

PM MODI CONCLUDES HIS FIRST STATE VISIT TO EGYPT

Why in news?

- PM Modi left for India after concluding his first-ever visit to Egypt where he held talks with President Abdel Fattah El-Sisi.

Why have India and Egypt rekindled their ties with each other?

Imperative for India

- **Push to engage the Global South**
 - Indian government is pushing hard to engage the Global South.
- **Rekindling of the principles of non-alignment**
 - India also wants to rekindle the principles of non-alignment that have come back to the fore during Russia – Ukraine war.
- **Strategic weight of Egypt**
 - With a population of almost 110 million, Egypt is situated at a location that straddles Africa and Asia.
 - It has a standing army that is the largest in the region, a capital that hosts the League of Arab States and a diplomatic presence that punches above its weight in global affairs.
 - India is keen on further expanding its ties with Egypt, **a key player in the politics of both the Arab world as well as Africa.**
- **Economic importance of Egypt**
 - Egypt has boosted its attractiveness through a series of free trade agreements that span Africa (ACFTA; AGADIR; COMESA), Europe (EFTA), Latin America (MERCOSUR) and the Arab world (GAFTA).
 - It is also seen as a major gateway to markets in Africa and Europe.
- **Egypt's plans to develop the Suez Canal Economic Zone (SCZONE) into a global manufacturing hub**
 - The ambitious plans to develop the Suez Canal Economic Zone into a global manufacturing hub are now gathering critical mass.

- SCZONE sits astride both banks of the Suez Canal, a strategic waterway that connects the Mediterranean with the Red Sea to provide the shortest link between European and Asian markets.
- China, as usual, has been the first to take advantage of the opportunities presented by SCZONE.
 - China views SCZONE as a vital part of its Belt & Road and Maritime Silk Road projects.
- A deeper economic engagement with Egypt therefore acquires an additional strategic imperative.
- **Resetting India's ties with Muslim-majority countries**
- India's ties with Muslim-majority countries were tested following controversial remarks made by then spokesperson of ruling party in June 2022.
- That Egypt was one of the few countries from the Arab world which did not react officially to the controversial remarks.
- **Other factors**
- India wants to draw huge amounts of capital from Gulf nations, curtail religious extremism by supporting moderate countries in the region and participate in the security politics of the area.
- In order to do all this, India has realised that Egypt is a key player.
 - The country has remained fairly moderate over the years.
 - It shares strong ties with the UAE and Saudi Arabia.
 - It is located at a crucial geo-strategic location — 12 per cent of global trade passes through the Suez Canal.

ORDER OF THE NILE AWARD

Recently, the Egyptian President conferred the country's highest state honour "Order of the Nile" award to the Prime Minister of India.



About the Order of the Nile Award:

- It is Egypt's highest state honour.
- Instituted in 1915, the 'Order of the Nile' is conferred upon Heads of state, Crown Princes, and Vice-Presidents who offer Egypt or humanity invaluable services.

- The 'Order of the Nile' is a pure gold collar consisting of three-square gold units comprising Pharaonic symbols.
 - The first unit resembles the idea of protecting the state against evils, the second one resembles prosperity and happiness brought by the Nile, and the third one refers to wealth and endurance.
 - The three units are connected by a circular gold flower decorated with turquoise and ruby.
 - Hanging from the collar is a hexagonal pendant decorated with flowers of the Pharaonic style and turquoise and ruby gems.
 - In the middle of the pendant, there is a protruding **symbol** representing the Nile that **brings together the North** (represented by the Papyrus) and **the South** (represented by the Lotus).
 - Those who receive the 'Order of the Nile' shall be saluted upon their death.
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GREAT PYRAMID OF GIZA

Indian Prime Minister recently visited the Great Pyramid of Giza during his maiden State visit to Egypt.



About the Great Pyramid of Giza:

- The Great Pyramid of Giza also called the **Great Pyramid** and the **Great Pyramid of Khufu**, is an **ancient Egyptian pyramid** that is the **largest of the three Pyramids of Giza**.
- **Location:** It is located on the **Giza plateau** on the **west bank of the Nile River** near the modern city of **Cairo in Egypt**.
- It was **built by Khufu (Cheops)**, the **second king of Egypt's 4th dynasty**(c. 2575–c. 2465 BCE), and was **completed about 2560 BCE**.
- The pyramid was **first excavated** using modern techniques and scientific analysis **in 1880 by Sir William Matthew Flinders Petrie** (1.1853-1942), the British archaeologist.

Features:

- It is the largest Egyptian pyramid **which rises to a height of 479 feet (146 metres) with a base of 754 feet (230 metres)** and is comprised of over **two million blocks of stone**.

- The pyramid's **sides rise at an angle of 51.87°** and are accurately oriented to the **four cardinal points of the compass.**
- The Great Pyramid's **core is made of yellowish limestone blocks**, and the inner passages are of finer light-coloured limestone.
- The **interior burial chamber is built of huge blocks of granite.**

Key facts about the Pyramids of Giza:

- These are **three 4th-dynasty** (c. 2575–c. 2465 BCE) pyramids erected on a rocky plateau on the west bank of the Nile River **in northern Egypt.**
- The **designations of the pyramids—Khufu, Khafre, and Menkaure—correspond to the kings** for whom they were built.
- The **northernmost and oldest pyramid** of the group was **built for Khufu**, the second king of the 4th dynasty.
- The **middle pyramid was built for Khafre**, the fourth of the eight kings of the 4th dynasty.
- The **southernmost and last pyramid** to be built was **that of Menkaure**, the fifth king of the 4th dynasty.

WHAT ARE PELAGIC BIRDS?

Birdwatchers and enthusiasts of Gujarat have recently reported sightings of Pelagic birds in places not typically associated with their presence.



About Pelagic Birds:

- These are **seabirds that live on open seas and oceans rather than inland** or around more restricted waters such as lakes and rivers.
- They can be **found thousands of miles offshore** but can get **blown onto land during high winds** and storms.
- The **only other time they come inland is to breed.**
- The most familiar **types of pelagic birds include albatrosses, frigatebirds, fulmars, petrels, shearwaters, and tropicbirds.**

- **Features:**

- They **feed on planktonic crustaceans and squid** and hunt fish far from the land.
- Generally, they have **dense, waterproof feathers** and **layers of fat to keep them warm**.
- They have **exceptionally long and thin wings** that allow them to **fly effortlessly for long periods** without rest.
- Many pelagic birds **have special salt glands**. This allows them to drink seawater and **discard extra salt** accidentally ingested by their oceanic prey.
- Some **have webbed or partially webbed feet for swimming**, plucking fish from the shallows, or executing precise, plunging dives.
- In general, **seabirds live longer than other wild birds**; most have an average lifespan of 50 years.
- Almost all seabirds **live in colonies, migrate annually, and mate for life**.

CHANDRAYAAN-3: LANDER VIKRAM, ROVER PRAGYAN TO RETURN FOR ANOTHER TRYST WITH THE MOON

Why in News?

- The Indian Space Research Organisation (ISRO) plans to retain the names of the Chandrayaan-2 lander (Vikram) and rover (Pragyan) for their Chandrayaan-3 equivalents as well.
- **Following Chandrayaan-2**, where a last-minute glitch led to the failure of the lander's (Vikram) soft landing attempt after a successful orbital insertion, another lunar mission (Chandrayaan-3) for demonstrating soft landing was proposed.

The Chandrayaan-3 Mission:

- **Chandrayaan-3** ("mooncraft") is a planned **3rd lunar exploration mission by the ISRO** to demonstrate end-to-end capability in -
 - **Safe landing** (through the lander Vikram - after Vikram Sarabhai, the father of the Indian space programme) and
 - **Roving** (through the rover Pragyan) on the lunar surface.

- Unlike Chandrayaan-2, it will **not have an orbiter** and its propulsion module will behave like a communications relay satellite.
- Chandrayaan-3 **interplanetary** mission has **three major modules**: the Propulsion module, Lander module, and Rover.
- ISRO plans to launch the third moon mission in mid-July aboard the LVM3 (formerly GSLV Mk-III) rocket from Sriharikota.

Chandrayaan-3 Payloads:

- **The propulsion module:** It has Spectro-polarimetry of Habitable Planet Earth (**SHAPE**) payload to study the spectral and polarimetric measurements of Earth from lunar orbit.
- **Lander payloads:** It will have 4 payloads -
 - Radio Anatomy of Moon Bound Hypersensitive ionosphere and Atmosphere (**RAMBHA**) to study the temporal evolution of electron density in the Lunar ionosphere.
 - Chandra's Surface Thermophysical Experiment (**ChaSTE**) to measure the thermal conductivity and temperature;
 - Instrument for Lunar Seismic Activity (**ILSA**) for measuring the seismicity around the landing site;

A look at the major differences between the two missions

	CHANDRAYAAN - 1	CHANDRAYAAN - 2
Mission	India's first mission to moon India's first deep-space mission, aims to devise a three-dimensional atlas	Follow-up mission to Chandrayaan-1 ISRO's first inter-planetary mission to land rover on any celestial body
Goals	Involves orbiting around moon	Involves orbiter, lander, and rover
Approx. cost (₹ crs)	380	960
Launch vehicle	PSLV-C11	GSLV Mk-III
Operational for	312 Days	Approx. 365 days
Net weight	1380 kgs	3290 kgs
Payloads (or study devices)	11 (built in India, USA, UK, Germany, Sweden & Bulgaria)	14 (13 Indian, 1 from NASA)
Major	To conduct scientific experiments using instruments on the spacecraft	Test new technology and conduct experiments on the moon

India is the 4th country to soft land rover on the surface of moon after Russia, US & China

- Langmuir Probe (**LP**) to estimate the plasma density and its variations.
- **Rover payloads:** Alpha Particle X-ray Spectrometer (**APXS**) and Laser Induced Breakdown Spectroscope (**LIBS**) for deriving the elemental composition in the vicinity of the landing site.

How will the Mission be implemented?

- A propulsion module will carry the lander-rover configuration to a 100-km lunar orbit.
- Once the 'Vikram' lander module makes it safely to the moon, it will deploy 'Pragyan'.

- Pragyan will carry out in-situ chemical analysis of the lunar surface during the course of its mobility.
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SKIN BANK

Recently, North India's first skin bank was inaugurated in Delhi's Safdarjung Hospital.



About Skin Bank:

- A skin bank is a place where **cadaveric skin is processed and preserved under optimal conditions** from where it can be used for the benefit of Burn victims.
 - Skin can be donated after Death within **6 hours from the time of Death**.
 - Anyone can Donate Skin **irrespective of sex & blood group**; the minimum age of the donor **should be 18 years**.
 - There is no upper age limit; even a 100-year-old person can donate his skin, and it will be used for treatment.
 - The skin of persons **suffering from AIDS, Hepatitis B & C, Sexually Transmitted Diseases, Skin Cancer, Active skin Disease and Septicemia** are considered **unfit for donation**.
 - At the time of skin harvesting, a blood sample from the body of the deceased is also taken, and a necessary test for HIV, Viral markers & Hepatitis is carried out at the Skin Bank.
 - An old history of trauma or old history of burns does not make the donor unfit for skin donation.
 - Skin is generally preserved in 85% glycerol solution. It is stored between 4-5 degree Celsius, and it can be stored for a period of up to 5 years.
 - The country has **16 skin banks** — a facility where the skin of deceased persons can be donated — with seven in Maharashtra, four in Chennai, three in Karnataka, and one each in Madhya Pradesh and Odisha.
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SOUTH AFRICAN CUSTOMS UNION (SACU)



Amid declining merchandise exports due to demand slowdown in the West, India is placing a renewed focus on striking a trade deal with the South African Customs Union (SACU).

About the South African Customs Union (SACU)

- It is the world's **oldest customs union** which was established in 1910.
- **Member countries:** South Africa, Namibia, Botswana, Lesotho, and Eswatini (formerly Swaziland).
- **Head Quarter:** Windhoek (Namibia)
- It was administered by South Africa through the 1910 and 1969 Agreements.
- The customs union collected duties on local production and customs duties on members' imports from outside SACU, and the resulting revenue was allocated to member countries in quarterly instalments utilising a revenue-sharing formula.
- Negotiations to reform the 1969 Agreement started in 1994, and a new agreement was signed in 2002. The new arrangement was ratified by SACU Heads of State.
- The **Economic structure** of the Union links the Member states by a **single tariff and no customs duties between them.**
- The Member States form a single customs territory in which tariffs and other barriers are eliminated on substantially all the trade between the Member States for products originating in these countries, and there is a common external tariff that applies to non-members of SACU.

ABOUT NUCLEAR SUPPLIERS GROUP (NSG):

- The Nuclear Suppliers Group (NSG) is a multilateral export control regime and a group of nuclear supplier countries.
- The group seeks to prevent nuclear proliferation by controlling the export of materials, equipment and technology that can be used to manufacture nuclear weapons.
- The **NSG was founded in response to the Indian nuclear test** in May 1974 and first met in November 1975.
- It is an informal organization, and its guidelines are non-binding. Decisions, including on membership, are made by consensus.
- Currently, the NSG has **48 participating governments**. The NSG chair for 2023 - 2024 is **Brazil**.

Why is India Not a Member of the NSG?

- **India is a non-signatory to NPT –**
 - Non-Proliferation Treaty (NPT) is an international treaty, which came into force in 1970.
 - The main objective of NPT is to prevent the spread of nuclear weapons and weapons technology.
 - All the participants of NSG are the signatory of NPT. **India, Pakistan and Israel** have not signed NPT.
 - India refused to sign NPT because the NPT defines nuclear weapons states as those that tested devices before 1967.

Opposition from China –

- While a majority of the 48-member group backed India's membership, China along with few other countries has opposed India's admission.
 - Other countries that are opposing India's inclusion in the NSG are Turkey, South Africa, Ireland and New Zealand.
 - Experts believe that China's resistance is to facilitate the entry of Pakistan, a close ally of China, in NSG.
 - China has even argued that if India can be let in without signing NPT, then Pakistan should be granted the membership as well.
 - However, track record of Pakistan is not good. US, in 2018, sanctioned 7 Pakistani nuclear firms for nuclear proliferation.
 - Since, NSG works on the basis of consensus, **China's opposition is making it difficult for India to gain entry.**