

Prelim Bits 25-09-2022 & 26-09-2022 | UPSC Daily Current Affairs

L.69 Group

On recognising the weaknesses of the UN Security Council (UNSC) in dealing with global challenges, the L.69 group of countries have committed to instilling "new life" in their efforts towards achieving reform of the UNSC.

- The L.69 group is of **pro-reform member states**, including primarily developing countries from Africa, Latin America and the Caribbean, Asia and the Pacific.
- The Group is bound by the firm conviction that **expansion in both the permanent and non-permanent categories of membership** of the UNSC is imperative to better reflect contemporary world realities.
- **Members** - The group currently has 42 countries as its members.
- India is also the member of the group.

Razali Reform Plan

- In 1997, the Razali plan was proposed by the then UN General Assembly president Ismail Razali.
- It is a proposal to enlarge the United Nations Security Council from its present 15 members to 24 members.
- Under the plan, the UNSC would have
 1. Five new permanent members **without veto powers**, and
 2. Four more non-permanent members.

Uniting for Consensus

- The 'Uniting for Consensus' is an informal '**coffee club**', comprising of 40-odd nations.
- These nations together in 1997 to **oppose the Razali plan**.
- It is a loose alliance that was mobilised, chiefly through the efforts of Italy's ambassador to the UN, Francesco Paolo Fulci, and was named "Fulci's coffee club".
- It has since become the "coffee club" or the "cappuccino club".
- The Coffee club comprises of mostly mid-sized states who oppose bigger regional powers grabbing permanent seats in the UNSC.
 1. Italy and Spain are opposed to Germany's bid for Security Council's permanent membership,
 2. Pakistan is opposed to India's bid,
 3. Argentina is against Brazil's bid,
 4. Australia opposes Japan's.
 5. Canada and South Korea are opposed to developing countries, often dependent

on their aid.

G-4 Nations

- G-4 nations comprise of Brazil, India, Germany, and Japan.
- G-4 nations have a common goal of a more representative UNSC.
- They support each other's bid for a permanent seat in UNSC.

Reference

1. <https://www.aninews.in/news/world/asia/l69-group-of-nations-commit-to-instilling-new-life-in-efforts-towards-bringing-uns-c-reform20220924042909/>
2. https://dbpedia.org/page/L.69_Group_of_Developing_Countries
3. <https://www.hindustantimes.com/india/coffee-club-holding-back-uns-c-reforms/story-2C-NWj3UBwW6UifsznD095H.html>
4. <https://www.nytimes.com/1997/03/21/world/un-panel-proposes-expanding-security-council-to-24-members.html>

Effect of the Moon on Mangroves

A new study has found that the oscillation of the moon's orbit or 'moon wobble' has a significant impact on the mangrove canopy cover of the world.

- **Mangrove forests** - They are typically located between land and sea.
- Areas with higher tidal amplitude combined with smooth topography such gentle-sloping mudflats are ideal for the growth of these salt-tolerant trees.
- Mangroves can be found in India, Indonesia, Central America, Vietnam, Thailand, the Philippines and Australia.
- **Moon Wobble** - The 'wobble' is a fluctuation in its gravitational pull that influences tidal activity. It is a result of the moon's elliptical orbit.
- The process is cyclical and takes place every 18.61 years.
- During one half of this cycle, Earth's regular tides are suppressed while the other half produces amplified tidal activity.
- **Findings of the Study** - Now, the study has found that these long-phase tidal cycles plays an important role in the regulation of tidal wetland ecosystems - such as the growth of mangrove forests.
- The study has found that the mangrove canopy cover fluctuated at an interval of about 18 years - similar to the lunar "nodal" cycle.
- During the phases of the 18.61 year cycle, the shifting of mangrove canopy cover in coastlines experienced two tidal patterns,
 1. Semi-diurnal or two tides daily and
 2. Diurnal or one tide daily.
- **Related Links** - [Moon Wobble](#)

Importance of Mangroves

- Recent studies on the rhythm of the lunar wobble have shown that it is heading towards a period where tides are amplified, resulting in an overall rise in sea level.
- Consequently, studies have predicted that by the mid-2030s, the lunar cycle will cause

a dramatic increase in the number of high-tide floods.

- Mangroves are potent carbon sites with 4-5 times greater efficiency than terrestrial forests. They can be used for natural carbon sequestration.

Reference

1. <https://www.thehindu.com/sci-tech/science/the-strange-effect-of-the-moon-on-mangrove-forests/article65910123.ece>
2. <https://theconversation.com/what-caused-the-worlds-largest-die-off-of-mangroves-a-wobble-in-the-moons-orbit-is-partly-to-blame-190141>
3. <https://www.abc.net.au/news/science/2022-09-15/mangroves-dieback-moon-wobble-gulf-carpentaria-climate-change/101434980>

RH-200 Sounding Rocket

The Indian Space Research Organisation (ISRO) will achieve the 200th successful launch of Rohini RH-200 sounding rocket in the near future.

- Rohini RH-200 has completed 198 consecutive successful flights.
- RH-200 is 3.5-metres tall, two-stage rocket.
- It is capable of climbing to a height of 70 km bearing scientific payloads.
- The first and second stages of RH-200 are powered by solid motors.
- Rohini sounding rockets are used by the ISRO for **Atmospheric studies**.
- The '200' in the name denotes the diameter of the rocket in mm.
- For years, RH-200 rocket had used a polyvinyl chloride (PVC)-based propellant.
- But, in 2020, the first RH-200 based on hydroxyl-terminated Polybutadiene (HTPB) propellant was flown.
- Other operational Rohini variants are RH-300 Mk-II and RH-560 Mk-III.

Sounding Rockets

- Sounding rockets are one or two stage solid propellant rockets used for probing the upper atmospheric regions and for space research.
- These are also used for a variety of experiments, including those on phenomena related to eclipses.
- The first sounding rocket, American Nike-Apache, was launched from Thumba, Kerala, in 1963.
- After that, two-stage rockets from Russia (M-100) and France (Centaure) were flown.
- The ISRO launched its own version of sounding rocket, Rohini RH-75, in 1967.
- To know more about Sounding Rockets, [click here](#)

Reference

1. <https://www.thehindu.com/news/national/kerala/isro-eyeing-200th-successful-launch-of-rh-200-sounding-rocket-in-a-row/article6593122ece>

Sittanavasal

The Archaeological Survey of India has undertaken conservation measures as much of the

art in Sittanavasal are either damaged or vandalized.

- Sittanavasal is a small village in Pudukottai district of Tamil Nadu.
- It was a **major centre of Jain influence** for 1,000 years just before the Christian era.
- Sittanavasal houses
 1. Arivar Kovil (temple of Arihats - Jains who conquered their senses),
 2. Ezhadipattam (a cavern with 17 polished rock beds),
 3. Navachunai tarn (small mountain lake) with a submerged shrine,
 4. Megalithic burial sites.
- Of the 20 cave temples in Pudukottai district, Sittanavasal is the **only Jain temple with sculptures.**
- Sittanavasal is the only place in Tamil Nadu that houses **Pandya paintings.**
- The artwork on the ceiling of the sanctum and the ardha mandapam of Arivar Kovil is an early example of **post-Ajanta cave paintings** of the 4th to 6th centuries.
- These artwork were done using the **fresco-secco technique** (a process that dispenses with preparation of the wall with wet plaster).
- The ceiling paintings show 'bhavyas' (exalted souls who work to achieve moksha) enjoying themselves in a pool, full of blooming lotuses.
- The pillars of the verandah (added by the Maharaja of Pudukottai at the instance of then Diwan Alexander Tottenham in the 1900s), were brought from Kudumiyamalai.
- The colours used are,
 1. Mixture of plant dyes and mineral elements such as lime, lamp black,
 2. Clay pigments such as ochre for yellow
 3. Terre verte for the greyish-green tints.
- Jainism in the region exist from the 1st to 10th centuries.
- Sittanavasal remains an important place to study the history of the Jain religion as the inscriptions in Brahmi and 'vattaezhuthu', from the third century AD have been discovered here.
- Early Tamil inscriptions from the ninth century AD of the Jain monk Ilan-Gautaman, are found inside the complex.

Reference

1. <https://www.thehindu.com/news/national/tamilnadu/sittanavasals-jain-monuments-weathering-the-elements-and-public-apathy/article65931192.ece>

Operation Megh Chakra

The Central Bureau of Investigation (CBI) conducted searches across India, as part of a pan-India drive against the circulation and sharing of Child Sexual Abuse Material (CSAM).

- The Operation Megh Chakra was carried out following the inputs from Interpol's Singapore special unit.
- The Operation Carbon is also a similar exercise conducted by the Central Bureau of Investigation (CBI).
- The CBI is the nodal agency for the Interpol, which has an International Child Sexual Exploitation (ICSE) image and video database.
- The database allows investigators from member countries to share data on cases of

child sexual abuse.

- CBI has also constituted a special unit called Online Child Sexual Abuse and Exploitation Prevention/ Investigation (OCSAE) in 2019.
- The agency will investigate matters pertaining to online child sexual abuse and exploitation.

Reference

1. <https://www.thehindu.com/news/national/sharing-of-child-sexual-abuse-material-cbi-raids-56-places-in-19-states-and-1-ut/article65930142.ece>

