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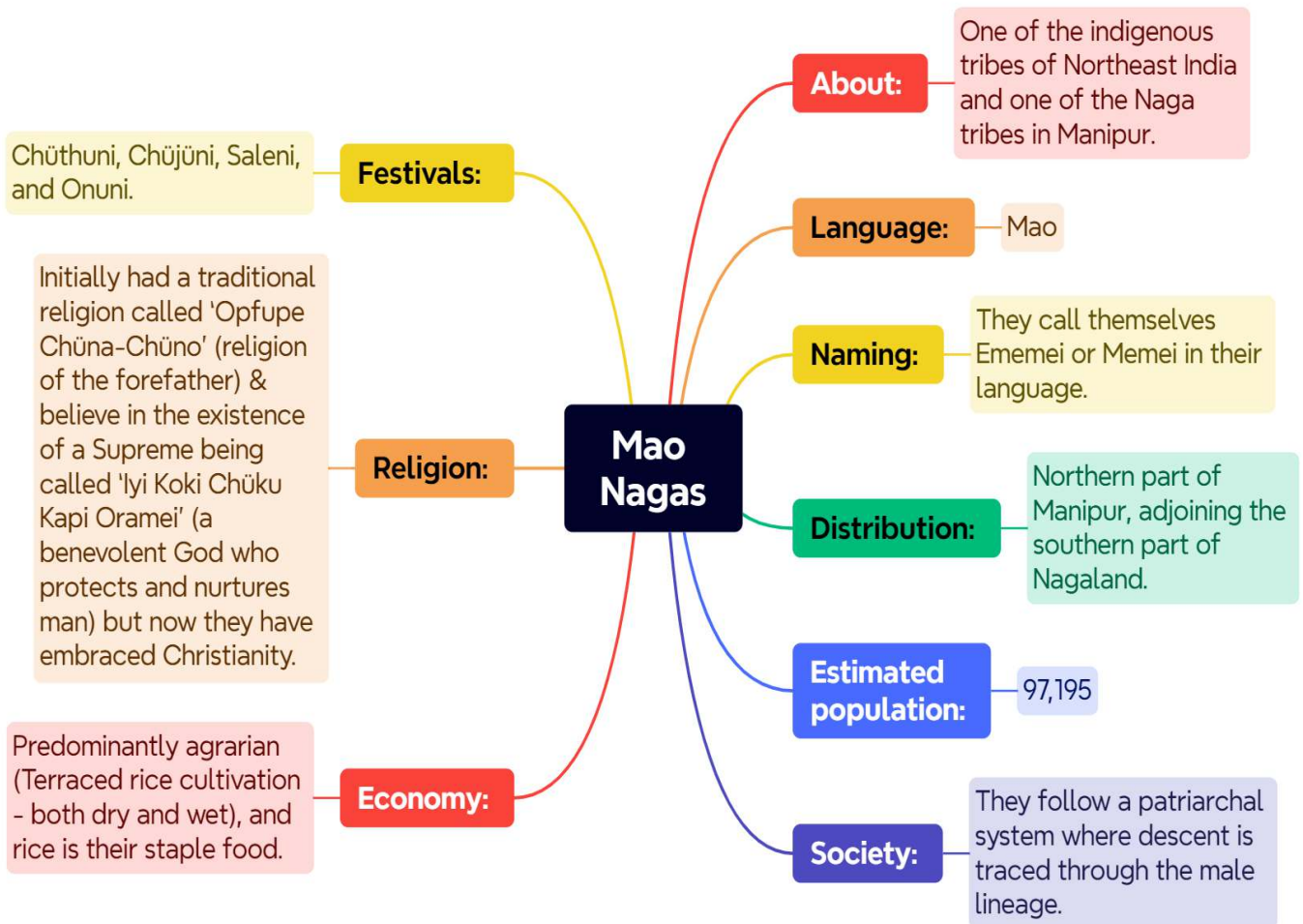
 **SAMYAK IAS, NEAR RIDDHI-SIDDHI, JAIPUR**

Art and Culture

1. Mao Tribe Accepts Verdict On Traditional Land Dispute With Nagaland - The Hindu

The Mao Council, apex tribal body of the Mao Nagas in Manipur, has officially accepted the judgment and order of the Tenyimia People's Organisation (TPO) Presidential Council regarding the traditional land dispute along the Nagaland-Manipur border.

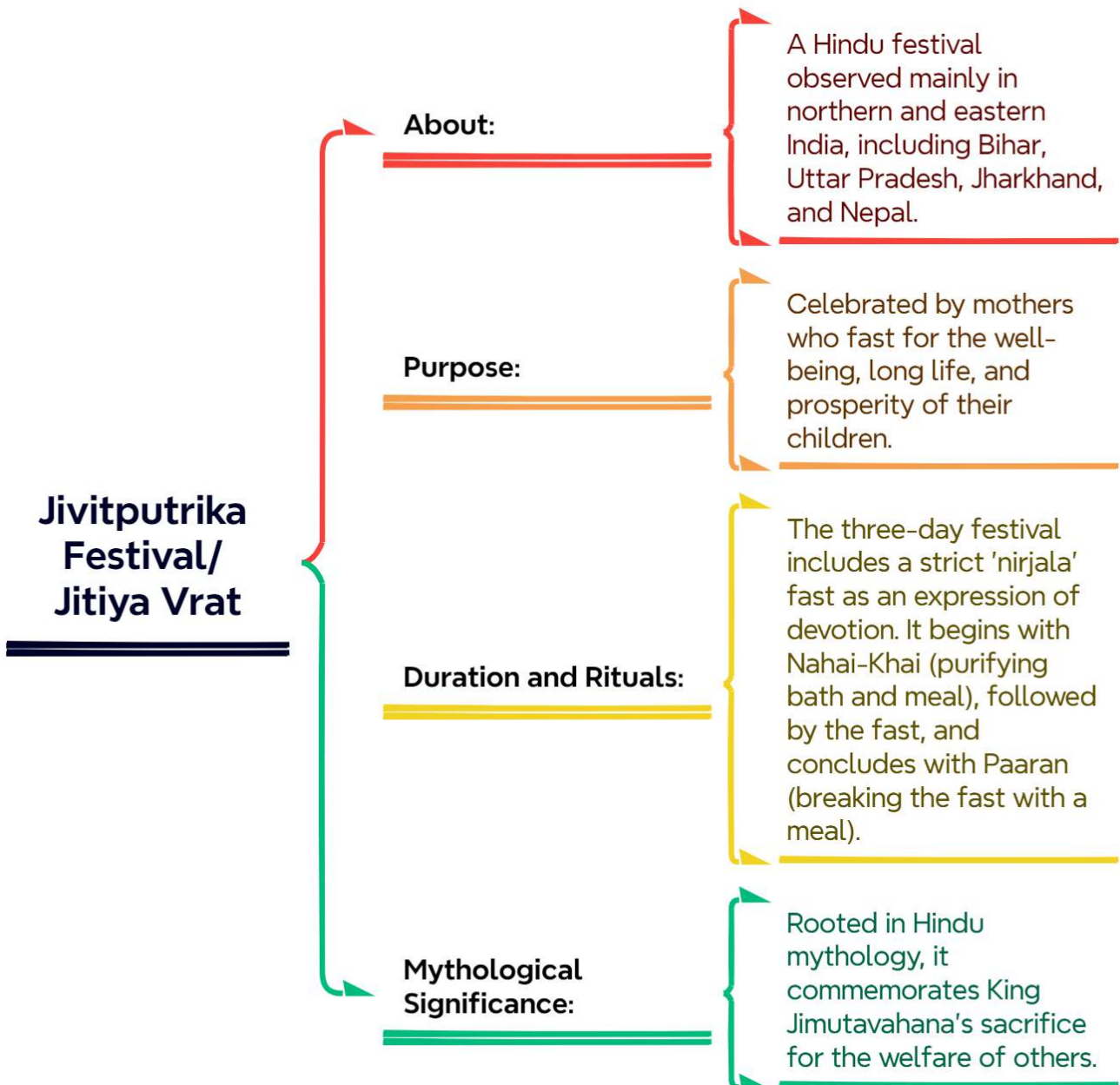
Mao Nagas »



2. 'Jivitputrika' Festival - The Hindu

At least 46 people, including 37 children, drowned while taking holy dip in rivers and ponds in several Bihar districts during the 'Jivitputrika' festival.

Jivitputrika Festival/ Jitiya Vrat >>



Geography

3. Philadelphi Corridor - Indian Express

It took the Israel Defense Forces three months to defeat Hamas terrorists holed up in Rafah city and along the border with Egypt. This key strategic area is called the Philadelphi corridor, and Israel has vowed to keep control of it in the near-term as part of its war against Hamas.

Doctrine of 'Constructive Possession' >>



*UN refugee camps are long-established areas of housed accommodation with health and educational facilities

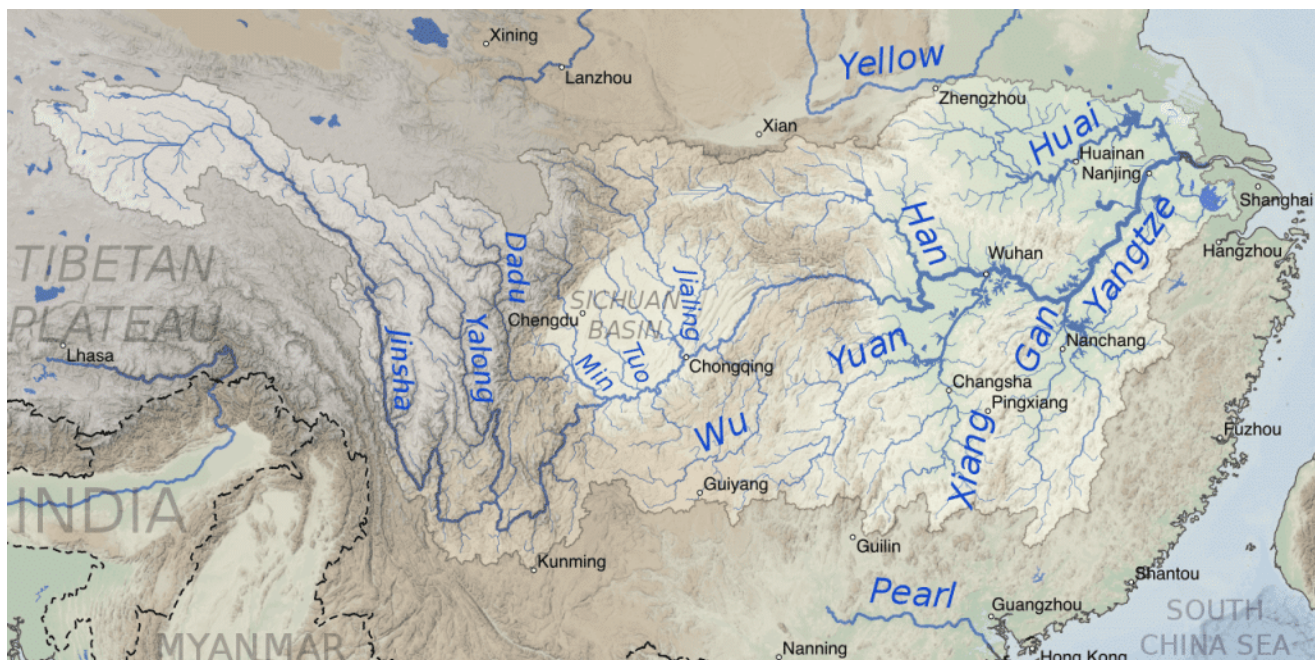
- **About:** A patch of land about 14 kms in length and 100 metres wide along Gaza's border with Egypt.
- **Formation:** Formed under the 1979 Israel-Egypt peace treaty as a 100-meter-wide buffer demilitarised border zone after the withdrawal of Israeli settlements and troops from Gaza in 2005 and runs from the Mediterranean to the Kerem Shalom crossing with Israel.
- **Expansion:** The zone was later expanded beginning during the Second Intifada & covers the entire 8.7-mile-long border.
- **Rafah Crossing:** Located between Egypt and Gaza, it is within the Philadelphi Corridor.

4. China's Three Gorges Dam - Indian Express

The world's largest hydroelectric dam in China called the "Three Gorges Dam" is a very huge infrastructure project and its size is so big that it has affected the spin of Earth.

Three Gorges Dam »

- **Location:** On the Yangtze River in China's Hubei Province.
- **About:** The world's largest hydroelectric power station completed in 2012 after nearly two decades of construction.
- **Dimensions:** 2,335 metres (7,660 feet) long and 185 metres (607 feet) high.
- **Capacity:** 40 cubic kilometres (10 trillion gallons) of water, which can produce up to 22,500 megawatts of electricity.



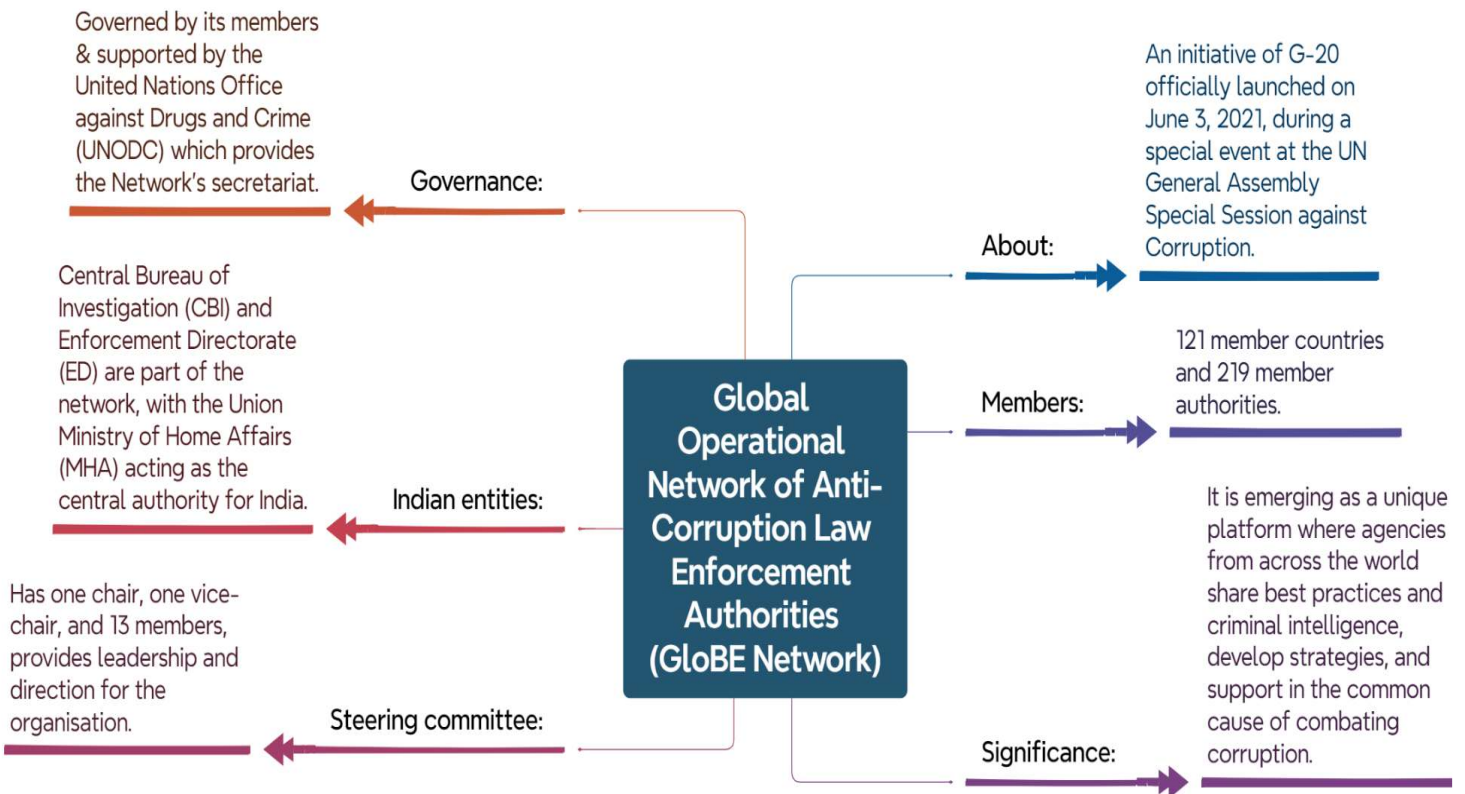
- **Water inflow:** Uses water from 3 gorges – Qutangxia, Wuxia, and Xilingxia
- **Significance:** Hydroelectric potential, increasing the Yangtze River's shipping capacity and reducing the potential for floods downstream by providing flood storage space.
- **About:** The longest river in both China and Asia and third longest river in the world, with a length of 3,915 miles (6,300 km).
- **Basin area:** 698,265 square miles (1,808,500 sq.km).
- **Left bank tributaries:** Yalong, Min, Jialing, and Han rivers
- **Right bank tributaries:** Wu, Yuan, Xiang, and Gan rivers

World Affairs

5. India Elected To Globe Steering Committee On Combating Corruption - The Hindu

India was elected to the 15-member GlobE Steering Committee during the plenary session held in Beijing recently after a multistage voting process.

Global Operational Network of Anti-Corruption Law Enforcement Authorities (GloBE Network) »



6. Why Pakistan Needed Another Bailout From Imf, What This Will Entail

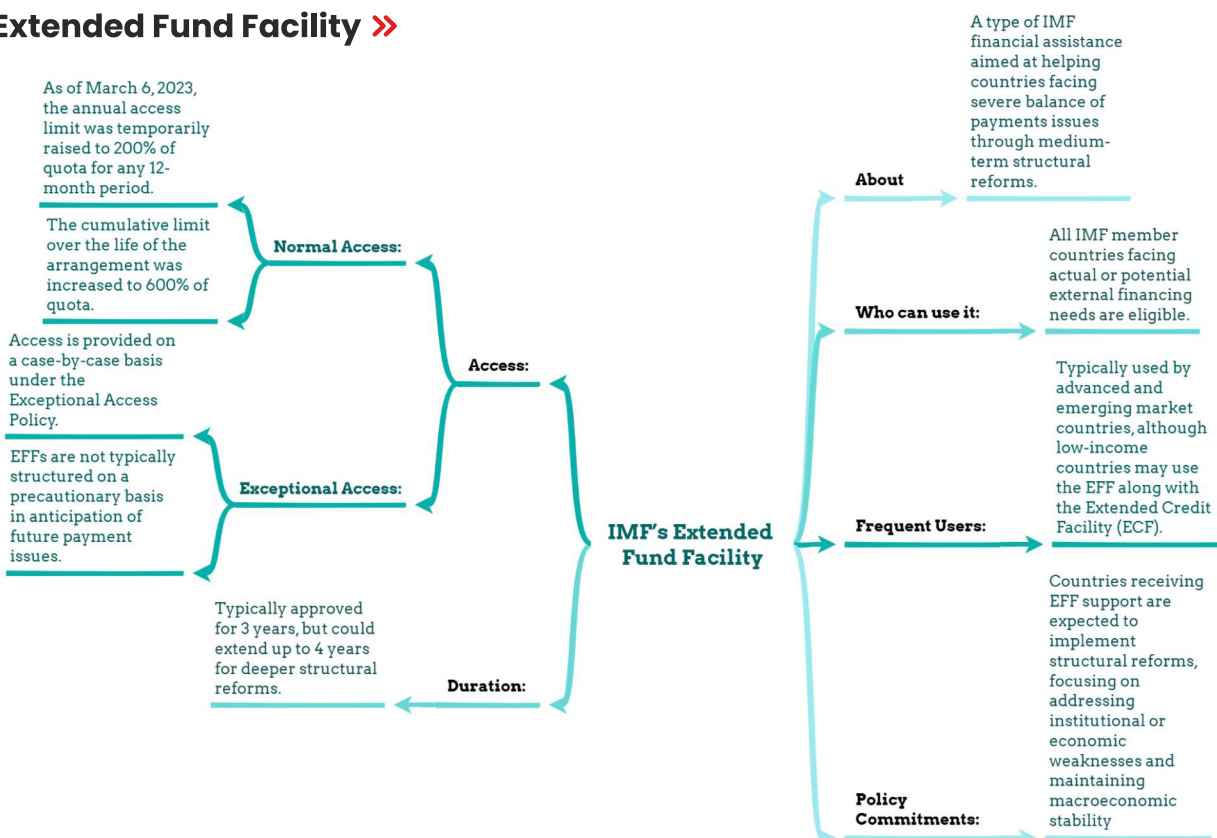
Context »

- Pakistan has once again secured a \$7 billion financial assistance bailout package from the International Monetary Fund (IMF) under the Extended Fund Facility (EFF) in September 2024. This aims to stabilize the country's fragile economy, which has been plagued by external debt, inflation, and dwindling foreign reserves.
- The bailout comes after previous IMF programs and stand-by arrangements that aimed to stabilize the economy but have left Pakistan with a heavy burden of structural reforms to meet.

Background

- In 2019, Pakistan entered the IMF's EFF program but was hit hard by the global impacts of the Covid-19 pandemic, the Russia-Ukraine war, and severe floods in 2022.
- By November 2022, the IMF had paused disbursements of funds due to Pakistan's failure to meet the stringent conditions imposed by the IMF.
- The economic crisis deepened in 2023, with inflation peaking at 38%, and the Pakistani rupee losing 20% of its value against the US dollar
- In July 2023, Pakistan secured a nine-month \$3 billion Stand-By Arrangement (SBA) from the IMF, which imposed strict conditions to maintain fiscal discipline, implement structural reforms, and stabilize the exchange rate.

IMF's Extended Fund Facility »



Economy

7. India Ranks 39th In Global Innovation Index 2024 - Indian Express

According to the Global Innovation Index released recently, India holds the 39th position in the Global Innovation Index (GII) 2024.

Global Innovation Index >>

- **Publisher:** World Intellectual Property Organization.
- **About:** A reliable tool for governments across the world to assess the innovation-led social and economic changes in their respective countries

Global Innovation Index 2024 >>

- **India's Rank:**
 - India has been ranked first among 10 economies in Central and Southern Asia, further emphasizing its regional dominance in innovation.
 - India has also secured the 4th position in the World Intellectual Property Organization (WIPO) Science and Technology (S&T) Cluster Ranking.
 - India has achieved the 7th rank globally in intangible asset intensity, which measures the strength of non-physical assets like patents and trademarks.
- **Indian cities among world's top 100 S&T clusters:** Major cities like Mumbai, Delhi, Bengaluru, and Chennai.



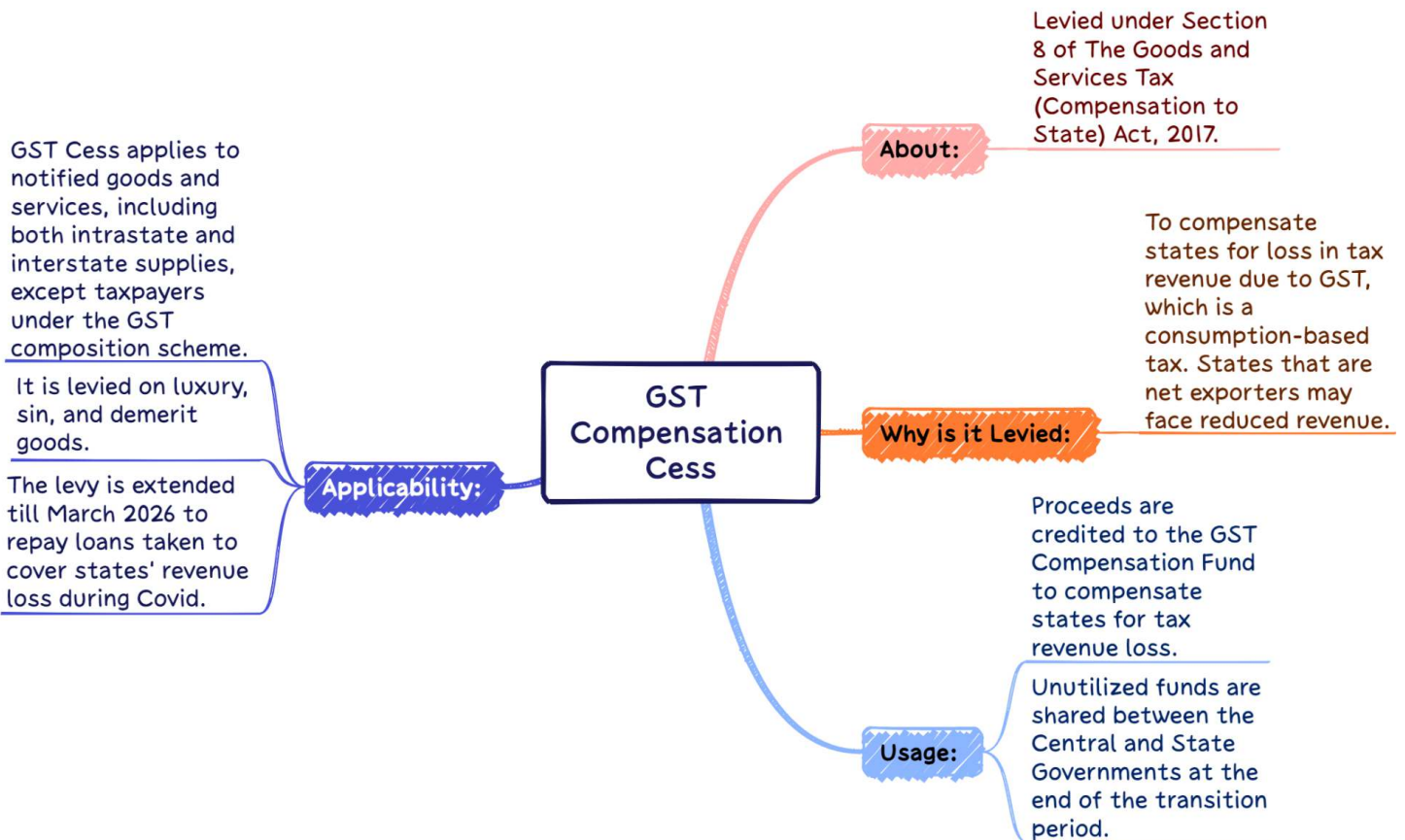
World Intellectual Property Organisation

- **About:** A specialized agency of the United Nations established by the WIPO Convention in 1967.
- **Headquarters:** Geneva, Switzerland.
- **Mission:** To lead the development of a balanced and effective international intellectual property (IP) system that enables innovation and creativity for the benefit of all.
- **Members:** 193
- **Functions:** Provides a global policy forum, where governments, intergovernmental organizations, industry groups and civil society come together to address evolving IP issues.

8. Gst Council Sets Up Gom On Compensation Cess; Panel To Submit Report By December 31 - The Hindu

The Goods and Services Tax (GST) Council has set up a 10-member GoM, chaired by Minister of State for Finance Pankaj Chaudhary, to decide on the taxation of luxury, sin and demerit goods once the compensation cess ends in March 2026.

GST Compensation Cess »



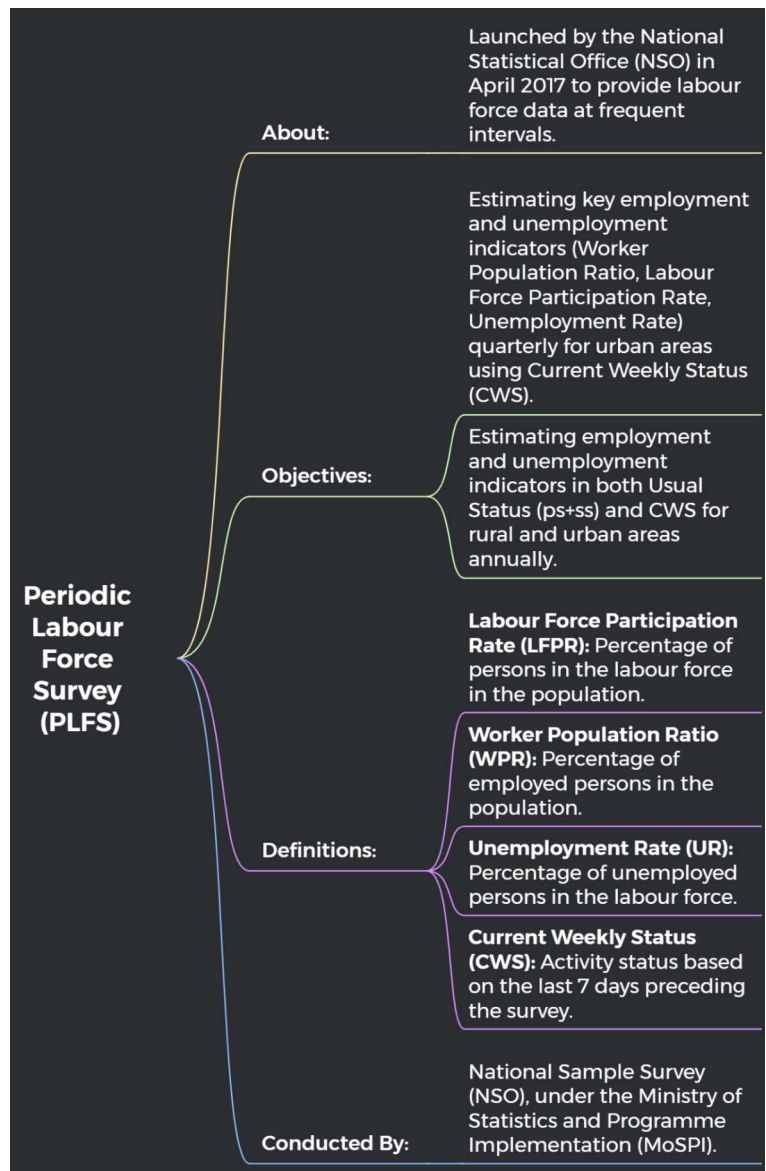
9. Unemployment Rate Stagnant, Reveals Government Survey - The Hindu

The Periodic Labour Force Survey (PLFS) for the period between July 2023 and June 2024, released by the Labour Bureau recently, reported no major change in the unemployment rate, and there is minor increase in the distribution of workers in agriculture and the manufacturing sector shows no growth in giving jobs compared to past years.

Findings of the survey >>

- **Labour Force Participation Rate (LFPR):**
 - For persons aged 15 years and above: 60.1%.
 - Male: 78.8%, Female: 41.7%.
- **Worker Population Ratio (WPR):**
 - For persons aged 15 years and above: 58.2%.
 - Male: 76.3%, Female: 40.3%.
- **Unemployment Rate (UR):** 3.2% for both males and females aged 15 years and above.
- **Trend in Unemployment Rate:** Male unemployment rate declined from 3.3% to 3.2%, while female unemployment rate increased from 2.9% to 3.2% between July 2022 - June 2024.

Periodic Labour Force Survey (PLFS) >>



10. India Is Now World's Third Largest Producer And Consumer Of Ethanol

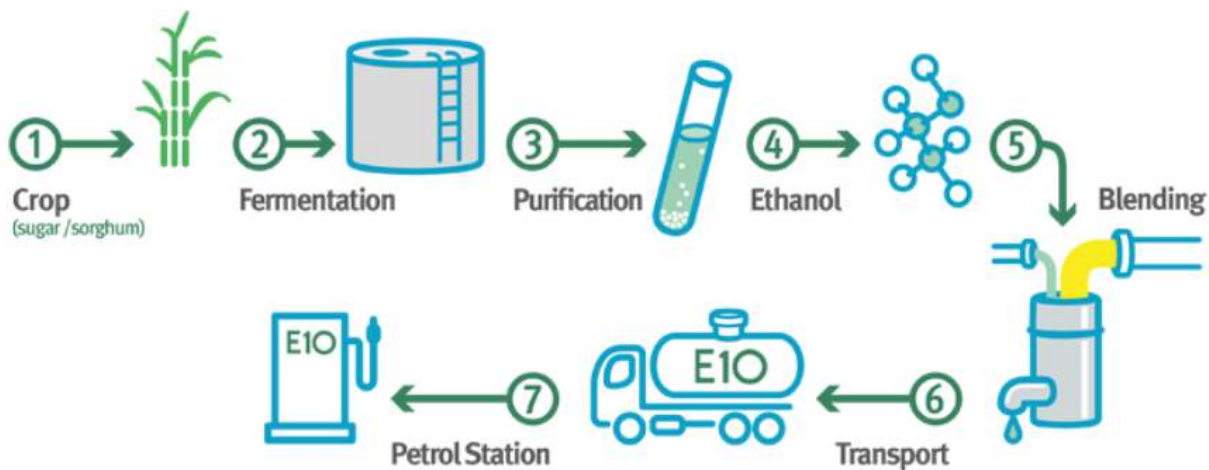
Union Minister for Food and Public Distribution, Pralhad Joshi, announced that India has become the world's third-largest producer and consumer of ethanol.

About Ethanol

- It is a renewable, clean-burning fuel derived primarily from biomass.
- It is commonly used as an alternative fuel or fuel additive in gasoline, helping to reduce carbon emissions and reliance on fossil fuels.
- Ethanol production: by fermentation of sugar or starch-based crops

Ethanol-Blended Petrol (EBP)

- It is a mixture of ethanol and gasoline, where ethanol, an alcohol derived from biomass, is blended with conventional petrol.
- Purpose - to reduce the consumption of fossil fuels, lower greenhouse gas emissions, and promote the use of renewable energy sources.



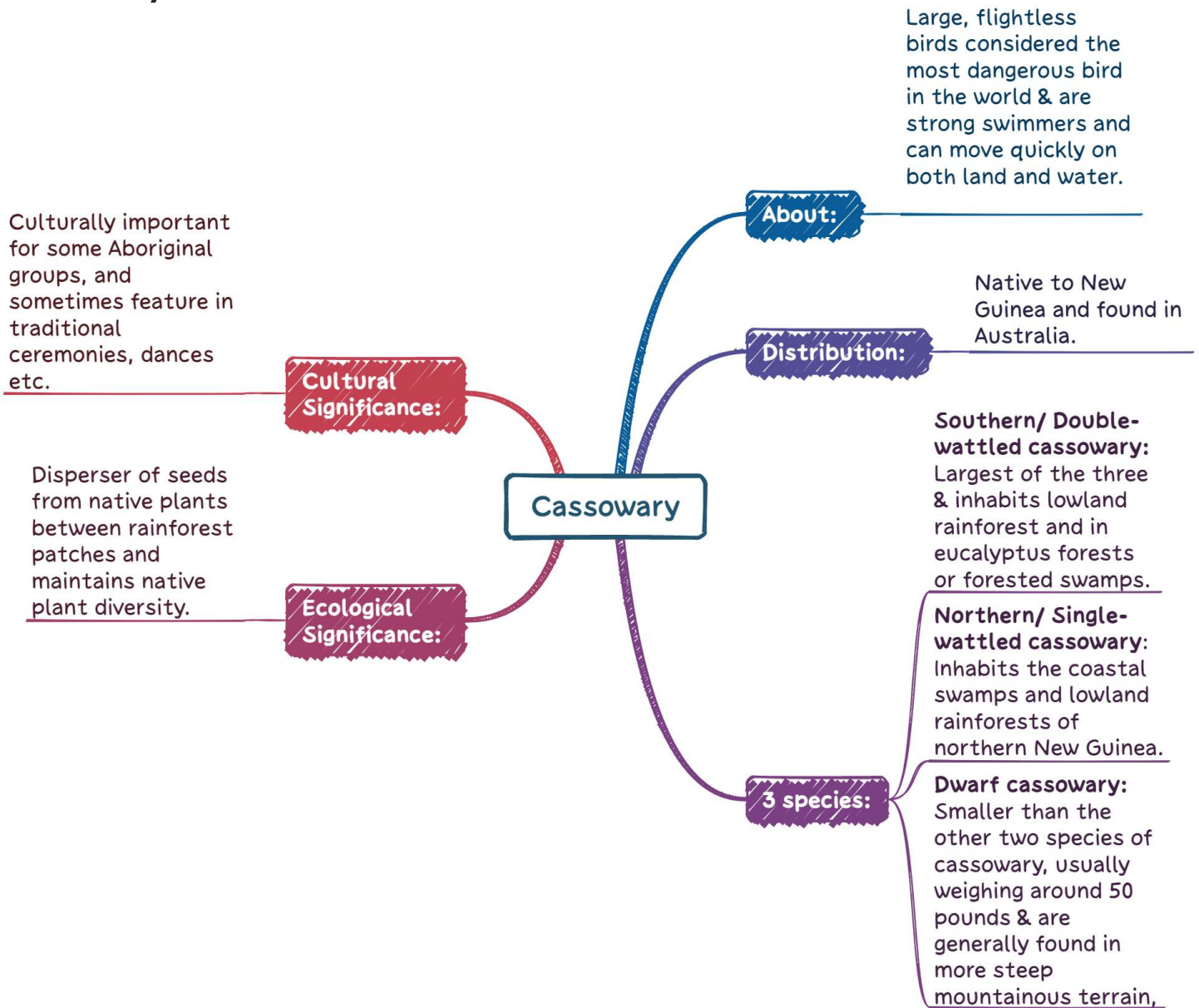
- **Launched:** January 2003
- **Aim:** to blend ethanol with petrol to achieve several objectives:
 - **Reduction of Pollution:** Ethanol is a cleaner fuel, and blending it with petrol helps lower emissions, thus reducing air pollution.
 - **Conservation of Foreign Exchange:** By using domestically produced ethanol, India can reduce its reliance on imported crude oil, saving foreign exchange.
 - **Supporting the Sugar Industry:** The program allows for the use of excess sugarcane for ethanol production, helping sugar mills clear arrears owed to farmers by increasing their value addition.
- **Target:** The program set a target of 10% ethanol blending (E10) by 2021-22, and 20% blending (E20) by 2025-26.

Environment

11. Cassowary, The 'most Dangerous Bird' In The World - Indian Express

September 26 has been set aside as the World Cassowary Day.

Cassowary >>



12. Manas National Park - The Hindu

Assam's famed Manas National Park and Tiger Reserve will reopen for tourists soon following the end of the monsoon closure period as mandated by the government of India.

Manas National Park and Tiger Reserve >>

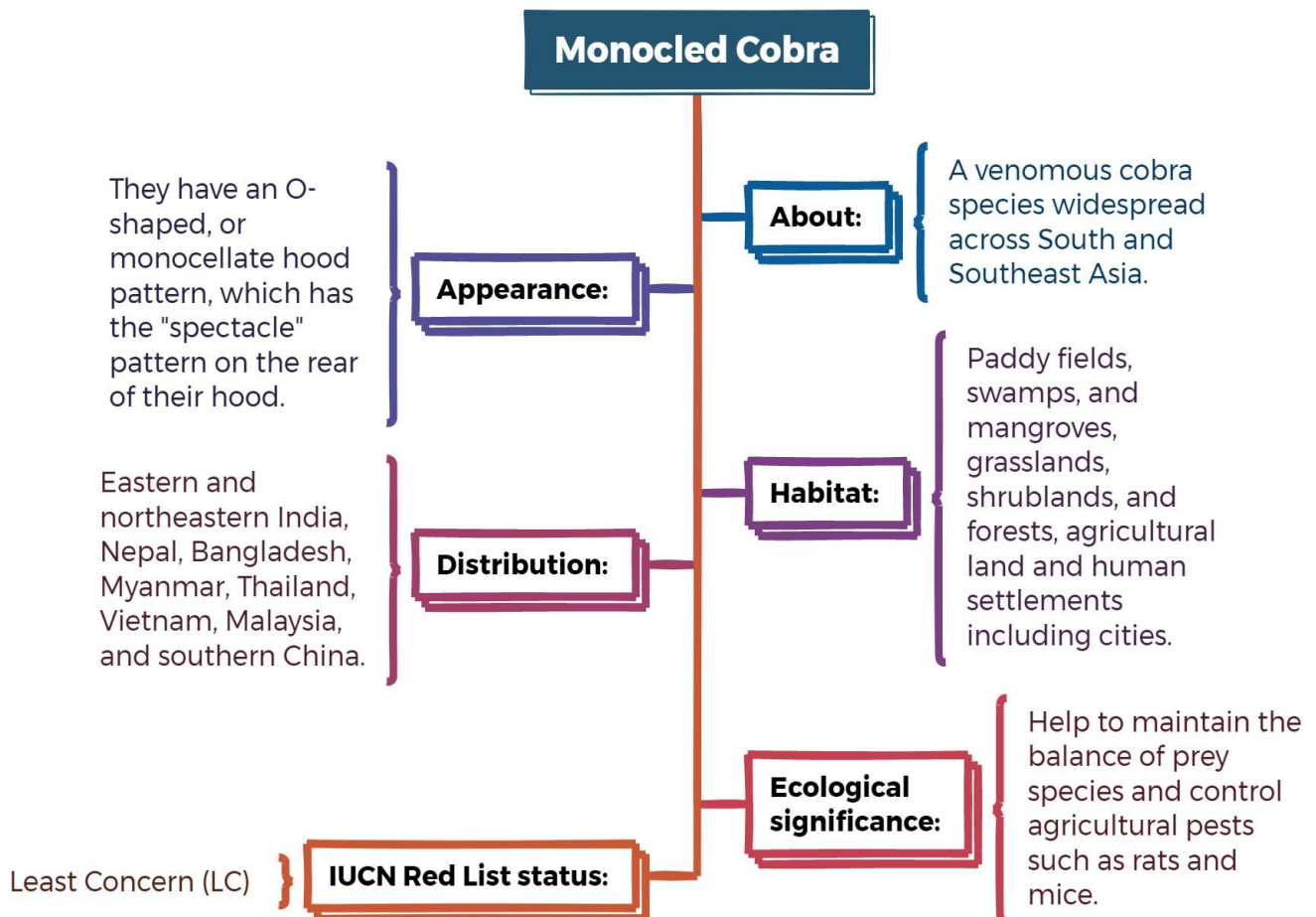
- **Location:** Doothills of Himalayas in Assam & is contiguous with the Royal Manas National Park in Bhutan.
- **Significance:** A Natural World Heritage Site, a Tiger Reserve, an Elephant Reserve, a Biosphere Reserve and an Important Bird Area & is one of the first reserves included in tiger reserve network under project tiger (1973).
- **Naming:** Named after the Manas River (a major tributary of Brahmaputra River), which is named after the serpent goddess Manasa.
- **Flora:** Sal, scrub forests, old plantations (in buffer areas), semi-evergreen and mixed deciduous forests, grasslands and riparian vegetation (in core area).
- **Fauna:** Hispid Hare, Pygmy Hog, Golden Langur, Indian Rhinoceros, Asiatic Buffalo etc.



13. Region-Specific Antivenoms can Improve Treatment of Monocled Cobra Bites - PIB

Species-specific and region-specific antivenoms are needed for improving treatment of monocled cobra bites, according to a new study.

Monocled Cobra >>



14. Equivalent Of Tasmanian Tiger For Bird Watchers' Discovered In Western Australia Desert - Indian Express

The largest known population of one of Australia's rarest birds has been found living in Western Australia's Great Sandy desert.

Great Sandy Desert >>

- **About:** An arid wasteland of northern Western Australia.
- **Australia's second largest desert:** After the Great Victoria Desert, it encompasses an area of 284,993 Sq.Km.
- **Extension:** From Eighty Mile Beach on the Indian Ocean eastward into the Northern Territory and from Kimberley Downs southward to the Tropic of Capricorn and the Gibson Desert.
- **Climate:** High daytime temperatures and overnight temperatures, along with far below average humidity levels.
- **Population:** The main population is made up of Indigenous Australians & has two main tribes; Martu in the west and Pintupi to the east.



NIGHT PARROT

- **About:** A medium-sized ground dwelling bird associated with mature Spinifex habitat in arid and semi-arid regions.
- **Distribution:** Night Parrots are now known only in isolated populations in south-west Queensland and northern inland WA (endemic to Australia).
- **Key threats:** Predation by feral cats, altered fire regimes, and habitat degradation associated with overgrazing and changing climatic conditions.
- **IUCN List status:** Critically endangered

15. Eturnagaram Wildlife Sanctuary - Indian Express

The Eturnagaram Wildlife Sanctuary, a haven of nature in the Mulugu district of Telangana, faced a rare and devastating event. In the blink of an eye, thousands of trees were destroyed.

Eturnagaram Wildlife Sanctuary >>

- **Location:** Near the border of Maharashtra, Chhattisgarh and Telangana in the village of Eturnagaram, a tribal village in Mulugu district of Telangana.
- **Designation:** Declared as a wildlife sanctuary in 1952 by Hyderabad Nizam Government.
- **Area:** ~ 806 sq. km.



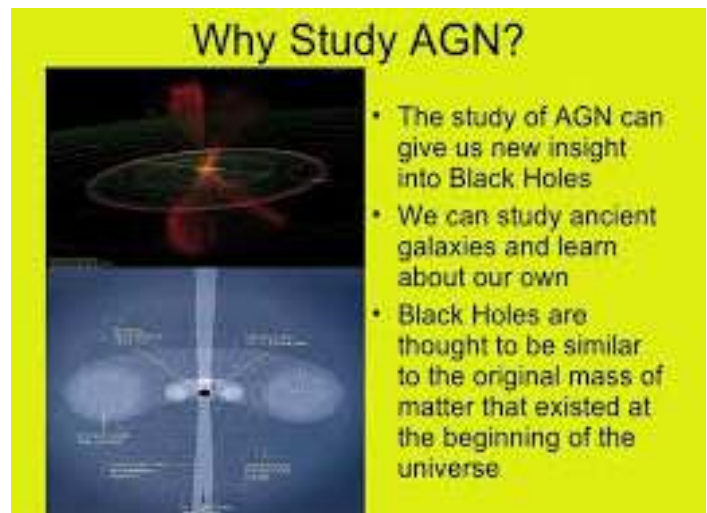
- **River:** Dayyam Vagu, which separates the sanctuary into two parts as well as river Godavari.
- **Vegetation:** Thick natural vegetation which falls in tropical dry deciduous.
- **Flora:** Teak, bamboo and other trees like madhuca and terminalia.
- **Fauna:** Tiger, Leopard, Panther, Wolf, Wild Dogs, Jackals, Sloth Bear, Chousingha, Black Buck, Nilgai, Sambar, Spotted Deer and Four Horned Antelope etc, Mugger crocodiles and snakes like the Cobra, Python and Krait.
- **Religious Significance:** The famous Sammakka-Saralamma Temple is situated inside the sanctuary.

16. IIA Finds Proof Of Interaction Between Radio Jet, Interstellar Gas - The Hindu

Researchers from the Indian Institute of Astrophysics (IIA) have found evidence of an interaction between a radio jet emitted from a special kind of galaxy called Active Galactic Nuclei (AGN) and the surrounding interstellar medium. This interaction has been detected for the first time in a dwarf galaxy situated at a distance of about 14 million light years.

Active Galactic Nucleus (AGN) »

- **About:** A bright central region of a galaxy dominated by light from dust and gas falling into a black hole.
- **Luminosity:** The central region is extremely luminous, often outshining the entire galaxy, emitting radiation across the electromagnetic spectrum (radio waves to gamma rays).
- **Cause of Radiation:** Radiation is produced by a supermassive black hole devouring nearby material.
- **Active Galaxy:** A galaxy hosting an AGN is called an 'active galaxy.'
- **Characteristics:** AGNs are the most luminous, persistent sources of electromagnetic radiation in the Universe, useful for discovering distant objects.
- **Quasars and Blazars:** The most powerful AGNs are quasars, which create extremely luminous galactic centers. A blazar is an AGN with a jet pointed toward Earth.



17. Meta Introduces Llama 3.2 - The Hindu

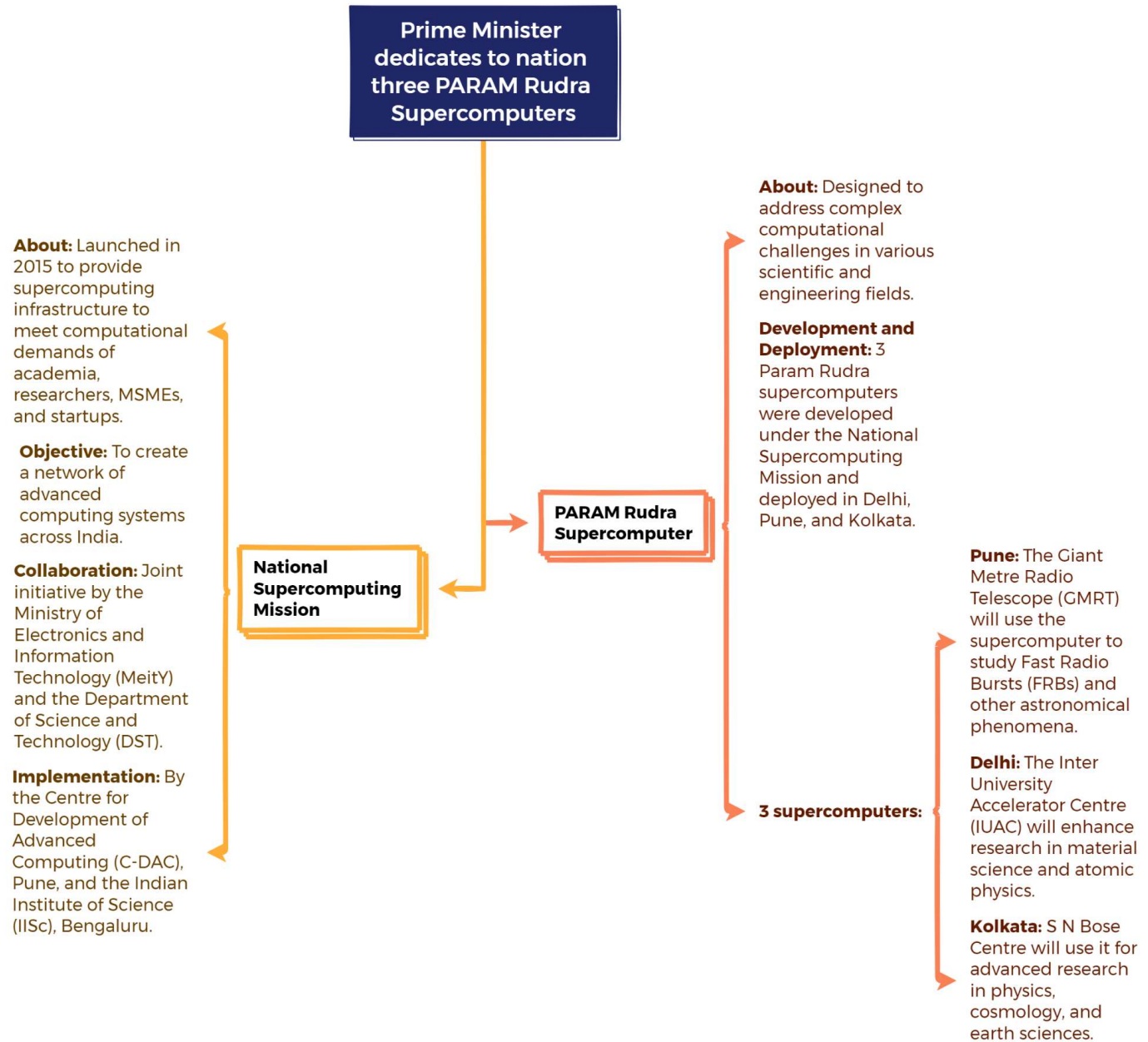
As all eyes are on the Meta Connect 2024, Mark Zuckerberg comes with the biggest announcement of introducing Llama 3.2. Zuckerberg said that Meta will be bringing Llama 3.2.

Llama 3.2 »

- **About:** An open-source large language model developed by Meta that has both image and text processing abilities.
- **Variants:** Includes both small and medium-sized variants at 11-billion and 90-billion parameters as well as more lightweight text-only models at 1-billion and 3-billion parameters that fit into select mobile and edge devices.
- **Applications:** AR apps with a real-time understanding of video, visual search engines that distribute images based on content, or document analysis tools that can summarise large portions of text.

18. Prime Minister Shri Narendra Modi Dedicates To Nation Three Param Rudra Supercomputers Via Video Conferencing - Pib

The Prime Minister, Shri Narendra Modi dedicated to the nation three PARAM Rudra Supercomputers worth around Rs 130 crore via video conferencing recently.



Defence

19. Russian Tu-22m3 Bomber - The Hindu

Recently, Tu-22M3 missile carriers of the Russian Aerospace Forces struck Snake Island in the Black Sea with Kh-22 cruise missiles.



Russian
Kh-22
ALCM

Kh-22 Air Launched Cruise Missile (ALCM). Converted ex-Soviet Anti-Ship Missile.

The Kh-22 is a Soviet-Russian air launched supersonic cruise missile. Designed originally as an anti-ship missile, the Kh-22s had variants to deliver nuclear or conventional High Explosive warheads. Launched from strategic bombers, Russia is now using Kh-22s and updated Kh-32s to target Ukrainian civilian targets.

The Kh-22 is launched by RU strategic bombers including the Tu-95 and Tu-22M.

The missile is guided by a gyro-stabilized autopilot in and a radio altimeter.

The Kh-22 uses a Tumansky liquid-fueled rocket engine giving it a max. speed of Mach 4.6 and a range of up to 320 mi (600 km).

Warhead: 1,000 kg
(2,205 lb) RDX High
Explosive

The weapon can conduct high altitude and low attitude attack profiles.

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