgrading their administrative and technical skills.

### Challenges:

- **China's Growing Influence:** China's increasing presence near the disputed India-Bhutan-China border and its growing economic ties with Bhutan raise concerns for India's strategic interests.
- **Delay in Projects:** Delays and disagreements regarding revenue sharing from India-Bhutan hydropower projects can create tension.
- **Trade Dependence:** Bhutan's heavy reliance on India for trade makes it vulnerable to economic fluctuations in India.
- **Hydropower Projects and Environmental Risks:** Bhutan has concerns about environmental and social impacts from hydropower projects.

- **Motor Vehicle Agreement:** India's plans for a Motor Vehicle Agreement within the Bangladesh-Bhutan-India-Nepal grouping have faced delays.
- **Power Purchasing Policy:** India's sudden change in its power purchasing policy, rigid rates, and refusal to allow Bhutan to join the national power grid and trade with third countries like Bangladesh has strained relations.

### Measures needed:

- **Strengthening Economic Cooperation:** India can invest in infrastructure development, tourism, and other sectors to diversify Bhutan's economy and reduce its dependence.
- **Enhanced Connectivity:** Improved road, rail, and air links will boost trade, tourism, and people-to-people exchanges.
- **Cultural and Educational Exchange:** Programs fostering cultural understanding and educational opportunities can strengthen the bond between the two nations.
- **Strategic Dialogue:** Regular high-level talks on security and border issues can address concerns and maintain transparency.
- **Addressing Bhutan's Concerns:** India must address Bhutan's anxieties regarding China's influence through sensitive diplomacy and economic cooperation.
- **Multilateral Cooperation:** Collaboration on regional projects like hydropower and infrastructure development can be pursued through organizations like BIMSTEC (Bay of Bengal Initiative for Multi-Sectoral Technical Cooperation).

### Way forward:

- **Maintaining a strong and mutually beneficial relationship with Bhutan** is crucial for India's strategic interests in the region.
- **By addressing challenges and implementing the measures** required, India and Bhutan can ensure a prosperous and secure future for both nations.

Source: PIB

## NEWS IN SHORT

### DARIEN GAP

#### Context

- **Darien Gap** had become a **major route for the illegal migration to US**.



### Where is Darien Gap?

- The Darien Gap is a stretch of **densely forested jungle across northern Colombia located in South America and southern Panama located in North America.**
- **Roughly 60 miles (97 kilometres)** across, the terrain is muddy, wet and unstable.
- The challenging topography of humid, swampy rainforest as well as criminal gangs who control the area, make the route an extremely challenging and deadly one.



Source: DTE

## INDIA NAVY GETS FIRST INDEPENDENT HQ 'NAUSENA BHAWAN'

### In News

- The Defence Minister inaugurated the '**Nausena Bhawan**', the new state-of-the-art headquarters of the Indian Navy at the **Delhi Cantonment.**

### About

- It establishes the Navy's first independent headquarters in Delhi. Previously, the Navy operated from 13 different locations, making it difficult to coordinate.
- It is a centralised and technologically advanced headquarter that reflects the nation's commitment to maritime excellence and national security.
- The Building comprises three wings and four stories, incorporates innovative construction

technologies to optimise efficiency and sustainability.

Source: TOI

## LYME DISEASE

### In News

- A case of Lyme disease was reported in Kerala's Ernakulam.

### About

- It is caused by the bacterium *Borrelia burgdorferi*.
- It is transmitted by infected ticks of the genus *Ixodes*.
- Erythema migrans rash is the most characteristic symptom and others are headache, fatigue, and muscle aches.
- It is mostly common in the US, Europe & some parts of Asia.

Source: TOI

## PANDAVULA GUTTA DESIGNATED AS A GEO-HERITAGE SITE

### In News

- Pandavula Gutta, a geological marvel older than the Himalayan hills, has been officially recognised as the sole Geo-heritage site in Telangana.

### About Pandavula Gutta

- They are older than the Himalayas, famous for ancient rock paintings which depict animals like bison, antelope, tiger, and leopard, along with geometric designs and symbols like swastikas, circles, and squares.
- The presence of these paintings suggests the area was inhabited from the Mesolithic period (around 12,000 to 6,000 BCE) up to medieval times.

### About Geo-heritage Sites

- Geo-heritage refers to the geological features which are inherently or culturally significant offering insight into earth's evolution or history to earth science or that can be utilized for education.
- In India, the Geological Survey of India (GSI) identifies these special places and designates them as Geo-Heritage Sites (GHS). This helps protect them. It's similar to how UNESCO safeguards world heritage sites around the globe.



**Geological Survey of India (GSI)**

- The Geological Survey of India (GSI) is a scientific agency of India. It was founded in 1851, under the Ministry of Mines
- It is responsible for conducting geological surveys and the updation of national geoscientific information and mineral resource assessment.

**Source: TH****MODEL CODE OF CONDUCT (MCC)****News**

- The Election Commission of India has announced the dates for the upcoming Lok Sabha Election and it has officially put in place the model code of conduct (MCC).

**What is the Model Code of Conduct (MCC)?**

- It was first introduced in the 1960 Assembly elections in Kerala. In 1991, T.N. Seshan first codified the MCC.
- It is a set of guidelines issued by the Election Commission to regulate the campaigning of political parties and candidates during elections.
- Its main aim is to conduct free and fair elections by preventing any activities that could influence voters or disrupt the poll process.

**Is MCC legally binding?**

- The MCC is not enforceable by law.
- However, certain provisions of the MCC may be enforced through invoking corresponding provisions in other statutes such as the Indian Penal Code, 1860, Code of Criminal Procedure,

1973, and Representation of the People Act, 1951.

**Source: TH****HYBRID PEROVSKITES****In News**

- A new study led by Bharat Ratna Professor C N R Rao highlights how the atoms within **lead iodide perovskites** shift and rearrange during changes in temperature and pressure.

**About**

- **Hybrid perovskites:** They are an exciting new class of semiconductor that combine the advantages of both organic (low cost, solution processable, flexible) and inorganic semiconductors (high performance, electrical conductivity).
  - ♦ Lead iodide perovskites are a specific type of hybrid perovskite material with lead (Pb) and iodide (I) as key components.
  - ♦ It has good **optoelectrical properties** which make them excellent solar cell materials. Their energy conversion efficiency can be higher than even that of commercial silicon-based solar cells.
- A major concern with **lead iodide perovskites is their stability**. Lead is a toxic element, and the materials can degrade over time, especially when exposed to moisture or heat.
- The lead iodide perovskites is used in solar cells, LEDs, X-ray shielding, and Energy Storage Systems.

**Source: PIB**