



कौटिल्य एकेडमी

www.kautilyaacademy.com IAS • IPS • MPPSC • CJ-II

CURRENT AFFAIR

05th JULY 2023



















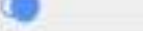



1. Energy Transition Index 2023
2. India Announced to Join Artemis Accords
3. India 6G Alliance
4. Pangong Tso Lake
5. Mozambique

Energy Transition Index 2023

- The World Economic Forum (WEF) published a report titled '**Fostering Effective Energy Transition 2023**' which benchmarks 120 countries based on energy transition.
- In this ranking, WEF has placed India at 67th position (a jump of 20 places) globally in the Energy Transition Index (ETI). In the year 2021, India was in the 87th position among 115 countries.
- India is the only major economy that has seen a rapid pace of energy transition across all dimensions and Singapore is the only other major country that is showing "**proper momentum**" by promoting sustainability, energy security and equity in a balanced manner.
- France (7th) was the only G20 country in the top 10, followed by Germany (11th), the US (12th) and the United Kingdom (13th).

- ➔ The global average ETI score has increased by 10% since 2014, but the last three years have seen minimal growth. Only 41 countries have shown sustained progress in the last decade.
- ➔ The World Economic Forum (WEF) is a Swiss non-profit organization established in the year 1971 in Geneva (Switzerland).
- ➔ It is recognized by the Swiss government as an international institution for public-private cooperation.
- ➔ Founder and Executive Chairman: Klaus Schwab.
- ➔ **Following are some of the major reports published by WEF:**
 - Energy Transition Index (ETI)
 - Global Competitiveness Report
 - Global IT Report
 - Global Gender Gap Report
 - Global Risk Report
 - Global Travel and Tourism Report

Rank	Country	ETI score (2014–2023)	2023 ETI score	SP ¹ ('23)	TR ² ('23)
1	Sweden		78.5	81.0	74.8
2	Denmark		76.1	73.7	79.8
3	Norway		73.7	77.3	68.3
4	Finland		72.8	68.9	78.6
5	Switzerland		72.4	75.7	67.4
6	Iceland		70.6	73.9	65.6
7	France		70.6	73.3	66.5
8	Austria		69.3	69.2	69.5
9	Netherlands		68.8	65.7	73.5
10	Estonia		68.2	74.2	59.2
11	Germany		67.5	64.6	71.9
12	United States		66.3	68.4	63.2
13	United Kingdom		66.2	67.7	64.0
14	Brazil		65.9	68.9	61.3
15	Portugal		65.8	66.7	64.5
16	Spain		65.0	65.1	64.7
17	China		64.9	65.0	64.8
18	Hungary		64.3	68.8	57.5
19	Canada		64.2	66.7	60.3
20	Luxembourg		64.2	61.5	68.2

India Announced to Join Artemis Accords

- ➔ India has recently become the **27th signatory country** to the Artemis Accords. The Artemis Accords is a set of non-binding guidelines that support the US-led Artemis program for lunar exploration.
- ➔ India has already ratified all international agreements relating to the upholding of the Outer Space Treaty and similar ideals at its own level.

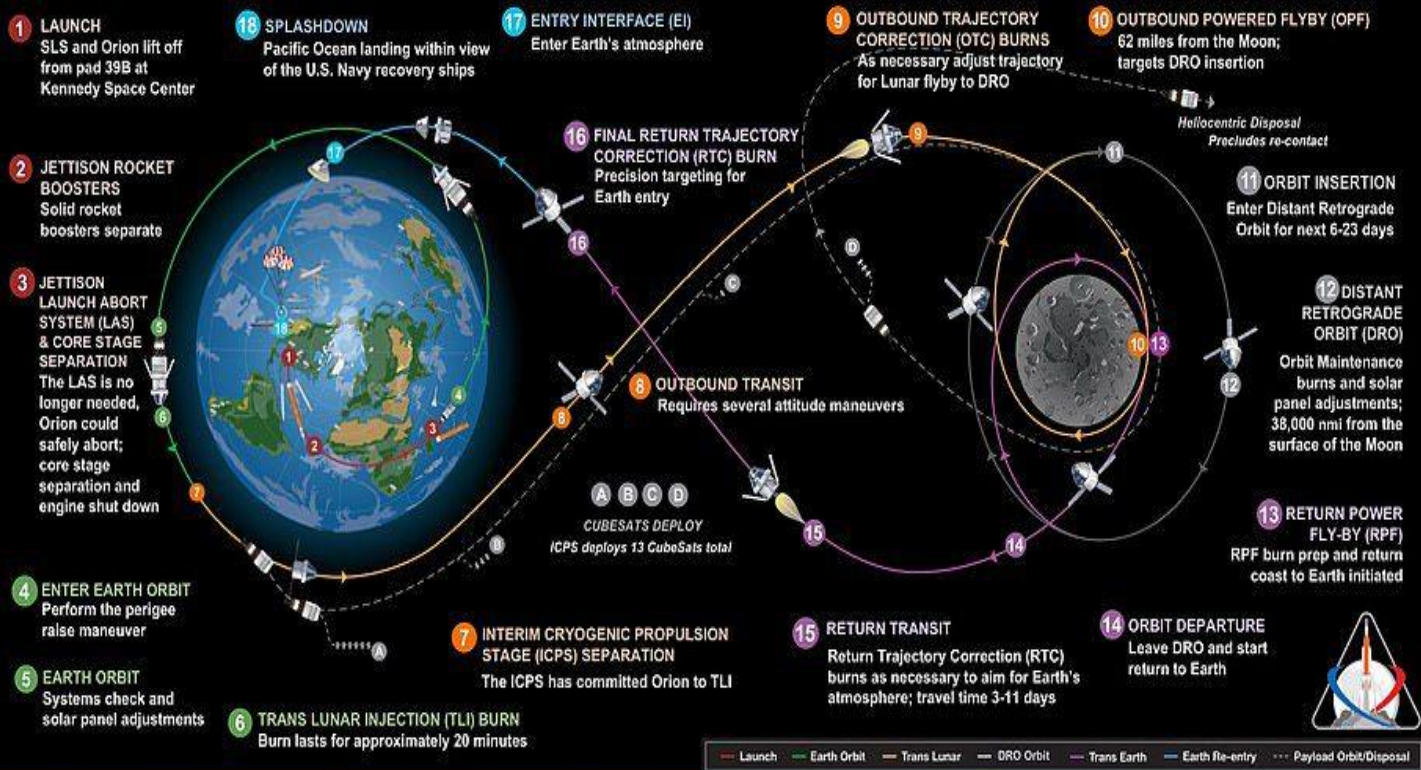


- ➔ The Artemis Accords, established in 2020 by the United States along with seven other founding nations, is a collection of non-binding principles that reinforce obligations outlined in the 1967 Outer Space Treaty.
- ➔ With 27 signatories so far, including India, these agreements serve as guidelines for international cooperation in civilian space exploration, particularly in the context of the ambitious Artemis program aimed at lunar exploration.
- ➔ The signatories will implement the Memorandum of Understanding (MOU) between governments or agencies conducting space activities for peaceful purposes by international law.
- ➔ The signatories recognize the importance of shared research infrastructure to promote scientific discovery and commercial use.
- ➔ Signatories are expected to preserve historical landing sites, artefacts, and evidence of activity on celestial bodies.
- ➔ Signatory countries plan for the safe disposal of old spacecraft and limit the production of harmful debris.

➔ The Artemis program begins on **November 16, 2022**, with the launch of the spacecraft named "Orion" on the Space Launch System (SLS) from NASA's Kennedy Space Center. The SLS, a super heavy-lift launch vehicle, took Orion directly to the Moon on a single mission.

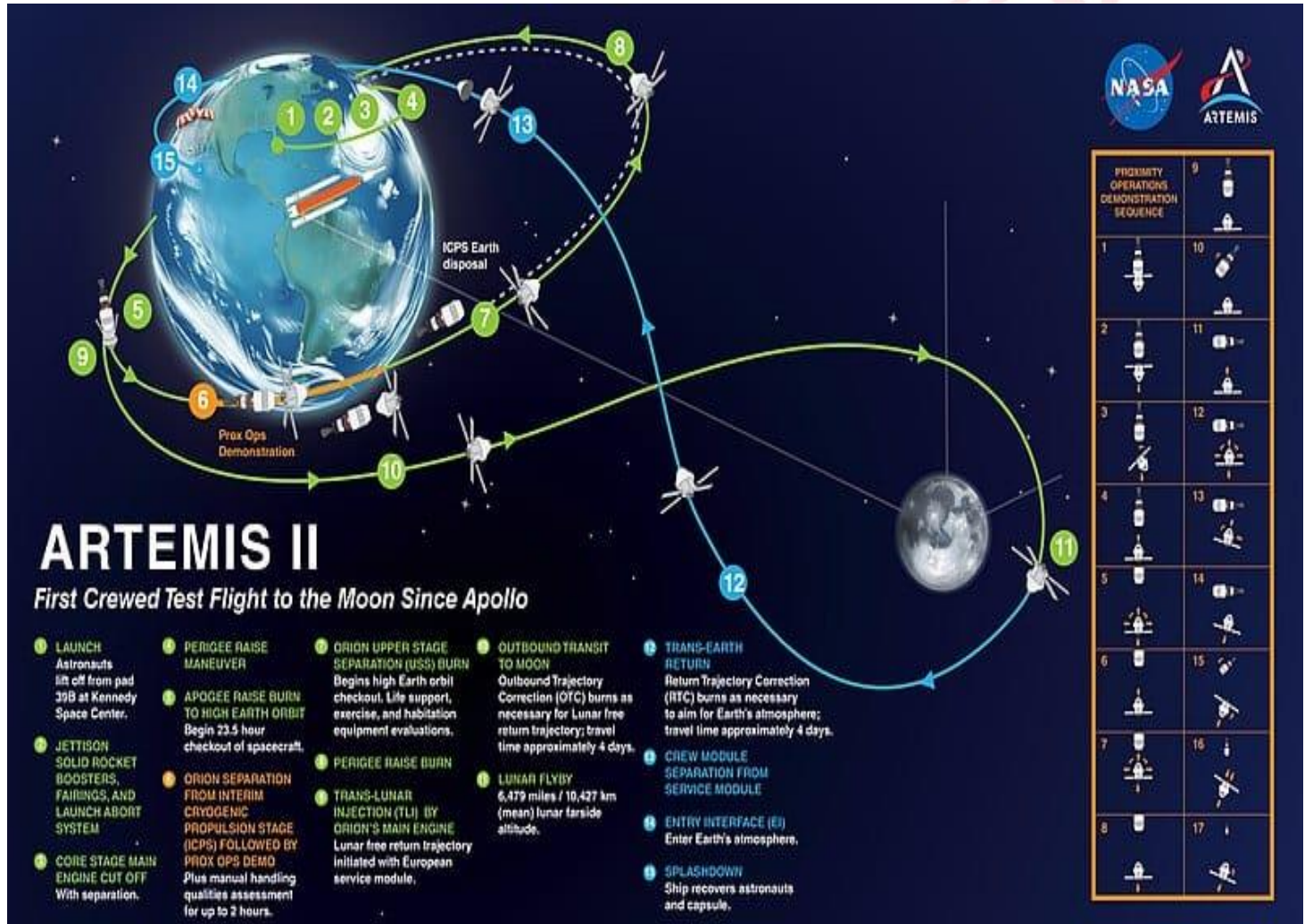
Artemis 1

The first uncrewed, integrated flight test of NASA's Orion spacecraft and Space Launch System rocket, launching from a modernized Kennedy spaceport

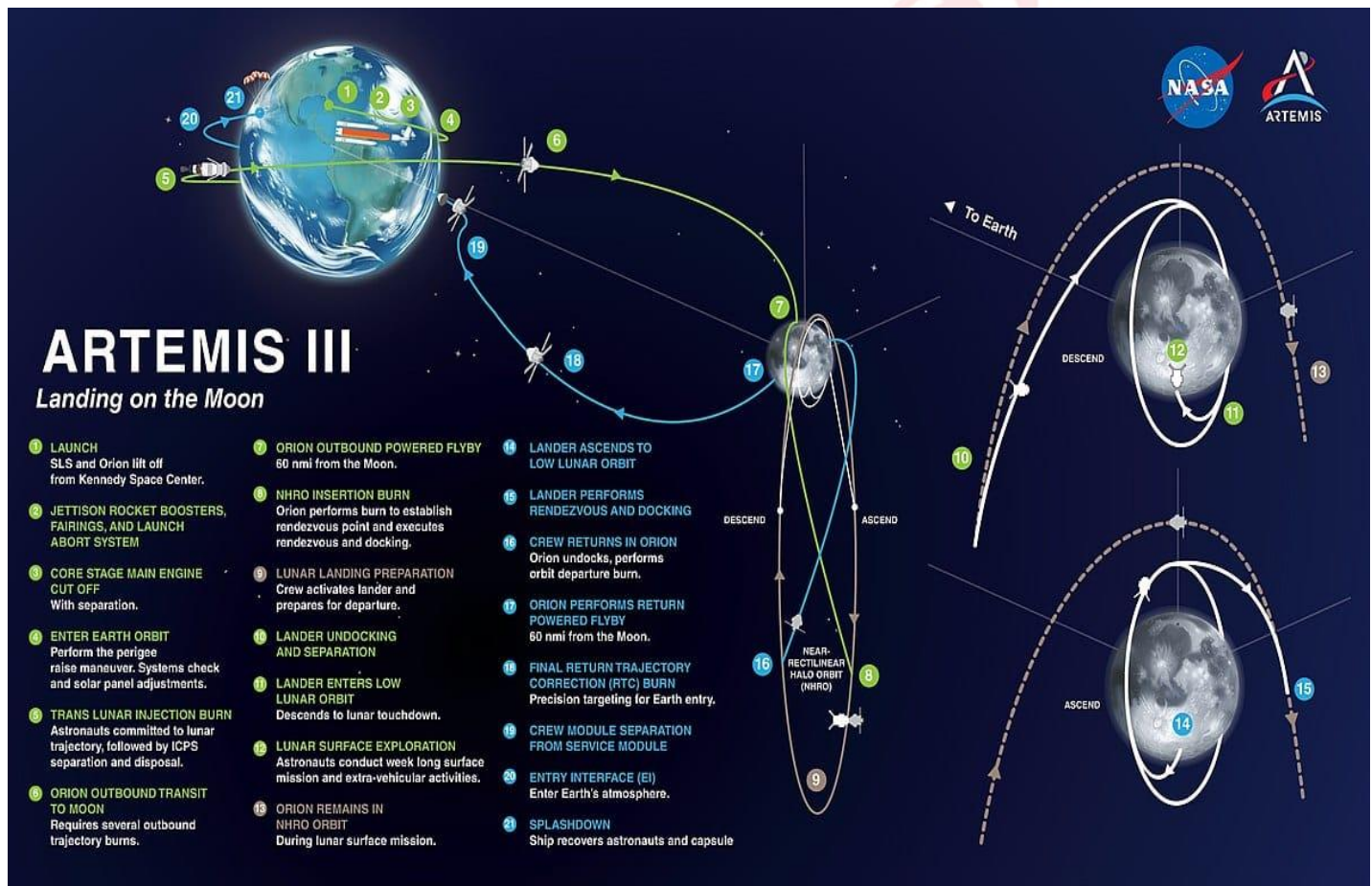


© NASA distance traveled: 1.3 million miles – Mission duration: 26-42 days – Re-entry speed: 24,500 mph (Mach 32) – 13 CubeSats deployed

➔ **Artemis-II**, scheduled for 2024, will be the first manned mission under the Artemis programme. The SLS will carry four astronauts as it performs several activities in extended orbit around Earth. The mission will also include a lunar flight and return to Earth.



→ **Artemis-III**, scheduled for 2025, will mark an important milestone in human space exploration as astronauts return to the Moon. This mission will follow up on Artemis-II's lunar fly-by, allowing astronauts to land on the lunar surface. Along with this, permission will be received to study the Moon more extensively.



- ➔ The establishment of the Lunar Gateway Station has been planned for the **year 2029**. The station will serve as a docking point for astronauts and will facilitate scientific research as well as experiments.
- ➔ India's participation in the Artemis Agreement provides India access to advanced training, technological advancements and scientific opportunities.
- ➔ The Artemis program could be beneficial to India in pursuing its lunar exploration goals such as the Chandrayaan-3 mission.
- ➔ Collaboration with NASA will improve India's capability for the Gaganyaan manned mission and future ambitious space missions.
- ➔ The Artemis program will also benefit from India's cost-effective mission and innovative approach, which will lead to mutual progress in space exploration.

India 6G Alliance

- Union Telecom Minister Ashwini Vaishnav has stepped up preparations to bring 6G to India. Recently, he launched the 'Bharat 6G Alliance' regarding this.
- This alliance (Bhart 6G Alliance) will work for the development of new technology and 6G in the telecom sector in India.
- The focus of this alliance is to bring next-generation technology to India's telecom industry on time as well as reduce dependence on other countries.
- It is a collaborative platform aimed at achieving universal and affordable connectivity, promoting indigenous technology and establishing India as a global leader in the telecom sector.

‘भारत 6G’ प्रोजेक्ट

पीएम मोदी के विजन डॉक्यूमेंट ‘भारत 6G’
में जुड़ी बड़ी बातें...

इस विजन डॉक्यूमेंट को डिपार्टमेंट
ऑफ टेलिकम्युनिकेशन ने
तैयार किया है। इसके जरिए 6G
को डेवलप करने के लिए
रिसर्च और फंड का इंतजाम होगा।

भारत में 6 G प्रोजेक्ट दो फेज में लागू होगा...

फेज 1	फेज 2
इसमें नए आइडिया, कॉन्सेप्ट टेस्ट और इससे जुड़ी मुश्किलों के लिए सपोर्ट मिलेगा।	उन कॉन्सेप्ट्स को आगे बढ़ाया जाएगा, जिनमें 6G विकसित करने की संभावना दिखेगी। इस फेज में नेटवर्क टेस्टिंग और मार्केट में लॉन्च करने का प्लान बनेगा।

6G

प्रोजेक्ट ठीक तरह से रोल आउट हो, इसके लिए एक
अपेक्स काउंसिल भी बनाई गई है। जो 6G में
इस्तेमाल होने वाले स्पेक्ट्रम के स्टैंडर्ड और
आईडेंटिफिकेशन की निगरानी करेगी।

- ➔ The platform, comprising public and private companies, academia, research institutes and standards development organisations, aims to lead the development and deployment of **6G technology** in India.
- ➔ It will forge alliances and synergies with other **6G** global alliances, and promote international cooperation and exchange of knowledge.
- ➔ It aims to bring together the Indian startups, companies and manufacturing ecosystem to establish a consortium that will drive the design, development and deployment of 6G technologies in India.
- ➔ One of the key goals of **B6GA** is to facilitate market access for Indian telecom technology products and services, helping the country emerge as a global leader in 6G technology.
- ➔ To support the advancement of 6G technology, the government has allocated a grant of 240.51 crore through the Telecom Technology Development Fund Scheme.

6G और 5G में क्या अंतर है?



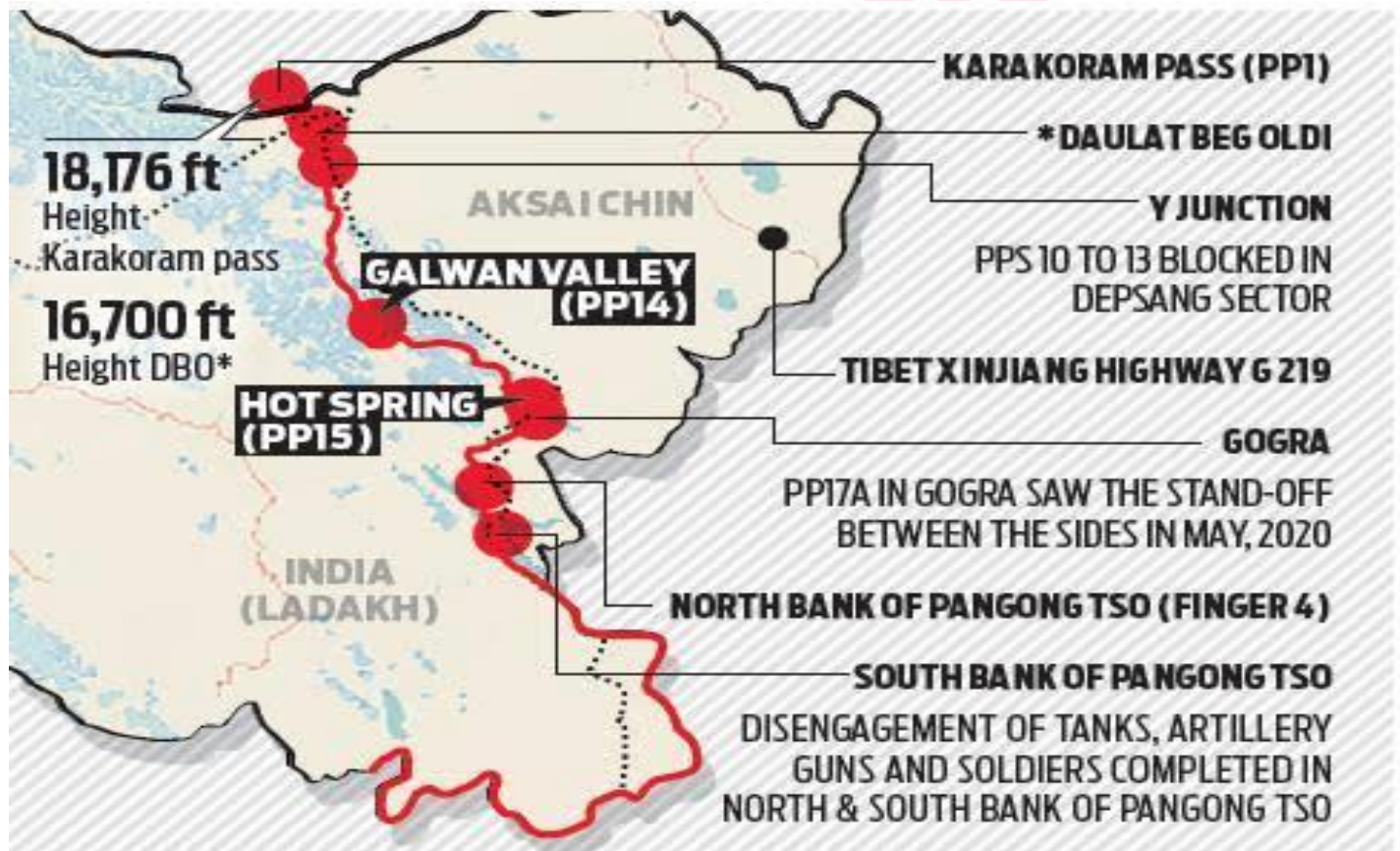
Pangong Tso Lake

- ➔ Recently, China has been building new bridges and other major military infrastructure in and around the lake to facilitate faster movement of its troops and goods.
- ➔ China is building a bridge to connect the northern and southern shores of the lake, while India is building a black-top road along the northern shore.



- **Pangong Tso** is an endorheic lake (a body of water that does not flow into the ocean or sea) spread over eastern Ladakh and western Tibet, situated at an altitude of **4,225 metres**.
- It is 134 km long and is divided into five sub-lakes. It is the highest salt water lake in the world.
- Its water, which appears to be tinted blue, is in stark contrast to the arid mountains surrounding it.
- Due to its salty water, there is no fish or any other aquatic life in it. But it is an important breeding ground for many migratory birds.
- 45 km area of this lake is located in India, while 90 km area falls in China. The Line of Actual Control passes through the middle of this lake.
- The lake was at the southern end of the Johnson Line in the mid-19th century. The Johnson Line was an early attempt to demarcate the boundary between India and China in the Aksai Chin region.

- ➔ The lake is visible from the finger area. Out of the Sirijap range (on the northern side of the lake) is a group of eight rocks.
- ➔ The 135 km long Pangong Tso is an endorheic lake, more than two-thirds of which is under Chinese control.
- ➔ The LAC is much west of Khurnak Fort, with India claiming Finger 8 and China claiming Finger 4.



Mozambique

→ Capital : Maputo

→ Indian Naval Ship (INS) Sunayna recently visited Beira, **Mozambique**, reinforcing India's cordial relations with the country and its vision of Security and Growth for All in the Region (SAGAR).



- ➔ The Commanding Officer of **INS Sunayna** called on the Secretary of State of the Republic of Mozambique and the Office of the Mayor of Beira Municipal Council.
- ➔ INS Sunayna is a Saryu-class patrol vessel of the Indian Navy.

➔ **Political Boundaries -**

- **Location:** It is situated on the southeast coast of Africa. It is located on the western side of the Mozambique Channel in the Indian Ocean.
- **Bordering countries:** Malawi, South Africa, Swaziland, Tanzania, Zambia and Zimbabwe.
- It shares its maritime border with Comoros, Madagascar and Mayotte Island (France).

➔ **Geographical Features:**

- **Climate:** There is variation in the climate here. Here from south to north, subtropical to tropical type of climate is found.

- ➔ **Major Rivers:** Zambezi River, Limpopo River, Ruvuma River etc.
- ➔ **Major Lakes:** Lake Malawi (Nyasa), Cahora Bassa etc.
- ➔ The country was named Mozambique by the Portuguese after the island of Mozambique. The capital and largest city of Mozambique is Maputo (formerly known as "Lourenco Marques" - from 1876 to 1976).
- ➔ Mozambique is one of the poorest countries in the world, ranking 181st out of 189 countries on the Human Development Index.
- ➔ Mozambique's geography consists mostly of coastal lowlands, with uplands in its center and high plateaus in the northwest. There are also mountains in the western part. The country is located on the east coast of Southern Africa, just west of the island of Madagascar.

- ➔ Mozambique has a tropical to subtropical climate. The rainfall distribution in Mozambique follows a north-south gradient, with more rainfall occurring along the coast, where the annual average is between 800 and 1200 mm.
- ➔ **Formation of the country:** 25 June 1975
- ➔ **Country's currency** - Mozambican Metical
- ➔ **President** - Filipe Nyusi

