

### TO BEAT CHINA, INDIA MUST ENGAGE WITH APEC

#### Context

- The 2023 Asia Pacific Economic Cooperation (APEC) summit was held in San Francisco last week. The US hosted APEC after a gap of 12 years.
- Despite being in the same region, **India is not a part of APEC but India needs to engage with aspects of APEC so that its economic goals can be met.**

#### The Asia Pacific Economic Cooperation (APEC)

- The APEC is a **regional economic** forum that was formed in **1989**. **The objective of the grouping is to leverage the growing interdependence of the Asia-Pacific and create greater prosperity for the people of the region through regional economic integration.**
- The focus of APEC has been on trade and economic issues and hence, it terms the countries as “**economies.**”
- It has been operating based on non-binding commitments with decisions taken through commitments and consensus undertaken on a voluntary basis.
- Currently, APEC has **21 members**. The criterion for membership, however, is that **each member must be an independent economic entity, rather than a sovereign state.**

#### Significance of APEC

- APEC **accounts for nearly 62 per cent of global GDP** and nearly half of global trade.
- Since its formation, **the grouping championed the lowering of trade tariffs, free trade, and economic liberalisation.**
- As per the US State Department, **during its first five years of operation, APEC established its core objectives.**
- **In the Seoul Declaration (1991), APEC member economies proclaimed the creation of a liberalised free trade area around the Pacific Rim as the principal objective of the organisation.**

#### Reason Why India is Not a Member of APEC

- **APEC's Resistance to Protectionism**
  - Although many members have been in favour of the inclusion of India, **some opposed the idea citing the economic reforms** which took place in the country and **claiming that it has 'protectionist instincts'**.
  - APEC's guiding motive was to resist protectionist policies by individual member states, and the promotion of trade liberalisation and economic cooperation within the affiliated Asia-Pacific economies.
  - By that description, **India did not seem to fit in.**
- **India's Record on Economic Reforms and WTO Engagement:** The main impediment has been the opposition of some participants who have held **India's record on economic reforms and WTO engagement to be unsatisfactory.**
- **Membership freeze:** Another reason for not making India part of the grouping was a **membership freeze which came into force in 1997. However, it was not extended in 2012.**

## Conclusion

- APEC has strategically emphasised sustainability, inclusion, resilience, and innovation as key focal points. India shares these objectives, and by aligning with APEC's priorities, **it can enhance its economic trajectory.**
- Considering APEC's emphasis on sustainability and innovation, **India can present itself as an alternative for new Foreign Direct Investment (FDI) when compared to China.**
- This alignment positions India as a proactive participant in the region's economic dynamics. **Therefore, India must increase its engagement with APEC to beat China to have strategic edge in the region.**

## AGNI INITIATIVE

Recently, the Central Council for Research in Ayurveda Sciences (CCRAS), Ministry of Ayush, launched the "Ayurveda Gyan Naipunya Initiative" (AGNI) for physicians practising in the field of Ayurveda.



## About the AGNI Initiative:

- **Aim:** To provide a **platform for Ayurveda practitioners** to report their innovative practises and experiences in various disease conditions, along with promoting the culture of evidence-based practise among Ayurveda practitioners.
- **Objectives of the Initiative**
  - To promote the **culture of reporting** evidence-based practise among Ayurveda practitioners.
  - To document the **reported successful therapeutic regimens** for various disease conditions involving single drug/ Formulation/ Procedures for the purpose of education and academics.
  - To identify interested Ayurveda practitioners for collaboration in the **creation of a database** through applications and capacity building through training in research methods and good clinical practises.
  - To undertake **research for mainstreaming pragmatic practises** through scientific validation and evidence-based appraisal

## Key Facts about Central Council for Research in Ayurveda Sciences

- It is an autonomous body under the **Ministry of AYUSH, Govt. of India.**
- It is an apex body in India for undertaking, coordinating, formulating, developing, and promoting research on scientific lines in Ayurvedic sciences.
- The research activities of the Council include **Medicinal Plant Research** (Medico-Ethno Botanical Survey, Pharmacognosy, and Tissue Culture), **Drug Standardization**, Pharmacological Research, Clinical Research, Literary Research and documentation and Tribal Health Care Research Programme.
- **Headquarter:** New Delhi

## 25 YEARS OF THE INTERNATIONAL SPACE STATION

### Why in the news?

- The International Space Station (ISS) turned 25 years old on November 20, 2023. The first module of the ISS launched into orbit in 1998.

### What is the International Space Station (ISS)?

- ISS is a large spacecraft in low Earth orbit.
- It is a habitable spacecraft that orbits Earth at an average altitude of approximately 420 kilometers (260 miles).
- It serves as a unique and collaborative space laboratory, research facility, and living space for astronauts and cosmonauts from various countries.

### What are the features of ISS?

- **Construction and Ownership**
  - The major partners include NASA (United States), Roscosmos (Russia), ESA (European Space Agency), JAXA (Japan Aerospace Exploration Agency), and CSA (Canadian Space Agency).
    - In 2022, Russia announced that **it would pull out of ISS after 2024** and focus on building its orbiting outpost.
  - These agencies have contributed modules, components, and resources to construct and maintain the station.
- **Size and Structure**
  - The ISS is quite large, with a mass of around 460 tons and a habitable volume roughly equivalent to the interior of a Boeing 747 aircraft.
  - It consists of various interconnected modules and components, including laboratories, living quarters, and docking ports.
- **Orbit and Duration**
  - It travels at 8 kilometers (5 miles) per second. This means it orbits Earth every 90 minutes.

- It passes over our heads 16 times every 24 hours — traveling through 16 sunrises and sunsets.
  - Missions typically last six months, although some crew members may stay for shorter or longer durations.
- **International Crew**
  - The ISS is continuously inhabited by a rotating crew of astronauts and cosmonauts from different nations.
  - These crew members live and work on the station for several months at a time, conducting experiments, maintaining systems, and performing various tasks necessary to keep the station operational.

## Why Is the Space Station Important?

- One of the primary purposes of the ISS is to conduct scientific research and experiments in the unique microgravity environment of space.
  - Microgravity is often referred to as **near-zero gravity or weightlessness**.
- Researchers from around the world use the station to study a wide range of fields, including biology, physics, astronomy, and Earth sciences.
- The ISS has contributed to our understanding of topics such as human health in space, materials science, and climate change.
- Human beings have been living in space every day since the first crew arrived.

## How long will the ISS be operational?

- Plans for the future operation of the ISS were thrown into uncertainty with the start of Russia's invasion of Ukraine in early 2022.
- Both the European Space Agency and national bodies withdrew from international collaborations with Russia.
- Later, Russia said it was leaving the ISS to build its own space station.
- Also, old and new space faring nations want to make an independent mark on space. They include Japan, China, India, the United Arab Emirates and others.

- The US and Europe have said they remain committed to the International Space Station through 2030.
  - But plans are afoot for a post-ISS world, as well:
    - NASA is almost entirely focused on its Artemis program and plans to populate the moon.
    - ESA is working toward a new space station, which it is calling Starlab.
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## WHAT IS AT STAKE AT COP 28

### Why in News?

- The 2023 UN Framework Convention on Climate Change (UNFCCC) will convene from 30 November to 12 December 2023 in Dubai, United Arab Emirates (UAE).
- It will comprise:
  - **The 28th meeting of the Conference of the Parties (COP 28);**
  - The 5th meeting of the COP serving as the Meeting of the Parties to the Paris Agreement (CMA 5);
  - The 18th meeting of the COP serving as the Meeting of the Parties to the Kyoto Protocol (CMP 18); etc.

### Background to the COP 28:

- There is an almost **linear relationship** between global warming and cumulative carbon dioxide (CO<sub>2</sub>) emissions.
- **The UNFCCC in 1992** noted that per capita emissions in developing countries are still “relatively low” and that their share in the global emissions will grow to meet their social and developmental needs.
- The Convention recognises the ‘**common but differentiated responsibilities and respective capabilities**’ (CBDR-RC) principle.
  - This means different States have different responsibilities and respective capabilities in tackling climate change.

- This principle has been reaffirmed in the **Paris Agreement (COP 21)**, whose main aim is -
  - To hold the increase in the global average temperature to well below 2 degrees C above pre-industrial levels and
  - To pursue efforts to limit the temperature increase to 1.5 degrees C above pre-industrial levels.

## Who's Responsible for Cumulative Global Emissions?

- **According to the IPCC AR6**, the developed countries have appropriated a disproportionately larger share of the global carbon budget to date.
- **The contribution of South Asia** (which includes India) to historical cumulative emissions is only around 4% despite having almost 24% of the entire world population.
- **The per capita CO<sub>2</sub>-FFI** (fossil fuel and industry) emissions of South Asia was just 1.7 tonnes CO<sub>2</sub>-equivalent per capita, far below North America (15.4 tonnes CO<sub>2</sub>-eq. per capita) and also significantly lower than the world average (6.6).

## What Should India's Stance be at COP 28?

- The Indian government has led from the front to **foster international consensus to tackle climate change**.
- To this end, India has set up the **International Solar Alliance, the Coalition for Disaster Resilient Infrastructure, and the Global Biofuel Alliance**.
- Through the '**Lifestyle for Environment**' (LiFE) mission, the Indian government also aims to spread awareness of good lifestyle practices and establish that sustainable lifestyles are the best way forward.
- **At COP28**, India must demand a fair share of its carbon budget or equivalent reparations to bring about fairness within the global order.

## Challenges and Way Ahead:

- In almost all the emissions scenarios estimated by the IPCC, **the world breaches an increase of 1.5 degrees C** from pre-industrial levels in the early 2030s.
- **The world is still largely powered by non-renewable energy.** In 2022, oil, coal and gas accounted for 30%, 27% and 23% of the world's total energy, while solar and wind energy together contributed only 2.4%.
- **Development is the first defence against climate change.** How long will developing countries have to divert their scarce resources, manpower, and attention to meeting global problems created by developed countries?
- **Until developed countries** themselves undertake mitigation efforts in their own backyard, the exercise will be pointless.
- **It is imperative that developing countries receive a fair and equitable share** of their carbon budget alongside stronger and more fruitful commitments from developed countries.
  - This includes a promised but unmet climate-specific new and additional finance.

## INVESTOR RISK REDUCTION ACCESS PLATFORM

Recently, the chairperson of the Securities and Exchange Board of India (SEBI) launched the Investor Risk Reduction Access platform.



### About the Investor Risk Reduction Access Platform:

- It has been developed to **reduce risks faced by investors** in the eventuality of technical glitches at the trading member's end at both the primary site and disaster recovery site.
- Its purpose is to provide investors with an **opportunity to square off/close their open positions** and cancel pending orders using the IRRA platform in case of technical glitches or unforeseen outages that render the trading member's site inaccessible.
- It has been designed to reduce risks for investors participating in the market.
- It is not meant for taking fresh positions or orders, but only to cancel the pending orders.





# CROSS & CLIMB ROHTAK



- This platform will be **available to trading members supporting internet-based trading (IBT) and Security Trading through Wireless Technology (STWT)** for their investors. However, it will **not be accessible for algo trading and institutional clients.**
- It has been **jointly developed by all the stock exchanges – BSE, NSE, NCDEX, MCX and Metropolitan Stock Exchange of India (MSE)**

## How will this platform work?

- Stock exchanges can also monitor parameters like **connectivity, order flow, and social media posts**, and Suo moto initiate the enablement of the IRRA service if needed, irrespective of any such request by the trading member.
  - This service shall be enabled by **the exchanges, Suo moto**, only in case of **disruption of trading services of trading member across all the exchanges**, where the trading member is a member
  - On invocation, after basic checks, the platform downloads trades of the trading member from all the trading venues and sends SMS/email to investors using internet trading or wireless technology, along with a link to access IRRA.
  - Once the trading member is migrated to the IRRA platform, the investors of the affected trading member will be enabled to access the IRRA platform through a secure login system using their Unique Client Code (UCC) or investor's PAN number.
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