

## DAILY CURRENT AFFAIRS (DCA)

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## SCO DEFENCE MINISTERS' MEETING

### In News

- Recently, India participated in the Shanghai Cooperation Organisation (SCO) Defence Ministers' meeting which was held in Astana, Kazakhstan,

### Key Outcomes of Meeting

- The SCO Defence Ministers agreed to develop the idea of '**One Earth, One Family, One Future**', rooted in the ancient **Indian philosophy of 'Vasudhaiva Kutumbakam'**.
- **India** reiterated its steadfast commitment toward maintaining peace, stability, and security in the SCO region.
- India emphasised the need to **adopt a zero-tolerance approach toward terrorism** in all its forms for the prosperity and development of the SCO Member States.
  - ♦ India highlighted its long-standing proposal for a **Comprehensive Convention on International Terrorism** at the United Nations.
- India also underscored the concept of '**Security and Growth for All in the Region (SAGAR)**', proposed by India for the Indo-Pacific.

### About Shanghai Cooperation Organization(SCO)

- It is a permanent intergovernmental international organization established on June 15, 2001 in Shanghai (PRC) by the **Republic of Kazakhstan, the People's Republic of China, the Kyrgyz Republic, the Russian Federation, the Republic of Tajikistan and the Republic of Uzbekistan.**
  - ♦ Its predecessor was the mechanism of the Shanghai Five.
- **Composition** : Currently, the SCO countries includes: 9 Member States — the Republic of **India**, the Islamic Republic of Iran, the Republic of Kazakhstan, the People's Republic of China, the Kyrgyz Republic, the Islamic Republic of Pakistan, the Russian Federation, the Republic of Tajikistan, the Republic of Uzbekistan.
- The official languages of the SCO are **Russian and Chinese.**
- The Organization has 2 standing bodies — **the Secretariat in Beijing** and the Executive Committee of the **Regional Anti-Terrorist Structure (RATS) in Tashkent.**

- The goals of the SCO are:
  - ♦ To strengthen mutual trust, friendship and good-neighbourliness between the Member States;
  - ♦ To encourage the effective cooperation between the Member States in such spheres as politics, trade, economy, science and technology, culture, education, energy, transport, tourism, environmental protection, etc;
  - ♦ To jointly ensure and maintain peace, security and stability in the region; and
  - ♦ To promote a new democratic, fair and rational international political and economic international order.
- **International Collaborations** : The SCO has established partnerships with the Commonwealth of Independent States (CIS), the Association of Southeast Asian Nations (ASEAN), the Collective Security Treaty Organization (CSTO), the Economic Cooperation Organization (ECO), the UN Economic and Social Commission for Asia and the Pacific (ESCAP), the UN Office on Drugs and Crime (UNODC), UNESCO, , the Food and Agriculture Organization, the World Tourism Organization (WTO),

### India and SCO

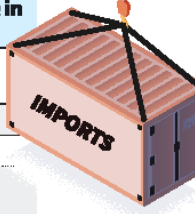
- India has been actively participating in SCO and providing substantial support to various mechanisms in the forum.
  - ♦ Since its accession as a **full - fledged Member State in 2017**, India has maintained an active engagement with the organisation.
- India is focusing on initiating proposals for mutual benefit of SCO Member States, Observers and Dialogue Partners.
- The SCO offers India the chance to safeguard, advance, and showcase its geostrategic and geoeconomic pursuits in the Central Asian and South Asian regions.
  - ♦ India used the SCO as a platform to secure its northern border from Pakistan's state-sponsored terrorism.
- **During the 2023 presidency**, India took a strong stance to promote new areas of development, including startups and innovation, traditional medicine, digital inclusion, youth empowerment, and the shared Buddhist heritage among most of the SCO member states.

- ◆ India established two new mechanisms—the Special Working Group on Startups and Innovation and the Expert Working Group on Traditional Medicine—significantly demonstrating New Delhi’s dedication to contributing to regional economic and social transformations.
- ◆ The Summit adopted the ‘**SECURE**’ SCO theme, where S stands for security of citizens; E for economic development for all; C for connecting the region; U for uniting the people; R for respect for sovereignty and integrity; and E for environmental protection.
- India’s demand for “an Afghan-led, Afghan-owned and Afghan-controlled” peace process received support from all SCO Central Asian members and Russia.
  - ◆ The agreements on counterterrorism, security cooperation, and defence between India and the Central Asian Republics further demonstrated the significant progress made by New Delhi through the SCO.
- The **Chinese BRI projects** have created a debt crisis and violated the sovereignty and integrity of SCO countries.
- To overcome the China-Pakistan axis, New Delhi invested in Chabahar Port and the 7,200-km long International North-South Transport Corridor (INSTC).
  - ◆ These connectivity initiatives led by New Delhi are consultative, transparent, economical, and reliable.
- **China** is the top supplier in eight major industrial sectors, including machinery, chemicals, pharmaceuticals, textiles etc.
- **Trade deficit concern:** Between **2018-19 and 2023-24**, India’s exports to China have stagnated around **\$16 billion** annually while imports have surged, resulting in a cumulative trade deficit exceeding **\$387 billion** over six years.

### Lion’s share

The table lists commodities imported by India, where China accounts for the largest share in total imports

	Commodity	China’s share in imports
1	Electronics/ telecom/ electrical products	43.9%
2	Machinery	39.7%
3	Textile and clothing	38.2%
4	Chemicals and pharmaceuticals	26.8%
5	Automobiles	26%



Source: GTRI Data as of 2022

### Concerns of India- China Trade Relations

- **Trade Imbalance:** India imports far more goods from China than it exports, leading to a large trade deficit.
  - ◆ This trade imbalance has been a persistent issue and has raised concerns about the impact on India’s domestic industries and employment.
- **Quality and Safety of Chinese Goods:** There have been concerns in India about the quality and safety of some Chinese goods, particularly in sectors such as electronics and consumer products.
  - ◆ Incidents of substandard or counterfeit products entering the Indian market have raised regulatory and consumer protection concerns.
- **Dumping Practices:** India has accused China of engaging in dumping practices, whereby Chinese companies allegedly flood the Indian market with cheap goods at prices below production costs.
  - ◆ This harms domestic industries in India by undercutting their competitiveness and market share.
- **Market Access and Non-Tariff Barriers:** Issues such as restrictions on foreign investment, complex approval processes, and intellectual property rights protection have hindered Indian businesses’ efforts to expand into China.

Source:DD News

## INDIA’S CHINESE IMPORT BILL RISE

### Context

- According to a report by the Global Trade Research Initiative (GTRI), Goods imports from China have risen 2.3 times faster than India’s total imports over 15 years.

### Key Findings

- India’s imports from China crossed **\$101 billion in 2023-24** from about **\$70 billion in 2018-19**, and the country’s share of India’s industrial goods imports has risen from 21% to 30% over 15 years.
- India’s total merchandise imports stood at **\$677.2 billion in 2023-24**, of which **15%** or \$101.8 billion worth goods were sourced from China.

- **Strategic Competition:** India and China are also engaged in strategic competition, both regionally and globally.
  - ♦ Their growing influence in South Asia and the Indian Ocean region has led to geopolitical rivalries, which can affect trade relations.
- **Security concerns** related to Chinese investments in critical infrastructure projects in India have also raised alarms.
  - ♦ India has been cautious about allowing Chinese companies to participate in sensitive sectors such as telecommunications and infrastructure, citing national security concerns.

### Concluding Remarks

- The strategic implications of the dependency on China are profound and affect not only economic but national security dimensions.
- There is a need for reassessment of India's import strategies. This is imperative not only to mitigate economic risks but also to bolster domestic industries and reduce dependency on single-country imports.

Source: TH

## GANHRI TO REVIEW INDIA'S HUMAN RIGHTS ACCREDITATION STATUS

### Context

- The **Sub-Committee on Accreditation (SCA)** of the **UN-recognised Global Alliance of National Human Rights Institutions (GANHRI)** is about to review **India's human rights accreditation status**.

### About

- **The National Human Rights Commission (NHRC)** will defend the government's human rights processes at the meeting in Geneva.
- The **NHRC's ratings were put on hold in 2023** over concerns on its composition procedure, the presence of police personnel in human rights investigations, and the lack of gender and minority representation.
  - ♦ The decision over whether the NHRC is given an A rating or a B rating would **affect its ability to vote at the UN Human Rights Council and some UNGA bodies**.

- Since being accredited in 1999, **India had retained its A ranking in 2006 and 2011**, while its status was deferred in 2016 and restored after a year.

### GANHRI and Accreditation

- GANHRI is one of the **largest human rights networks worldwide**.
- At an international workshop held in **Tunis, Tunisia in 1993**, a group of NHRIs set the foundation for the global network of national human rights institutions.
- It has its **Head Office in Geneva** and a governance structure representing NHRIs around the world.
- GANHRI is recognised, and is a trusted partner, of the United Nations.
  - ♦ It has established strong relationships with the UN Human Rights Office, UNDP and other UN agencies.
- **Members:** It is a body of 120 members, of which 88 have "A" status accreditation, while 32 have "B" status".
- GANHRI, through the Sub-Committee on Accreditation (SCA), is **responsible for reviewing and accrediting NHRIs in compliance with the Paris Principles**.
  - ♦ **Accreditation:** To be effective in their work to promote and protect human rights, national human rights institutions must be credible and independent.
    - ♦ **The Paris Principles** set out **internationally agreed minimum standards** that NHRIs must meet to be considered credible.
    - ♦ The Paris Principles require NHRIs to be independent in law, membership, operations, policy and control of resources.
    - ♦ They also require that NHRIs have a broad mandate; pluralism in membership; broad functions; adequate powers; adequate resources; cooperative methods; and engage with international bodies.
- It is a **rigorous, peer-based process**, undertaken by representatives of NHRIs from each of the four regions: **Africa, Americas, Asia Pacific and Europe**.
- **A national human rights institution is reviewed by the SCA when:**
  - ♦ it applies for initial accreditation;

- ♦ it applies for re-accreditation every five years; the circumstances of the NHRI change in any way that may affect its compliance with the Paris Principles.
- **Significance:** The Accreditation confers international recognition and protection of the NHRI.
- ♦ 'A' status accreditation also grants participation in the work and decision-making of the GANHRI, as well as the work of the Human Rights Council and other UN mechanisms.

### What are Human Rights?

- **Human rights** are fundamental rights and freedoms that are inherent to all human beings, regardless of nationality, ethnicity, gender, religion, or any other status.
- These rights are considered **universal, inalienable, and indivisible**, forming the foundation for **human dignity, equality, and justice**.
- **Human rights are different from the Civil rights** that are created and defined by laws within a specific nation.
  - ♦ **Civil rights** are legal rights granted and protected by a government, and they may change over time as laws are amended or updated.

### Significance of Human Rights

- **Inherent Dignity:** Human rights affirm the inherent dignity of every individual.
- **Equality and Non-Discrimination:** They strive to ensure that all individuals have equal opportunities and are treated with fairness and without prejudice.
- **Protection from Abuse:** Human rights provide a framework for holding governments, institutions, and individuals accountable for actions that violate these rights, promoting justice and accountability.
- **Global Standards:** International human rights agreements and treaties establish a global standard for how individuals should be treated, fostering a sense of shared responsibility for upholding these standards.
- **Human Dignity in Crisis:** In times of crisis, human rights provide a foundation for responding to emergencies in a way that upholds human dignity and prevents further harm.

### What is the Universal Declaration of Human Rights?

- The document, consisting of a **preamble and 30 articles** setting out fundamental rights and freedoms.
- This landmark document enshrines the inalienable rights that everyone is entitled to as a human being - regardless of race, color, religion, sex, language, political or other opinion, national or social origin, property, birth or other status.

### National Human Rights Commission

- NHRC is a statutory body established under the **Protection of Human Rights Act, 1993**. Its primary function is to promote and protect human rights in the country.
- **Establishment:** The NHRC was established in 1993, in accordance with the Paris Principles.
  - ♦ **Composition:** NHRC comprises a chairman, five full-time members, and seven deemed members.
  - ♦ The Chairperson is a retired Chief Justice of the Supreme Court of India, and the members are appointed from among persons having knowledge or practical experience in matters relating to human rights.
  - ♦ The President appoints the chairperson and members of the NHRC on the recommendation of a committee chaired by the Prime Minister of India.
- **Functions:** The NHRC is tasked with the responsibility of inquiring into complaints of human rights violations and taking appropriate action.
  - ♦ It can intervene in cases of human rights violations either suo motu (on its own motion) or upon receiving a complaint from a victim or any other person on their behalf.
- **Powers:** The NHRC has the powers of a civil court while trying a suit under the Code of Civil Procedure.
  - ♦ It can summon and enforce the attendance of witnesses, receive evidence on affidavits, requisition public records, and examine witnesses or documents.
  - ♦ Its recommendations are not binding, but they carry significant weight in matters related to human rights.

- **Reports:** The NHRC submits annual and special reports to the government, highlighting the human rights situation in the country and making recommendations for improvement.

**Source:** TH

## NEED OF GLOBAL PLASTICS TREATY

### Context

- Negotiators and observers from 175 countries arrived in Ottawa, Canada, to begin talks regarding the very first global treaty to curb plastics pollution.

### Background

- Under the **UN Environment Assembly Resolution 5/14**, the Intergovernmental Negotiating Committee (INC) is responsible for delivering a global plastics treaty by the end of 2024.
- The INC began its work during the second half of 2022. It is the fourth round of negotiations and the final round will take place in South Korea.

#### What is Plastic?

- Plastic refers to a wide range of **synthetic or semi-synthetic materials** that use **polymers as a main ingredient** with their defining quality being their plasticity – the ability of a solid material to undergo permanent deformation in response to applied forces.
- Most modern plastics are derived from fossil fuel-based chemicals like natural gas or petroleum.

#### Polymers used in Plastics

- **The polymers used in plastic production are:** Polyethylene terephthalate or PET, High-density polyethylene or HDPE, Polyvinyl chloride or PVC, Low-density polyethylene or LDPE, Polypropylene or PP, and Polystyrene or PS.
- Each of these have different properties and can be identified by their **resin identification code (RIC)** denoted by symbols found on plastic products.

### Concerns of Plastic Pollution

- Plastics are hard to eradicate due to their **slow decomposition rate** in natural ecosystems.

- Plastics break down into their smaller units called **microplastics**, which find their way across the planet, from the depths of the Pacific Ocean to the heights of the Himalayas.
- **BPA or Bisphenol A**, the chemical which is used to harden the plastic contaminates food and drinks, causing alterations in liver function, fetal development in pregnant women, the reproductive system and brain function.
- Plastic, which is a petroleum product, also **contributes to global warming**. If plastic waste is incinerated, it releases toxic fumes and carbon dioxide into the atmosphere.
- Plastic waste **damages the aesthetic value of tourist destinations**, leading to decreased tourism-related incomes and major economic costs related to the cleaning and maintenance of the sites.

### Why is a global plastics treaty needed?

- Plastic production increased from just 2 million tonnes in 1950 to more than **450 million tonnes in 2019**. If left unchecked, the production is slated to double by 2050, and **triple by 2060**.
- As plastic takes anywhere from **20 to 500 years to decompose**, and less than 10% has been recycled till now. According to a 2023 study published by The Lancet nearly 6 billion tonnes now pollute the planet
- About **400 million tonnes** of plastic waste is generated annually, a figure expected to jump by 62% between 2024 and 2050.
- According to a report by the Organisation for Economic Co-operation and Development (OECD), in 2019, plastics generated **1.8 billion tonnes** of GHG emissions — **3.4%** of global emissions.
  - ♦ Roughly **90%** of these emissions come from plastic production.

### Global Efforts In Tackling Plastic Waste

- **London Convention:** The **1972** Convention on the Prevention of Marine Pollution by Dumping Wastes and Other Matter.
- **Clean Seas Campaign:** The United Nations Environment Programme launched the Campaign in **2017**. It became the largest global campaign to raise awareness on plastic pollution and marine litter.

- **Basel Convention:** In 2019, the Basel Convention was amended to include plastic waste as a regulated material.
  - ♦ The Convention contains three main entries on plastic wastes in **Annex II, VIII and IX** of the Convention. The Plastic Waste Amendments of the convention are now **binding** on **186 States**.

### India's Efforts In Tackling Plastic Waste

- **Extended Producer Responsibility (EPR):** The Indian government has implemented EPR, making plastic manufacturers responsible for managing and disposing of the waste generated by their products.
- **Plastic Waste Management (Amendment) Rules, 2022:** It prohibits manufacture, import, stocking, distribution, sale and use of plastic carry bags having thickness less than **120 microns**.
- **Swachh Bharat Abhiyan:** It is a national cleanliness campaign, which includes the collection and disposal of plastic waste.
- **Plastic Parks:** India has set up Plastic Parks, which are specialized industrial zones for recycling and processing plastic waste.
- **Beach clean-up drives:** The Indian government and various non-governmental organizations have organized beach clean-up drives to collect and dispose of plastic waste from beaches.

### Challenges to the treaty

- Some of the biggest oil and gas-producing countries, as well as fossil fuel and chemical industry groups are trying to narrow the scope of the treaty to focus just on plastic waste and recycling.
  - ♦ Countries like Saudi Arabia, Russia, and Iran have opposed plastic production caps, and are using myriad delay tactics (like arguing over procedural matters) to derail constructive dialogues.
- Countries are yet to decide if the plastics treaty would be agreed upon by consensus or through a majority vote
- There is a coalition of around 65 nations, known as the "**High-Ambition Coalition**" which seeks to tackle plastic production.
  - ♦ The US has not joined the HAC as it is a fossil gas country.

### Way Ahead

- The proposed treaty will be the most important environmental accord since the 2015 Paris Agreement on climate change, in which nations agreed to cut greenhouse gas (GHG) emissions.
- The treaty can theoretically lay out guidelines on how rich nations should help poorer ones meet their plastic reduction target.
- It may also ban "particular types of plastic, plastic products, and chemical additives used in plastics, and set legally binding targets for recycling and recycled content used in consumer goods.

Source: IE

## OLDEST REMNANTS OF EARTH'S EARLY MAGNETIC FIELD

### Context

- Geologists at MIT and Oxford University have found **ancient rocks in Greenland** that bear the **oldest remnants of Earth's early magnetic field**.

### About

- The rocks are about **3.7 billion years old** and retain signatures of a **magnetic field with a strength of at least 15 microtesla**.
  - ♦ Today, Earth's magnetic field measures around 30 microtesla.
- The **iron particles in these rocks** effectively act as "**tiny magnets**" that can detect and record the Earth's magnetic field.
  - ♦ The rocks were uncovered from the **Isua Supracrustal Belt in Greenland**.
- Scientists suspect that, early in its evolution, the Earth was able to foster life, in part **due to an early magnetic field** that was strong enough to retain a life-sustaining atmosphere and simultaneously shield the planet from damaging solar radiation.
- **Significance:** This discovery can help scientists understand **Earth's early history and the factors that contributed to the emergence of life**.
  - ♦ The detailed analysis could help measure early traces of Earth's magnetic field in other places around the world, helping recreate its global shape and evolution through the planet's 4.5 billion-year lifespan.

### Supracrustal Belt

- **The Supracrustal Belt has a special geology:** It sits upon a thick layer of Earth's crust that has protected it from tectonic activity and deformation for billions of years.
- **The Isua Supracrustal Belt is one of the oldest known rock formations on Earth,** with some of its rocks dating back to around 3.7 to 3.8 billion years ago.
- This makes it a **crucial site for studying the early Earth's geological and environmental conditions.**
- **The Isua Supracrustal Belt is located in southwestern Greenland,** in a remote and inaccessible region.

### Earth's Magnetic Field

- Earth's magnetic field — also known as the **geomagnetic field** — is generated in planet's interior and extends out into space, creating a region known as the **magnetosphere**.
  - ♦ It is a protective shield generated by the movement of molten iron and nickel in its outer core.
  - ♦ This movement, called convection, creates electric currents, which in turn produce magnetic fields.
- These magnetic fields combine to form the Earth's overall magnetic field.
- **Significance:** It extends from the planet's interior out into space and helps protect the Earth from the harmful effects of solar wind and cosmic radiation.
  - ♦ The magnetic field also plays a crucial role in navigation, as it influences compass needles, allowing travelers to find their way based on magnetic north.
  - ♦ Without the magnetic field, life on Earth would not be possible as it shields us from the constant bombardment by charged particles emitted from the sun.

Source: TH

## NEWS IN SHORT

### INDULEKHA PAINTING OF RAVI VARMA

#### Context

- Recently, the first true copy of the painting 'Indulekha' by the legendary artist Raja Ravi

Varma was unveiled on the occasion of his 176th birth anniversary at the Kilimanoor Palace.



### About the Painting and its History

- The painting 'Indulekha' is a masterpiece by Raja Ravi Varma.
- It portrays **Indulekha**, the protagonist of the first modern novel in Malayalam literature by O. Chandu Menon, published in 1889.
  - ♦ It is believed that the famous painting '**Reclining Lady**' by Ravi Varma was modelled on Indulekha.
- It depicts Indulekha holding a letter addressing her lover Madhavan (the hero of the novel).

### Raja Ravi Varma (29 April 1848 – 2 October 1906)

- **Born:** Kilimanoor, Travancore (present-day Thiruvananthapuram, Kerala).

#### Contributions

- His paintings are one of the best examples of the **fusion of European academic art with a purely Indian sensibility and iconography.**
- Varma's paintings depicted scenes from Hindu epics like the **Ramayana and Mahabharata**, as well as portraits of deities.
- He was notable for making **affordable lithographs** of his paintings available to the public, and **increased the involvement of common people** with fine arts and defined artistic tastes.

Source: TH

### INS VIKRANT

#### Context:

- Recently, **INS Vikrant** alongwith the INS Vikramaditya showcased '**twin carrier operations**' and demonstrated an ability that only a handful of nations can boast of.



### About the INS Vikrant



- It is **India's first indigenous aircraft carrier**, commissioned into the Indian Navy in September 2022.
- It has been fully operationalised and integrated into the operational cycle in record time.

### Historical Significance

- The name 'INS Vikrant' originally belonged to India's first aircraft carrier which was acquired from the United Kingdom (UK), and played a vital role in the 1971 War with Pakistan before it was decommissioned in 1997.
  - ♦ The ship was laid down as HMS Hercules for the British Royal Navy during World War II, but construction was put on hold when the war ended.
  - ♦ India purchased the incomplete carrier in 1957, and construction was completed in 1961.

### Role and Capabilities

- The ship is capable of operating an air wing consisting of 30 aircraft comprising MiG-29K fighter jets, Kamov-31, MH-60R multi-role helicopters, in addition to indigenously manufactured Advanced Light Helicopters (ALH) and Light Combat Aircraft (LCA) (Navy).
- It offers an incomparable military instrument with its ability to project Air Power over long distances, including offensive, Air Interdiction, Anti-Surface Warfare, defensive Counter-Air, Airborne Anti-Submarine Warfare and Airborne Early Warning.
- With the commissioning, India has joined the elite group of nations (US, Russia, France, the UK and China) having capability to indigenously design and build an Aircraft Carrier.

Source: TH

### FOREIGN EXCHANGE (FOREX)

#### In News

- The Reserve Bank of India (RBI) has cautioned banks and customers again about unauthorised entities **offering foreign exchange trading** using the banking channels.

#### About Forex

- Foreign exchange (Forex) refers to exchanging the currency of one country for another at prevailing exchange rates
- Foreign Exchange Rate is the price of one currency in terms of another.
- It links the currencies of different countries and enables comparison of international costs and prices
- **Need:** People demand foreign exchange because: they want to purchase goods and services from other countries; they want to send gifts abroad; and they want to purchase financial assets of a certain country.
  - ♦ A rise in the price of foreign exchange will increase the cost (in terms of rupees) of purchasing a foreign good.
  - ♦ This reduces demand for imports and hence demand for foreign exchange also decreases, other things remaining constant.

Source: IE

### PHI-3-MINI

#### In News

- Microsoft unveiled the latest version of its 'lightweight' AI model – **the Phi-3-Mini**.

#### About Phi-3-mini

- It is the smallest **AI model developed by Microsoft**. It is believed to be the first in a series of three smaller models planned by Microsoft.
- It reportedly **outperformed models of the same size** and the next size up across a variety of benchmarks, in areas like language, reasoning, coding, and maths.
  - ♦ Essentially, language models are the backbone of AI applications like ChatGPT, Claude, Gemini, etc.
  - ♦ These models are trained on existing data to solve common language problems such as text classification, answering questions, text generation, document summarisation, etc.

### Comparison with LLMs

- Phi-3-mini is an SLM. Simply, SLMs are more streamlined versions of large language models.
  - ♦ When compared to LLMs, smaller AI models are also cost-effective to develop and operate, and they perform better on smaller devices like laptops and smartphones.
  - ♦ SLMs are great for “resource-constrained environments including on-device and offline inference scenarios.”

#### Do you know ?

- Phi-2 was introduced in December 2023 and reportedly equaled models like Meta's Llama 2.
- Phi-3 models significantly outperformed several models of the same size or even larger ones, including Gemma 7B and Mistral 7B, in key areas.

Source:IE

### REER VS NEER

#### Context

- The Real Effective Exchange Rate (REER) and Nominal Effective Exchange Rate (NEER) was in the news due to the depreciation of the rupee by 27.6% against the US dollar.

#### Nominal Effective Exchange Rate (NEER)

- NEER is an **unadjusted weighted average rate** at which one country's currency exchanges for a basket of multiple foreign currencies.
- It is the amount of domestic currency needed to purchase foreign currency and an indicator of a **country's international competitiveness** in terms of the foreign exchange (forex) market.
- The Reserve Bank of India has constructed NEER indices of the rupee against a **basket of six and also of 40 currencies**.
  - ♦ The former comprises the **US dollar, the euro, the Chinese yuan, the British pound, the Japanese yen and the Hong Kong dollar**.
  - ♦ The latter index covers a bigger basket of 40 currencies of countries that account for about 88% of India's annual trade flows.
- The NEER indices are with reference to a base year value of **100 for 2015-16**.
  - ♦ The increases indicate the rupee's effective appreciation against these currencies and decreases point to overall exchange rate depreciation.

### Real Effective Exchange Rate (REER)

- The real effective exchange rate (REER) is the **weighted average of a country's currency** in relation to an index or basket of other major currencies.
- The REER is basically the NEER that is adjusted for the inflation differentials between the home country and its trading partners.

Source: IE

### FENTANYL

#### Context

- The US Secretary of State spoke about the production and export of “synthetic opioid precursors”, specifically the drug fentanyl during his recent visit to China.

#### About

- Fentanyl is a potent **synthetic opioid drug** approved by the Food and Drug Administration for use as an analgesic (for pain relief) and anesthetic.
- It is approximately 100 times more potent than morphine and 50 times more potent than heroin as an analgesic.
- The overdoses of it can cause “**stupor, changes in pupil size, clammy skin, cyanosis (blue skin), coma, and respiratory failure leading to death**”.

Source: IE

### CHINA BUILT SUBMARINE FOR PAKISTAN

#### Context

- **China** has launched the **first of eight advanced Hangor-class submarines being developed for Pakistan**.

#### About

- The development comes as part of the agreement between Pakistan and China under which the latter had agreed to **provide the former with eight state-of-the-art advanced submarines**.
- Out of the total eight vessels, four are to be built by WSIG, while the remaining four are being built at KS&EW (Karachi Shipyard & Engineering Works) **under the Transfer of Technology (ToT) agreement**.

- The submarines, having **advanced stealth features**, are to be fitted with state-of-the-art weapons and sensors to operate under a **multi-threat environment and can engage targets at stand-off ranges**.
- Pakistan enjoys close military ties with China with their bilateral relations provisioning various arms imports by Pakistan.

Source: [TH](#)

