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A collection of historical artifacts is displayed against a background of a patterned, textured surface. In the foreground, a large, cylindrical object, possibly a telescope or a container, is partially visible on the left. A rolled-up scroll or document lies horizontally in the middle ground. Below the scroll, a map or document with a grid pattern is spread out. Various tools and objects, including a key and a small metal ring, are scattered on the map. The overall scene suggests a historical or archaeological setting.

# HISTORY- ARTS AND CULTURE





**DURGA PUJA - A CELEBRATORY FESTIVAL  
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**RAMLEELA**

**SAMMAKKA-SARAKKA JATARA AND  
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## DURGA PUJA - A CELEBRATORY FESTIVAL OF HINDUISM

Durga Puja, recognized as an Intangible Cultural Heritage of Humanity in 2021, is an annual festival celebrated predominantly in September or October. It is especially popular in Bengal, Assam, and eastern Indian states.

### SIGNIFICANCE OF DURGA PUJA

Durga Puja marks the triumph of the goddess Durga over the demon king Mahishasura. The festival aligns with Navratri, a nine-night celebration of the divine feminine (shakti) in many northern and western Indian states.



### STAGES OF DURGA PUJA

- Mahalaya: The beginning of Durga Puja, heralding the arrival of the goddess.
- Sasthi: The start of celebrations and worship on the sixth day.
- Days 7-9: Worshiping the goddess in her different forms as Durga, Lakshmi, and Sarasvati.
- Vijayadashami: The "Tenth Day of Victory," concluding the festival with vibrant processions and immersion rituals.

### Immersion Ritual

On Vijayadashami, sacred images are carried in grand processions to local rivers and immersed, symbolizing the deity's return to her Himalayan home and her husband, Shiva.

### Pandals and Temples

Elaborately decorated bamboo structures and galleries, known as "pandals," showcase images of the goddess Durga, often riding a lion and defeating the demon king Mahishasura.

Durga Puja's evolution from its early roots under the zamindars to its expansion among Kolkata's business elite and the influence of Europeans like Robert Clive reshaped how it was celebrated, turning it into a status and fashion symbol in society.

### THE EVOLUTION OF DURGA PUJA IN BENGAL

#### The Myth of Durga Puja's Origin

Durga Puja has multiple legendary origin stories, with one popular tale linking it to Robert Clive's gratitude following the Battle of Plassey in 1757. Robert Clive's Persian translator and close confidante, Nabakishan Deb, is said to have advised him to hold the first Durga Puja in Calcutta as a way to express gratitude to the goddess. However, historical records and evidence raise doubts about the authenticity of this origin story. It is more likely a metaphor representing the sociological roots of Durga Puja in Calcutta.

#### Durga Puja as a Status Symbol

The period of British East India Company rule brought significant social and economic changes to Bengal. Zamindars, or hereditary landowners, and rich Bengali merchants emerged as a powerful class, benefiting from the Company's rule. Durga Puja became an occasion for these nouveau riche families to display their wealth and socialize with the British sahibs, emphasizing conspicuous consumption over devotion to the goddess.



### PUJA TAKES A NATIONALIST TURN

By the late 19th century, nationalist sentiments grew among the educated Bengali population. Bankim Chandra Chattopadhyay's novel, "Ananda Math," popularized the phrase "Bande Mataram" and presented the nation as a mother figure. Goddess Durga, revered as "Ma" (mother) Durga, became a symbol of the nation's embodiment and its potential savior from foreign rule.

The meaning of Durga Puja shifted during Lord Curzon's Partition of Bengal in 1905, with communal festivities becoming a platform for collective consciousness and the Swadeshi Movement. British elites found themselves less welcome at the Pujas, and symbolic changes in the Puja idols reflected growing anti-British sentiments. In the 1920s, public Durga Pujas emerged, transforming the festival from an exclusive celebration of the wealthy elite into a more inclusive event, influenced by Gandhian principles against untouchability and the need for Hindu consolidation.





## RAMLEELA

Ramlila, a traditional Ramayana performance, has been recognized as an Intangible Cultural Heritage of Humanity since 2008. It literally means "Rama's play" and involves the portrayal of episodes from the Ramayana through a combination of song, narration, recital, and dialogue. Ramlila is a significant cultural practice in northern India, primarily performed during the Dussehra festival.



### KEY LOCATIONS OF RAMLILA

Notable Ramlila performances take place in various regions, including Ayodhya, Ramnagar, Benares, Vrindavan, Almora, Sattna, and Madhubani. These performances are deeply rooted in the local culture and traditions. The

### INFLUENCE OF RAMACHARITMANAS

Ramlila is based on the Ramacharitmanas, a sacred text composed by Tulsidas in the sixteenth century. This text, written in Hindi, aimed to make the epic Ramayana more accessible to a wider audience.



### LENGTH AND SIGNIFICANCE

Ramlila performances often span ten to twelve days, while some, like the one in Ramnagar, can extend for an entire month. The festivals coincide with Dussehra, celebrating Rama's return from exile and recounting the epic battle between Rama and Ravana.



### ELEMENTS OF RAMLILA

Ramlila's dramatic essence lies in its portrayal of key scenes from the Ramayana, represented through a succession of icons. The audience actively participates by singing and engaging in the storytelling. The performance serves as a unifying force, bringing together people of all backgrounds, transcending differences of caste, religion, and age.

### COMMUNITY INVOLVEMENT

Ramlila is not limited to on-stage performances; it involves the entire community. Villagers play various roles, participate in activities like mask and costume making, and contribute to the preparation of props and decorations.

### CHALLENGES AND CHANGES

The advent of mass media, particularly television soap operas, has led to a decrease in Ramlila's audience. This shift threatens the traditional role of Ramlila in uniting people and communities, as it faces competition from modern entertainment.

*"Be not afraid of greatness. Some are born great, some achieve greatness, and others have greatness thrust upon them."*

- WILLIAM SHAKESPEARE





## SAMMAKKA-SARAKKA JATARA AND SARAKKA CENTRAL TRIBAL UNIVERSITY IN TELANGANA

### SAMMAKKA-SARAKKA JATARA: A TRIBAL SPECTACLE

A renowned tribal festival, Sammakka-Sarakka Jatara, draws around 1.5 crore devotees and is likened to the Kumbh Mela for tribals. The festival takes place biennially in Medaram, Telangana, and commemorates the 13th-century battle of Sammakka and Sarakka against tax imposition on the Koya tribe.

### SIGNIFICANCE OF SAMMAKKA AND SARAKKA

Sammakka, a tribal woman, was married to a Kakatiya chief, Pagidda Raju, and had three children. Sarakka, her daughter, lost her life during a tax protest, and Sammakka's disappearance led to her belief as a vermilion casket.

### CULTURAL AND POLITICAL RELEVANCE

Samakka-Sarakka Jatara was declared a state

festival in 1996. The festival has seen remarkable growth in popularity, attracting participants from various states and receiving support from the Ministry of Tribal Affairs and the Telangana state government.

### EDUCATIONAL ADVANCEMENTS

The Sarakka Central Tribal University, approved by the Union cabinet, is set to enhance educational opportunities and cultural heritage in the region. The university fulfills a commitment made under the Andhra Pradesh Reorganisation Act, 2014.

### CULTURAL HERITAGE AND UNESCO SITE

The Mulugu district, where the festival takes place, is home to a substantial Scheduled Tribes (ST) population. The district also hosts the UNESCO World Heritage Site of Ramappa Temple, adding to its cultural significance.

## HABITAT RIGHTS GRANTED TO BAIGA TRIBAL GROUP IN CHHATTISGARH

### HABITAT RIGHTS FOR BAIGA TRIBAL GROUP

Baiga Particularly Vulnerable Tribal Group (PVTG) in Chhattisgarh receives habitat rights under the Forest Rights Act. These rights grant community-based authority over their customary territory, socio-cultural practices, and livelihoods. Habitat rights also include protection and conservation of natural and cultural heritage. These rights help safeguard traditional knowledge, livelihoods, and ecological practices passed down through generations.

isolated areas, facing health and economic challenges.

### IMPLEMENTATION AND RECOGNITION

The Ministry of Tribal Affairs in India identified 75 PVTGs in 18 states and one Union Territory. Currently, only three out of the 75 PVTGs in India have received habitat rights. The Bharia PVTG in Madhya Pradesh was the first, followed by Kamar and Baiga tribes in Chhattisgarh.

### THE BAIGA TRIBAL COMMUNITY

The Baiga tribe is located in various districts of Chhattisgarh and adjacent areas in Madhya Pradesh. As of 2015-2016, Chhattisgarh's PVTG population was 2.50 lakh out of a total tribal population of 78.22 lakh.



### LEGAL FRAMEWORK

Habitat rights are provided under section 3(1) (e) of the Forest Rights Act, 2006, for PVTGs. The rights encompass customary habitats in reserved forests and protected forests of tribal groups. It empowers PVTGs to protect their habitat from harmful developmental activities. Consent and consultation with the local gram sabhas are essential for any such activities.

### PVTGS AND THEIR CHARACTERISTICS

PVTGs are tribal communities characterized by technological backwardness, low literacy levels, and subsistence economies. They often inhabit remote and



Particularly Vulnerable Tribal Groups (PVTGs) in Chhattisgarh

Chhattisgarh is home to seven PVTGs, residing across 17 of the state's 33 districts. These groups include Kamar, Baiga, Pahadi Korba, Abujmadiya, Birhor, Pando, and Bhujia.





## CALLS TO UNLOCK PURI JAGANNATH TEMPLE'S TREASURE ROOM RESURGE

In Odisha, the clamor to access the Ratna Bhandar (treasure room) of the Puri Jagannath Temple is resurfacing. It has been thirty years since the treasure room in the temple was last opened.

### HISTORY AND CONSTRUCTION OF THE JAGANNATH TEMPLE

The Jagannath Temple in Puri, India, is a revered Vaishnava religious site, known for its ancient history and significance. The primary shrine of the temple was constructed in the 10th century during the reign of King Anantavarman from the Chodaganga dynasty. Although the temple's foundation is relatively recent, its deities are associated with King Indrayumna from the Satya-yuga period, who was a mythical ruler and nephew of Lord Ram. In 1174 AD, King Anang Bhim Deo undertook significant construction projects, including the expansion of the temple.

### KALAPAHAD'S ATTACK AND DEITIES' RESCUE

In 1568, General Kalapahad led an army to loot the Jagannath Temple after defeating the Gajapati ruler Mukunda Deva. The deities were secretly moved out of the temple and hidden near Chilika lake. However, Kalapahad discovered them and set the deities ablaze. A devoted follower managed to save the deities' essence as a symbolic ash. The deity's absence led to a mourning period within the temple.

### THE RETURN OF THE DEITIES

Raja Ramachandra Deva I, the ruler of the Hindu kingdom of Khurda, played a pivotal role in recovering the deities. He organized a ceremonial event called "Nobokoliboro" in 1575, which marked the return of the deities to their temple. As a token of appreciation, he was named "Abhinav Indrayumna" (Indrayumna incarnate). Over time, Ramachandra Deva I's authority over the temple gained recognition, even from the

Mughal Empire.

### BRITISH RULE AND TEMPLE MANAGEMENT

During the 18th and 19th centuries, the Marathas and later the British ruled over the Jagannath Temple. However, the local rulers of Khurda retained the trust of the devotees in managing the temple and its rituals. In 1809, the British East India Company officially returned control of the temple to the Rajas of Khurda, who maintained authority until the end of British colonial rule in India.

### RESTORATION AND CONSERVATION

In 1975, the Archaeological Survey of India initiated a restoration project to unveil the original designs hidden beneath multiple layers of lime plaster. This extensive conservation project lasted for two decades, revealing the natural colors of the khondalite stone used in the temple's construction. The temple's rituals and systems have remained largely unchanged since its establishment.

### UNIQUE DAILY WORSHIP OF LORD JAGANNATH

The Lord of the Universe is worshipped at the Jagannath Temple in a distinctive manner. The deities are treated as members of one's family, following a daily routine that includes waking them with music and arati. They undergo various activities like changing clothes, brushing teeth, bathing, and dressing up for the morning darshan. The deities enjoy a series of meals throughout the day, including a grand feast for lunch. The heavy meals are followed by a short siesta, and the deities are prepared for evening rituals. They partake in a late dinner and are lulled to sleep with music, leaving them in peaceful slumber until the next morning.

## NORWAY'S JON FOSSE WINS NOBEL FOR LITERATURE

Norwegian playwright Jon Fosse, aged 64, was awarded the Nobel Prize in Literature as announced by the Swedish Academy.



Fosse's global renown stems from his innovative contributions to the world of contemporary theatre and prose, which offer a voice to the unexpressed. His works are primarily written in the Norwegian Nynorsk language and encompass a diverse range of literary forms, including plays, novels, poetry collections, essays, children's books, and translations. Notable among his major works are "Boathouse" and "Melancholy I and II."

Fosse's literary journey began in 1983 with his debut novel "Red, Black," a narrative that seamlessly navigates through time and various perspectives. His most recent work, "Septology," stands as a semi-autobiographical magnum opus, spanning seven parts across three volumes, totalling 1,250 pages without a single full stop. The third volume of "Septology" was shortlisted for the 2022 International Booker Prize.

Jon Fosse's route to fame took an unexpected turn in the early 1990s when, struggling to make ends meet as an author, he was asked to write the beginning of a play. He discovered a deep affinity for the art form and ended up writing the entire play titled "Someone is Going to Come," which marked his international breakthrough when it premiered in Paris in 1999. Fosse continued to gain international acclaim with his subsequent work, "And We'll Never be Parted," in 1994. His literary contributions have been translated into approximately 50 different languages, solidifying his place as one of the most influential contemporary playwrights and writers worldwide.



## NOBEL PRIZES

The Nobel Prizes are prestigious international awards presented annually in recognition of outstanding achievements in various fields. They were established in accordance with the will of Alfred Nobel, a Swedish inventor, scientist, and philanthropist, who left a substantial portion of his fortune to fund these prizes.

The Nobel Prize has been conferred in the categories of physics, chemistry, physiology or medicine, literature, and peace since 1901, with the addition of an economic sciences memorial prize in 1968.

## INSTITUTIONS AND DISCIPLINES

**The Royal Swedish Academy of Sciences:** This institution is responsible for awarding the Nobel Prize in Physics and the Nobel Prize in Chemistry. These prizes recognize exceptional contributions to the fields of physics and chemistry.

**The Nobel Assembly at the Karolinska Institute:** This assembly awards the Nobel Prize in Physiology or Medicine. It acknowledges remarkable discoveries and achievements in the field of medical and life sciences.

**The Swedish Academy:** This academy presents the Nobel Prize in Literature, which recognizes outstanding literary work by an author, poet, or playwright.

**The Norwegian Nobel Committee:** Unlike the other prizes, the Nobel Peace Prize is awarded in Oslo, Norway. It is presented by the Norwegian Nobel Committee and recognizes individuals or organizations that have made significant contributions to the promotion of peace and conflict resolution on a global scale.

**The Sveriges Riksbank (Swedish National Bank) Prize in Economic Sciences in Memory of Alfred Nobel:** Often referred to as the Nobel Prize in Economic Sciences, this award recognizes outstanding contributions to the field of economics. It is presented along with the other Nobel Prizes and follows a similar format.

Each Nobel Prize is awarded in its respective discipline and is considered one of the highest honours in that field. The Nobel Laureates are selected through a rigorous nomination and evaluation process, and the prizes are awarded during ceremonies in Stockholm, Sweden, except for the Nobel Peace Prize, which is presented in Oslo, Norway.

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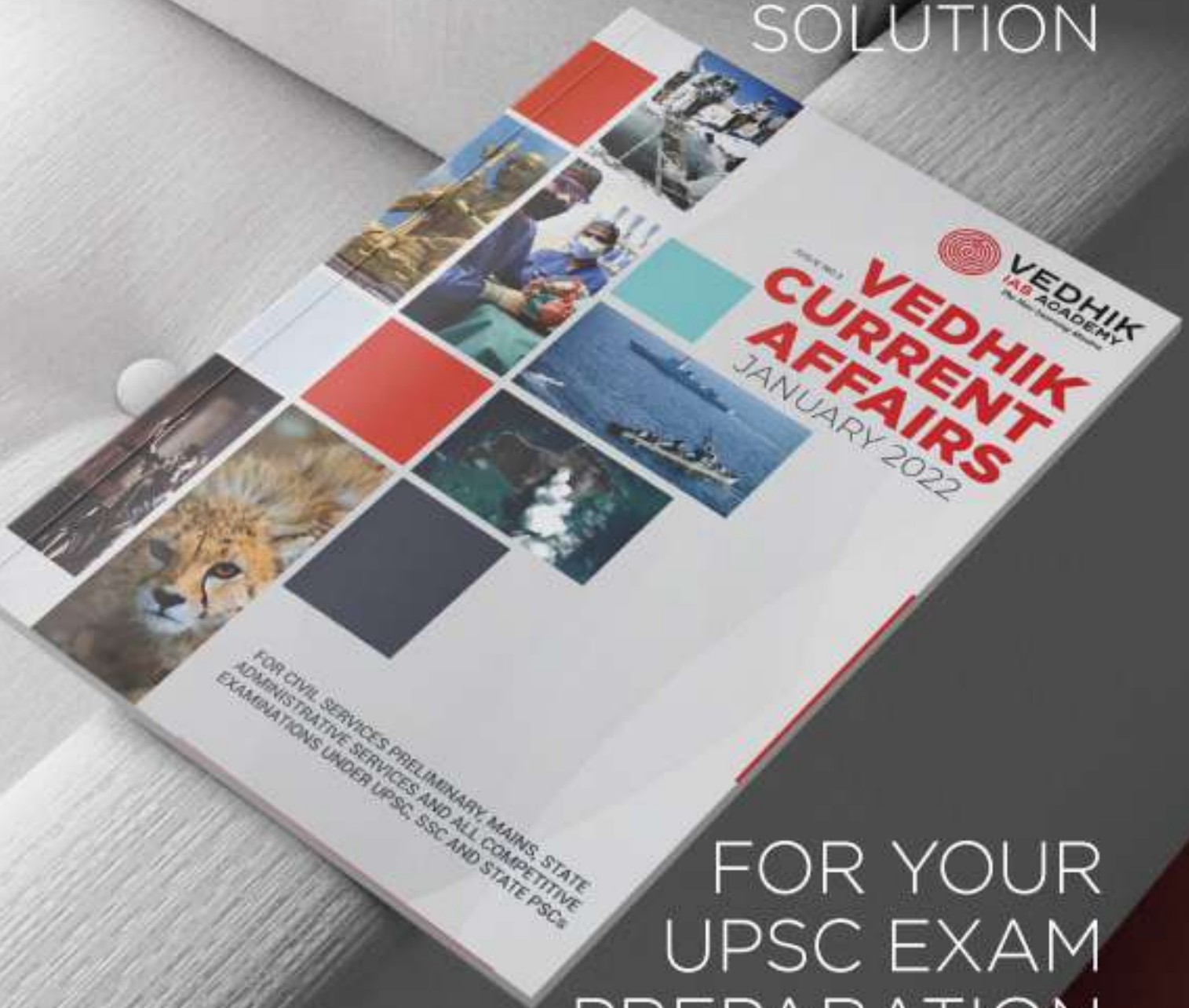
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**LUNAR SOIL**

**SIKKIM GLACIAL LAKE OUTBURST  
FLOOD**

**ZEALANDIA**

**ROSEBANK OIL FIELD**

**PONTUS PLATE**



## LUNAR SOIL

**CONTEXT:** Pragyan rover of Chandrayaan 3 was unable to leave a clear imprint of Indian national emblem and ISRO logo on lunar soil.

About lunar soil:

- It is not dusty but rather lumpy, indicating that something is binding the soil together.
- Lunar Soil is a thick layer of regolith, fragmental and unconsolidated rock material that covers the entire lunar surface.
- Lunar soil contains no organic matter.

A thick layer of regolith, fragmental and unconsolidated rock material, covers the entire lunar surface. This layer is the result of the continuous impact of meteoroids large and small and the steady bombardment of charged particles from the sun and stars. The regolith is generally about 4-5 m thick in mare regions and 10-15 m in highland areas.

Lunar soil is a term often used interchangeably with regolith, however, soil is defined as the sub centimeter fraction of the regolith (in practice though, soil generally refers to the submillimeter fraction of the regolith). Lunar dust has been defined in many ways by different researchers, but generally refers to only the very finest fractions of the soil, less than-10 or 20 microns.

Lunar soil can be a misleading term, as lunar "soil" bears little in common with terrestrial soils. Lunar soil contains no organic matter and is not formed through biologic or chemical means as terrestrial soils are, but strictly through mechanical comminution from meteoroids and interaction with the solar wind and other energetic particles.

Lunar soils are also not exposed to the wind and water that shapes the Earth. As a consequence, in contrast to terrestrial soils, lunar soils are not sorted in any way, by size, shape, or chemistry. Finally, without wind and water to wear down the edges, lunar soil grains tend to be sharp with fresh fractured surfaces.

On the Earth, we have meteorites which impact on a regular basis, but smaller particles burn up in the atmosphere (shooting stars). On the Moon, everything impacts, down to the smallest micro and nanometer particles. When these micrometeorites impact, they melt and vaporize small amounts of material that can then be re-deposited on nearby grains.

The mean grain size of typical lunar soils ranges from 40-800  $\mu\text{m}$  with most falling between 45-100  $\mu\text{m}$  (McKay et al., 1991). In terrestrial terms, most lunar regolith samples would correspond to pebble- or cobble-bearing silty sands, however, it is difficult, and probably dangerous, to apply such terrestrial terminology to lunar soils because their formation mechanisms are so different.

## SIKKIM GLACIAL LAKE OUTBURST FLOOD

**CONTEXT:** Sikkim recently experienced a Glacial Lake Outburst Flood (GLOF). The South Lhonak Lake, a glacial lake located at an altitude of 17,000 feet in the state's northwest, experienced a rupture as a result of continuous rainfall.

**About Glacial lake outburst:**

A GLOF (Glacial Lake Outburst Flood) is a sudden and potentially catastrophic flood that occurs when water stored behind a glacier or a moraine (a natural accumulation of ice, sand, pebbles, and debris) is released rapidly.

These floods happen when glacial lakes formed by melting ice accumulate water behind weak moraine dams.

Unlike sturdy earthen dams, these moraine dams can fail abruptly, releasing large volumes of water in minutes to days, leading to devastating downstream flooding.

GLOF can be triggered by several reasons, including earthquakes, extremely heavy rains and ice avalanches.

The Glacial Lake Outburst Floods (Glof) triggered by cloudburst in Sikkim has prompted the government to come up with a comprehensive National Glof Risk Mitigation Measure.

Globally, one of the most important mitigation measures for reducing GLOF is to reduce the volume of water in the lake in order to reduce the peak surge discharge.

## ZEALANDIA

**CONTEXT:** Recent research on Zealandia, an underwater continent to the southeast of Australia, is shedding light on its geological history and why it remained hidden for so long.

**What is Zealandia?**

Zealandia is an underwater continent located to the southeast of Australia. It was recognized as Earth's eighth continent in 2017.

Zealandia formed around 83 million years ago during the Late Cretaceous period and started as part of the supercontinent Gondwana before breaking away.

The existence of Zealandia was first recorded in 1642 by Dutch businessman and sailor Abel Tasman

The identification of Zealandia as a geological

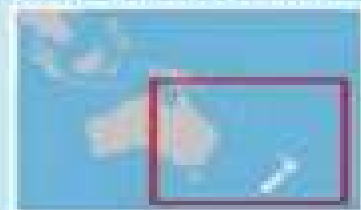
continent, rather than a collection of continental islands, fragments, and slices, more correctly represents the geology of this part of Earth. Zealandia provides a fresh context in which to investigate processes of continental rifting, thinning, and breakup.

Zealandia is everywhere substantially elevated above the surrounding oceanic crust. The main difference with other continents is that it has much wider and deeper continental shelves than is usually the case. Zealandia has a modal elevation of ~1100 m and is ~94% submerged below current sea level. The highest point of Zealandia is Aoraki-Mount Cook at 3724 m.

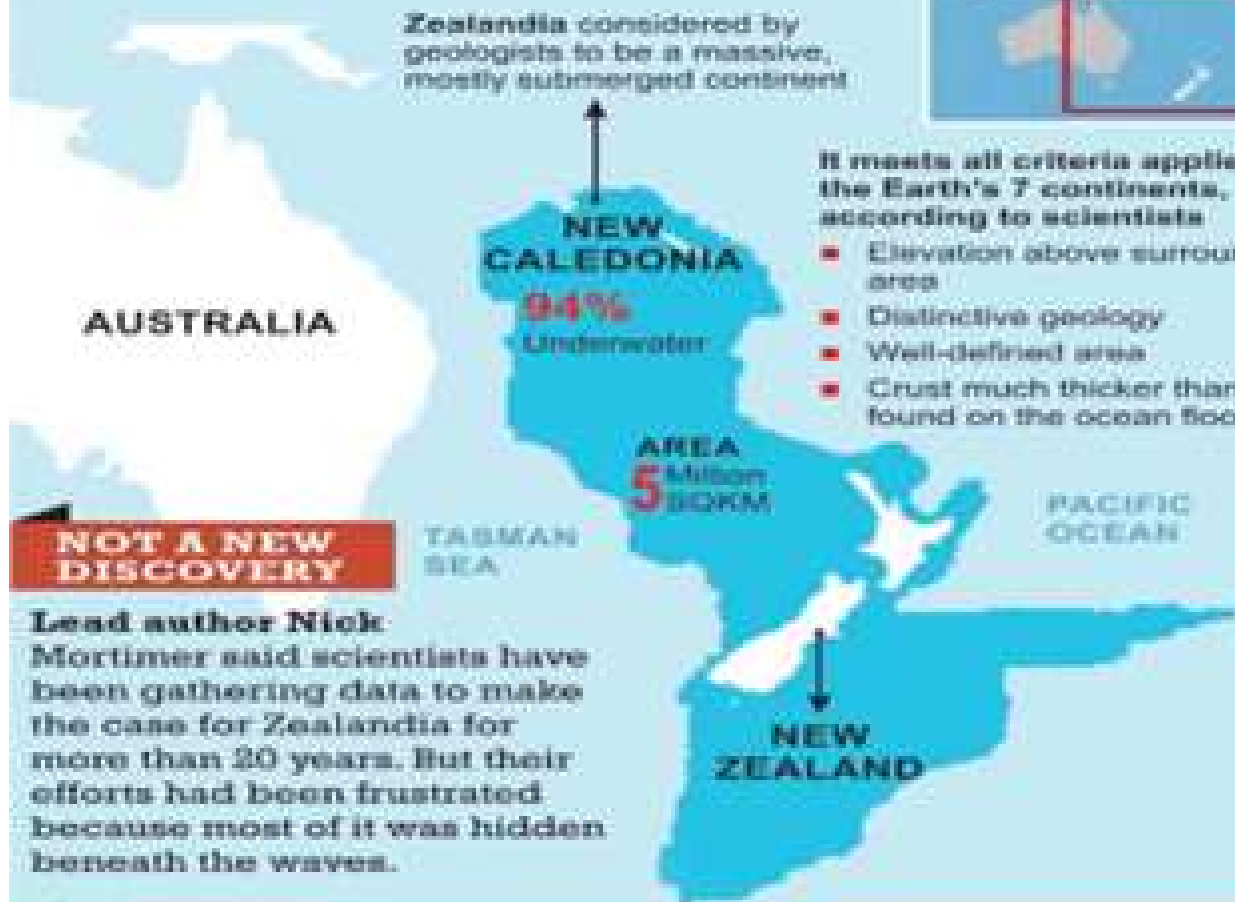


# THE LOST CONTINENT

New Zealand sits atop a previously unknown continent – mostly submerged beneath the South Pacific – that should be recognised with the name Zealandia, scientists said



Zealandia considered by geologists to be a massive, mostly submerged continent



It meets all criteria applied to the Earth's 7 continents, according to scientists

- Elevation above surrounding area
- Distinctive geology
- Well-defined area
- Crust much thicker than that found on the ocean floor

## NOT A NEW DISCOVERY

Lead author Nick Mortimer said scientists have been gathering data to make the case for Zealandia for more than 20 years. But their efforts had been frustrated because most of it was hidden beneath the waves.

## MOST OF IT SUBMERGED UNDERWATER

In a paper published in the Geological Society of America's Journal, GSA Today, they said Zealandia measured five million sqkm and was 94% underwater

The paper's authors said it had only three major landmasses, New Zealand's North and South Islands to the south, and New Caledonia to the north

## Broke Away 100 Million Yrs Ago

The scientists said Zealandia was once part of the Gondwana super-continent, but broke away about 100 million years ago





## ROSEBANK OIL FIELD

**CONTEXT:** The row over the UK's Rosebank oil field revolves around the British government's approval of a major oil and gas project in the North Sea. This decision has sparked Environmental Concerns.

The Rosebank oil field, located northwest of the Shetland Islands, is a significant untapped reserve with the potential to produce 300 million barrels of oil. It's expected to contribute 8% of the UK's total oil production and generate jobs until 2051.

The North Sea lies between Great Britain, Denmark, Norway, Germany, the Netherlands, Belgium and France. An epeiric sea (on the continental plate and having a very low depth avg. of 90m) on the European continental shelf, it connects to the Atlantic Ocean through the English Channel in the south and the Norwegian Sea in the north.

## PONTUS PLATE

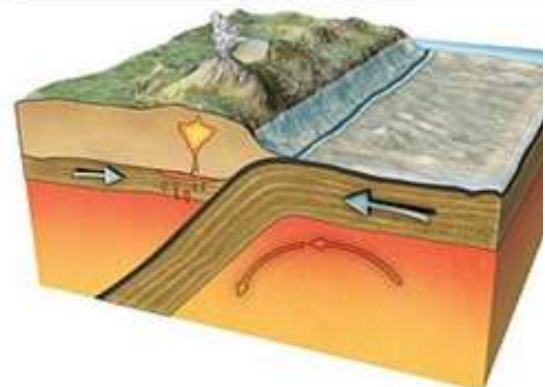
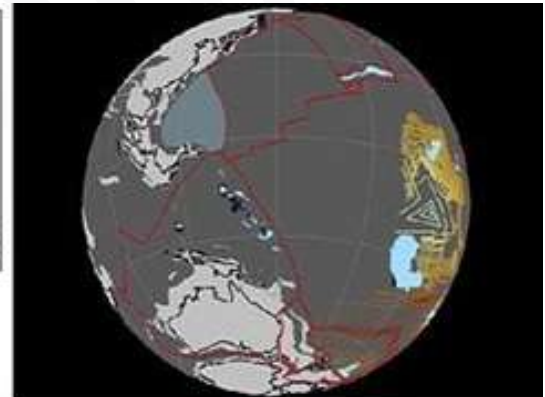
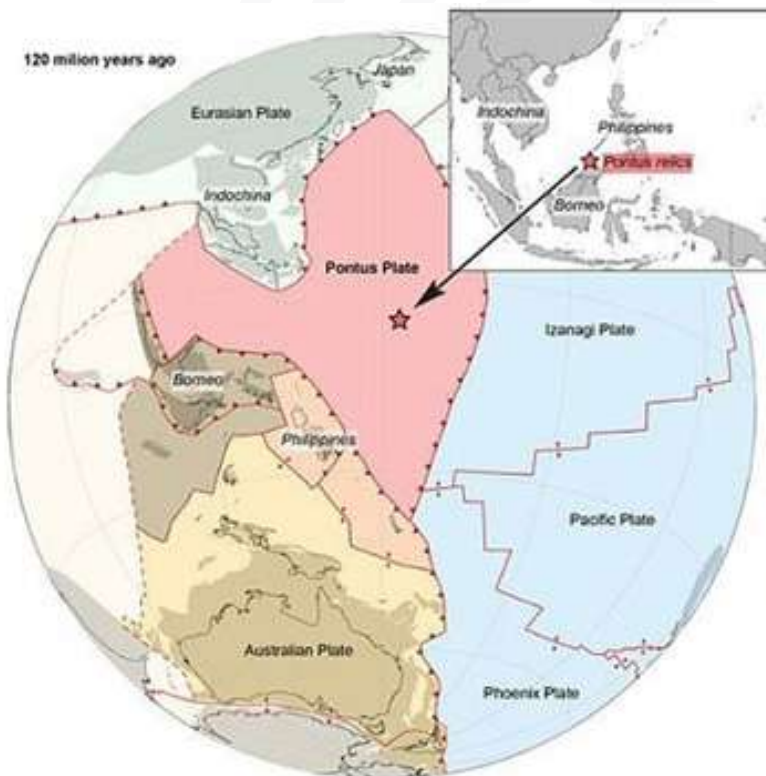
**CONTEXT:** Scientists have recently rediscovered the "Pontus plate," a long-lost tectonic plate that disappeared about 20 million years ago.

This plate was approximately a quarter the size of the Pacific Ocean and once existed beneath an ancient ocean known as the Pontus Ocean.

Computer modelling eventually revealed that these rock fragments belonged to a previously unknown tectonic plate, the Pontus plate.

The rediscovery of the Pontus plate was accidental, occurring during a study of rocks in Borneo. Researchers had originally been studying the Pacific plate when they came across rock fragments that didn't fit with known plates' magnetic properties.

This plate formed at least 160 million years ago, possibly even earlier, and eventually disappeared as it was subducted beneath the Australian and Chinese plates. This discovery sheds light on Earth's geological history and the movement of tectonic plates.



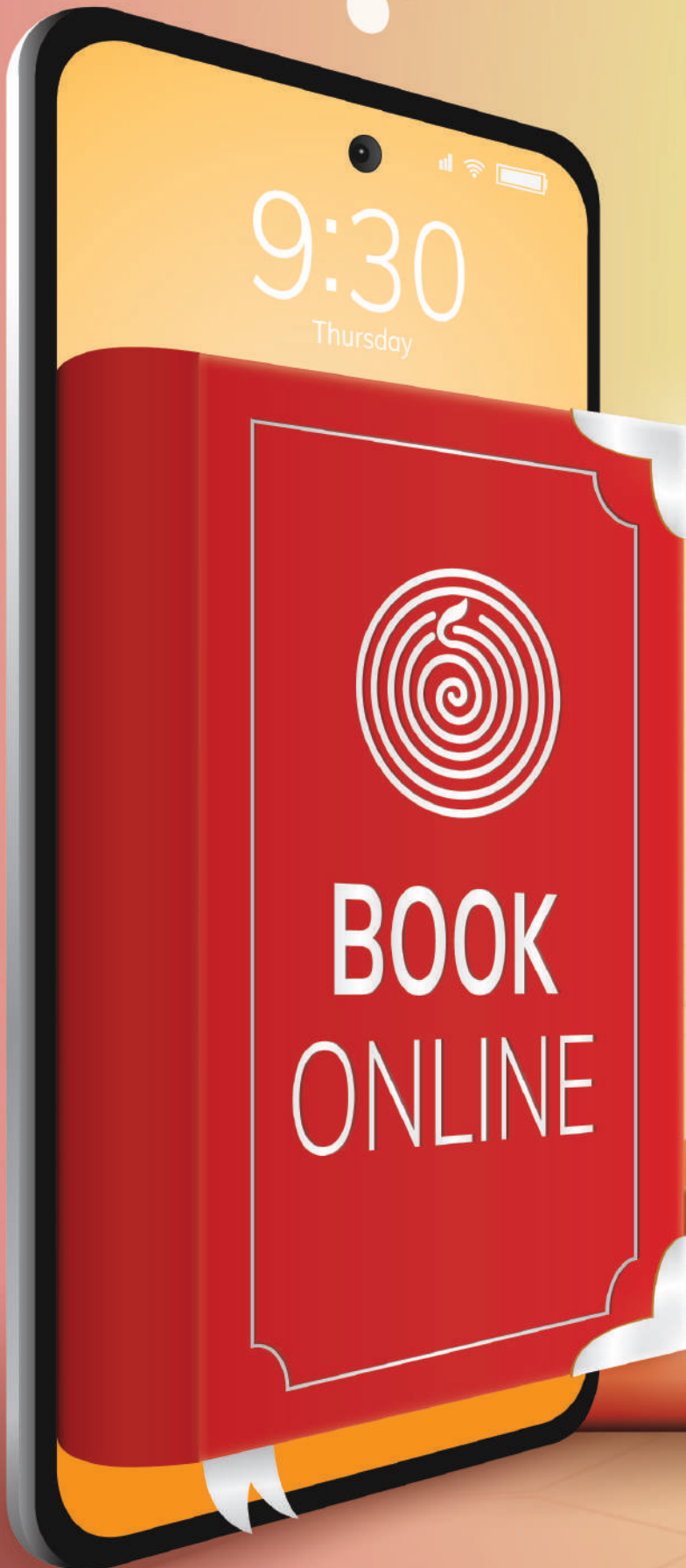
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# POLITY AND GOVERNANCE





**WHY SLLS ALSO NEED TO BE REFORMED**

**ALIGNING HIGHER EDUCATION WITH THE UNITED NATIONS SDGS**

**CONTROVERSIAL PROSECUTION SPARKS CONCERNS OF FREEDOM**

**COUNTING DEATHS IN INDIA'S PRISONS**

**DIGITAL INDIA ACT**

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**RELEASE OF BIHAR CASTE SURVEY UPHELD**

**SUPREME COURT TO HEAR ELECTORAL BONDS CHALLENGE ON OCTOBER 31**

**USING AI FOR AUDIT TECHNIQUES**

**SUPREME COURT SCRUTINISES MAHARASHTRA ASSEMBLY ANTI DEFECTION LAW PROCEEDINGS**





## WHY SLLs ALSO NEED TO BE REFORMED

**CONTEXT:** The Criminal Law Amendment Act, 2023 amend the substantive criminal law as codified in the Indian Penal Code (IPC), Code of Criminal Procedure (CrPC) and Indian Evidence Act (IEA).

The offences and procedures outlined in the IPC or CrPC represent just one facet of a general criminal law and its vital to recognise that the most critical offences and procedures are encompassed within the Special and Local Laws (SLLs). Nearly 39.9 % of all cognisable offences registered in 2021 were under Special and Local Laws (SLLs). As per the Crime in India Statistics of 2021, of the total of nearly 61 lakh cognisable offences registered, 24.3 lakh offences were registered under SLLs alone.

### NEED FOR REFORM IN SLLs

On the one hand, SLLs such as the Unlawful Activities (Prevention) Act, 1967 (UAPA) and the Maharashtra Control of Organised Crime Act, 1999 (MCOCA) suffer from glaringly deficient, ambiguous and vague definitions of offences and terms such as 'terrorist act', 'unlawful activity', 'organised crime', 'organised crime syndicate' etc. The Protection of Children from Sexual Offences Act, 2012 is increasingly being criticised for its applicability to consensual sexual activities between minors. Concerns have also been raised regarding criminalisation of such conduct through SLLs which would otherwise fall squarely within the domain of civil wrongs or at best, regulatory wrongs. The Supreme Court in the case of P. Mohanraj versus M/s Shah Brothers Ispat Ltd. (2021) referred to Section 138 of the Negotiable Instruments Act, 1881 as a 'civil sheep' in a 'criminal wolf's' clothing.

SLLs serve as tools to dilute universally accepted values via due process. Increased powers of search and seizure under Section 43A of the UAPA and the admissibility of confessions recorded by police officers under Section

18 of the MCOCA are prime examples. The stringent provisions provided for under Section 43(D)(5) of the UAPA, Section 37 of the Narcotic Drugs and Psychotropic Substances Act, 1985 and Section 45 of the Prevention of Money Laundering Act (PMLA) 2002 make the grant of bail a near impossibility.

### AN ALL-ENCOMPASSING LEGAL CODE

At the time of its drafting, it was expected that the IPC would be suitably amended in situations requiring the creation of new offences, clarification of existing offences, and removal of inconsistencies. It is true that the IPC today is criticised for the retention of an archaic morality as well as the colonial roots which underpins many of its offences. The challenges to homosexuality under Section 377 in *Navej Johar versus Union of India* (2018) and sedition under Section 124A in *S.G. Vombatkere versus Union of India* (2022) are all symbolic of the need to reform several aspects of our criminal laws. Nonetheless, it is hard to argue that as far as the idea of codification is concerned, the penal experiment in the form of IPC and CrPC has been unsuccessful.

All SLLs which criminalise/seek to criminalise a conduct should find a place as separate chapters within the larger structure of the penal code. All SLLs which create a separate procedure for reporting of offences, arrest, investigation, prosecution, trial, evidence and bail must be included either as separate procedures within the CrPC or as exceptions to the general provisions provided therein.

### SIGNIFICANCE

Non-inclusion of the substantive and procedural aspects of the SLLs in the ongoing reform project is a serious limitation. It is imperative therefore that a second generation of reforms be brought in, in order to address the lacunae.

## ALIGNING HIGHER EDUCATION WITH THE UNITED NATIONS SDGs

**CONTEXT:** The United Nations Sustainable Development Goals (SDGs) are a set of 17 goals and 169 associated targets that were adopted by all UN member states in 2015 to be achieved by 2030. The SDGs address global challenges such as poverty, inequality, climate change, and environmental degradation. The SDGs are important and so is the role of higher education in achieving them

**BACKGROUND:** The UN set the Sustainable Development Goals (SDGs) to address global challenges such as poverty, inequality, climate change, and environmental degradation. The SDGs are a universal call to action for all countries to work together to create a more sustainable and equitable world for all. Points from the article that can be used for descriptive answers with subheadings:

### The Importance of the United Nations Sustainable Development Goals (SDGs)

The United Nations Sustainable Development Goals (SDGs) encompass 17 objectives with 169 associated targets, universally agreed upon by all 193 UN member states, to be achieved by 2030. These goals address various pressing issues, such as poverty alleviation, environmental concerns, and socio-economic challenges, necessitating concerted efforts from both developed and developing nations.

### Challenges to SDG Progress in 2023

Despite the passage of eight years since the initiation of these goals, the SDGs Report 2023 has raised concerns about sluggish progress, primarily attributed to the enduring effects of COVID-19, climate change impacts, geopolitical conflicts like the Russia-Ukraine conflict, and a

weakened global economy. This issue has been particularly pronounced in the Least Developed Countries, including India, which, despite its resilience in managing global economic crises and pandemic challenges, faces setbacks in SDG attainment.

### The Role of National Education Policy (NEP) 2020

India's commitment to achieving the SDGs is underscored by recent actions and policies. SDG4, which focuses on quality education, is recognized as a pivotal element for realizing other SDGs. India's historical emphasis on equitable and inclusive education is reflected in its accelerated efforts to align with the SDGs. Notably, the National Education Policy (NEP) 2020 plays a significant role in this endeavor.

### Empowering Through Higher Education

Within NEP 2020, there is an emphasis on changes across all educational levels, with particular priority given to higher education. Higher education is seen as a catalyst for social mobility, fostering creativity, critical thinking, and employability. Data from the Organisation for Economic Co-operation and Development (OECD) underscores the economic benefits of higher education, including increased



employability and income. This has direct implications for poverty reduction, hunger alleviation, health and well-being, gender equality, economic growth, and reduced inequalities.

### The Importance of the Research-Teaching Nexus

To maximize the benefits of higher education, universities must strengthen the connection between research and teaching. This approach equips students with knowledge derived from research and nurtures multidisciplinary and interdisciplinary skills essential for addressing global challenges, including clean energy, sustainable communities, climate change mitigation, and economic impact analysis.

### Promoting Sustainable Development and Innovation

Sustainable development, encapsulated in SDG12, requires fundamental shifts in production and consumption patterns. Collaboration with private enterprises is essential for fostering innovation (SDG9) to address pressing challenges. Value-Based Education (VBE) can instill responsibility towards self, society, and the environment, contributing to SDG15 ("Life on Land").

### Suggestions and Conclusion

To expedite progress toward achieving the 2030 SDG agenda, higher education stakeholders must align their activities with these goals. Ranking universities based on SDG achievement is commendable but insufficient. Collaboration among India's numerous higher educational institutions is imperative, fostering community engagement, energy conservation, efficient resource allocation, and skill development.

Universities must embrace sustainability as a guiding principle, embedding SDGs into institutional strategies across administration, teaching, and research. Higher education should integrate with socio-economic development, demonstrating tangible impacts on SDGs. Ultimately, universities must be perceived as contributing directly to the well-being of citizens and nation-building, making the SDGs a shared aspiration for all.

### THE SUSTAINABLE DEVELOPMENT GOALS

In 2015, the United Nations introduced the Sustainable Development Goals (SDGs), often referred to as the Global Goals. These goals represent a worldwide initiative aimed at eradicating poverty, safeguarding the environment, and securing peace and prosperity for all individuals by the year 2030.

These 17 SDGs are designed to work together in a cohesive

manner, acknowledging that efforts in one domain can have repercussions in others. They emphasize the necessity of achieving development that harmonizes social well-being, economic growth, and environmental sustainability.

SDG timeline:

- 2000 - Millennium Development Goals (MDGs):

The Millennium Development Goals were established, providing a framework for global development efforts.

- 2002 - World Summit on Sustainable Development (Rio+10):

A summit in Johannesburg discussed progress on sustainability goals but did not result in new global goals.

- 2012 - Rio+20 - UN General Assembly Resolution:

During the United Nations Conference on Sustainable Development (Rio+20) held in Rio de Janeiro, Brazil, Member States endorsed the document titled "The Future We Want." Among their decisions in this document was the initiation of a process aimed at creating a collection of Sustainable Development Goals (SDGs) that would build upon the foundation laid by the Millennium Development Goals (MDGs).

- 2013 - UN Working Group:

The UN established a working group to begin the process of developing the SDGs. This group engaged in consultations and negotiations.

- 2014 - Open Working Group (OWG) on SDGs:

The OWG, consisting of UN member states, released a proposal for the SDGs, outlining 17 goals and associated targets.

- 2015 - Adoption of the SDGs:

In September, the United Nations General Assembly formally adopted the 2030 Agenda for Sustainable Development, including the 17 SDGs.

- 2016 - Implementation Begins:

Implementation of the SDGs began worldwide, with countries working to integrate them into national development plans.

- Ongoing - Monitoring and Reporting:

Continuous monitoring and reporting on progress toward the SDGs occur at various levels, from local to global.







## CONTROVERSIAL PROSECUTION SPARKS CONCERNS OF FREEDOM

**CONTEXT:** The Delhi Lieutenant Governor, V.K. Saxena, has granted prosecution sanction against renowned author Arundhati Roy and former Kashmir University Professor Sheikh Showkat Hussain in a 13-year-old case. They are accused of promoting the "separation of Kashmir from India" during a conference held in the national capital.

### THE STORY SO FAR

The case was originally registered on November 29, 2010, under various sections of the Indian Penal Code (IPC), including sedition, promoting enmity among different groups, and public mischief. However, the prosecution sanction granted did not include charges under IPC Section 124A (sedition), as the Supreme Court has directed that all ongoing trials, appeals, and proceedings related to this charge be put on hold.

The Lieutenant Governor also did not approve prosecution sanction under Section 13 of the Unlawful Activities (Prevention) Act (UAPA) of 1967. Instead, he granted sanction under Section 196 of the Code of Criminal Procedure (CrPC), which necessitates the permission of the State for prosecution.

Arundhati Roy is a well-known, author, advocate for human rights and environmental concerns.

### BACKGROUND & ANALYSIS

The Indian Penal Code (IPC) was created in 1860 by the British colonial government to codify and consolidate the country's criminal laws. It has remained a steadfast and enduring legal framework for the nation for over 150 years, with relatively limited amendments over time.

Section 124A of the IPC, which deals with the offense of sedition, has been criticized by many for being overly broad and vague. It has been used to suppress dissent and stifle freedom of expression. In recent years, there has been a growing movement to repeal this law.

The Unlawful Activities (Prevention) Act (UAPA) of 1967 is a controversial law that gives the government wide-ranging powers to investigate and prosecute individuals and organizations suspected of involvement in terrorist or unlawful activities. However, the law has also been criticized for being misused and abused, particularly against marginalized groups and human rights defenders.

The prosecution sanction granted against Arundhati Roy and Sheikh Showkat Hussain has raised concerns among some observers about the government's commitment to freedom of speech and expression. They argue that the charges against them are politically motivated and that the prosecution is an attempt to silence critical voices.

### THE INDIAN PENAL CODE (IPC): CREATION, ENDURANCE, AND LATEST DEVELOPMENTS

The Indian Penal Code (IPC) is the substantive criminal law of India. It is a comprehensive legal framework that addresses a wide range of offenses, from those against individuals and property to those against the State. The IPC was created in 1860 by the British colonial administration to codify and consolidate India's penal laws.

It was drafted by Lord Thomas Macaulay and his colleagues on the Law Commission of India. The IPC was based on English criminal law, but it also drew on elements of other legal systems, such as the French Penal Code and

Livingston's Code of Louisiana.

The IPC has remained a steadfast and enduring legal framework for India for over 150 years. It has undergone relatively limited amendments since its inception, even in the post-British era. This is a testament to the foresight and vision of its creators.

In recent years, there has been growing scrutiny of the IPC, particularly Section 124A, which deals with the offense of sedition. Section 124A has been criticized for being overly broad and vague. It has been used to suppress dissent and stifle freedom of expression.

In 2015, the Supreme Court of India held that Section 124A should be applied narrowly and only in cases where there is a clear and present danger to the government. The Court also stated that the mere expression of dissent or criticism of the government does not amount to sedition.

In 2022, the Supreme Court ordered that all ongoing trials, appeals, and proceedings related to charges under IPC Section 124A be put on hold until the government reviews the law and files its response in a pending case challenging its constitutionality.

The IPC is a complex and nuanced piece of legislation. It has played a vital role in shaping the criminal justice system of India. However, it is important to ensure that the IPC is applied in a fair and just manner, and that it does not infringe on the fundamental rights of citizens.

### LATEST DEVELOPMENTS IN THE IPC

In addition to the developments related to Section 124A, there are a few other noteworthy developments in the IPC.

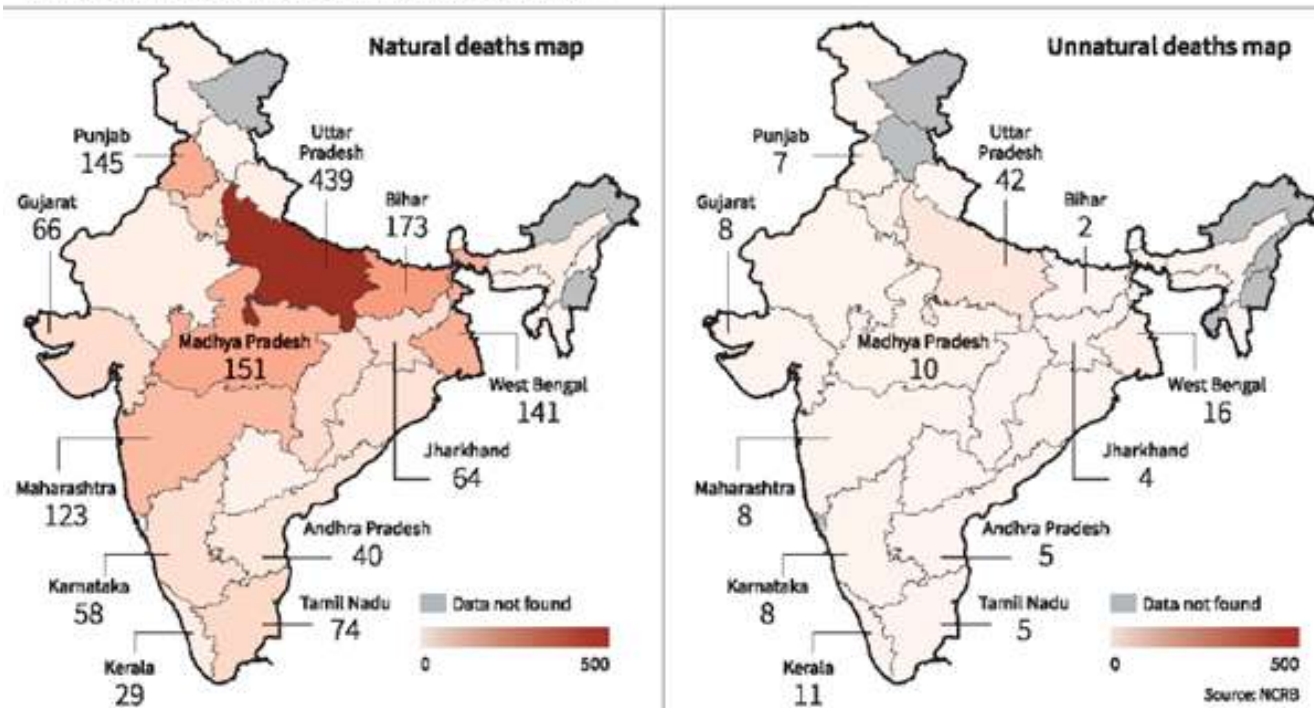
- In 2021, the government introduced a new bill in Parliament, the Bharatiya Nyaya Sanhita (BNS) Bill, which seeks to replace the IPC. The BNS Bill has been criticized by many experts for being regressive and draconian.
- In 2022, the Law Commission of India released a report on the IPC. The report recommended a number of amendments to the IPC, including the repeal of Section 124A.
- In 2023, the Supreme Court of India referred a batch of petitions challenging the validity of Section 124A to a Constitution Bench. The Constitution Bench is expected to hear the case in the near future.
- The result of the Supreme Court case on Section 124A and the fate of the BNS Bill will have a significant impact on the IPC and the criminal justice system of India.

**CONCLUSION:** The prosecution of Arundhati Roy and Sheikh Showkat Hussain is likely to be closely monitored by human rights groups and civil society organizations. The outcome of the case could have a significant impact on the freedom of speech and expression in India.

## COUNTING DEATHS IN INDIA'S PRISONS

### The deaths of inmates in prisons in 2021

The two maps below show the number of 'natural' and 'unnatural' deaths of inmates in prison in some of the major States in the country. U.P. recorded the highest number of overall deaths, with 481 inmates dying in 2021.



**CONTEXT:** In August this year, the Supreme Court Committee on Prison Reforms found suicide to be the leading cause of 'unnatural' deaths — deaths other than ageing or illnesses — among Indian prisoners, with U.P. recording the highest number of suicides between 2017 and 2021.

**BACKGROUND:** Every year, prison deaths are identified as 'natural' or 'unnatural' by the Prison Statistics India (PSI) report published by the National Crime Records Bureau (NCRB). In 2021, a total of 2,116 prisoners died in judicial custody, with almost 90% of cases recorded as natural deaths.

#### HOW ARE PRISON DEATHS CLASSIFIED?

**1) NATURAL DEATH:** Ageing and illness account for 'natural' deaths. Illness has been further categorised into diseases such as heart conditions, HIV, tuberculosis, and cancer. As the prison population swells, recorded natural deaths have increased from 1,424 in 2016 to 1,879 in 2021.

**2) UNNATURAL DEATHS:** They are more diverse in classification. They include suicide (due to hanging, poisoning, self-inflicted injury, drug overdose, electrocution, etc.) and death due to inmates, assault by outside elements, fire, negligence or excesses and accidental deaths such as natural calamities (earthquakes, snakebites, drowning, accidental fall, burn injury, drug/alcohol consumption, etc.).

**COMMENT OF SUPREME COURT:** In a landmark Supreme Court judgment, Justice M.B. Lokur said that the NCRB's distinction between natural and unnatural deaths is "unclear." During the pandemic, the PSI report classified deaths due to COVID-19 as 'natural' deaths.

**OCCUPANCY RATE IN INDIAN PRISONS:** At the time, the occupancy rate of prisons was 118% of their capacity, and almost 40,000 more under trials were held in prisons, in comparison with the previous year. The same year, the

sanctioned strength of medical staff was around 1:125, but in reality, there was just one staff member to look after 219 inmates.

**CUSTODIAL DEATHS:** The issue of custodial deaths — why they occur and how they are investigated — is intertwined with how congested prisons are, if inmates have access to medical help, whether there is adequate staff and whether the available staff is properly trained to aid inmates. Only 5% of expenditure is spent on medical facilities, as per the PSI 2021 report. Moreover, between 2016 and 2021, money earmarked for spending on inmates was underutilised — ₹6,727.30 crore was the average national expenditure against a sanctioned ₹7,619.2 crore in 2021.

#### HOW ARE DEATHS INVESTIGATED?

Since 1993, the NCRB is required to intimate a custodial death within 24 hours, followed by post-mortem reports, magisterial inquest reports or videography reports of the post-mortem. Further, if "an enquiry by the Commission into custodial death discloses negligence by a public servant, the Commission recommends to authorities of Central/ State Governments for paying compensation to the Next of Kin (NoK) and also for initiation of disciplinary proceedings/prosecution against the erring public servant," the Home Ministry said in response to a Lok Sabha question in 2022.

The same response noted that only one 'disciplinary action' was taken between 2021-22 against an "erring official."

In cases of custodial rape and death, the Code





of Criminal Procedure also requires compulsory judicial magisterial inquiry in place of an executive magistrate inquiry. The National Human Rights Commission (NHRC) in 2010, however, weakened the legal requirement to say inquiry by a judicial magistrate is “not mandatory” when “there is no suspicion or foul play or where there is no evidence or allegation of an offence.”

### WHAT HAS GOVERNMENT DONE SO FAR?

The Supreme Court in a 1996 judgment articulated the social obligation towards prisoners’ health, noting that they suffer from a “double handicap”.

“First, the prisoners do not enjoy the access to medical expertise that free citizens have. Their incarceration places limitations on such access; no physician of choice, no second opinions, and few if any specialists.

Secondly, because of the conditions of their incarceration, inmates are exposed to more health hazards than free citizens.”

The Model Prison Manual of 2016 and the Mental Healthcare Act of 2017, outline inmates’ right to healthcare, which includes adequate investment in healthcare facilities, setting up mental health units, training officers to provide basic and emergency care, and formulating suicide prevention programmes to thwart such instances.

In light of rising suicide cases, the NHRC in June this year issued an exhaustive 21-page advisory to States, highlighting that suicides arise out of both medical and mental health issues. The Supreme Court Committee on Prison Reforms made similar recommendations.

**INFRASTRUCTURAL CHALLENGES:** An infrastructural issue common to all is the need to scale both quantity and quality of staff, as several reports flag ‘overflowing prisons’ with inmate count exceeding capacity in at least 26 States. The NHRC recommended filling positions of “Prison Welfare Officers, Probation Officers, Psychologists, and Medical Staff,” further noting that “the strength should be suitably augmented to include Mental Health professionals.”

## DIGITAL INDIA ACT

**CONTEXT:** *The new Digital India Act 2023 is a big step towards creating a legal framework that is ready for the future of India’s growing digital ecosystem.*

*The Ministry of Electronics and Information Technology (MEITY) is taking a proactive approach to regulating and shaping the digital future of India by passing this law.*

**BACKGROUND:** The real backdrop to the New Digital India Act 2023 (DIA) is the dramatic growth of the internet and emerging technologies in India. The Information Technology Act, 2000 (IT Act), which is the current law governing the internet in India, was enacted at a time when the internet was in its infancy. As a result, it has struggled to keep pace with the rapid changes in technology and user behaviour.

The DIA is intended to address the shortcomings of the IT Act and to create a comprehensive legal framework for the digital age. It aims to promote innovation, protect the rights of users, and foster a more accountable and trustworthy digital environment.

### NEED FOR A NEW DIGITAL INDIA ACT (DIA) 2023

The rapid growth of the internet and emerging technologies: The Information Technology Act, 2000 (IT Act), the current law governing the internet in India, was enacted when the internet was in its infancy. As a result,

**THERE IS AN ACUTE SHORTAGE OF STAFF:** A sanctioned staff of 3,497 people (out of which only 2,000 roles were filled), was responsible for looking after 2,25,609 prisoners in 2021 (this number has shot up to 5,75,347 as of September 2023, according to the National Prisons Information Portal).

Vacancies too are unevenly distributed – States like Bihar and Uttarakhand had over 60% of positions lying vacant. Moreover, the total strength of staff includes personnel charged with medical, executive, correctional, ministerial and other duties; not everyone is trained to provide medical aid.

Another recommendation is to allow inmates an “adequate number of telephones” with friends and family; judgments also note that prisoners should be allowed access to newspapers or periodicals to “reduce the feeling of isolation” and “possibility of harmful activity.” Authorities have denied such literature – including a P.G. Wodehouse book to Gautam Navlakha – citing “security risks”.

To prevent suicides specifically, guidelines recommend a strict check on tools such as ropes, glasses, wooden ladders, pipes; initial mental health screening at the time of entry into jail; and installing CCTV cameras to monitor high-risk inmates. Human rights activists have cautioned against the latter measure, as heightened surveillance would violate the rights of prisoners. Almost 1.5% of the prison population suffers from mental illnesses, per the CHRI report. It also flagged a dearth of correctional staff including psychologists, “limited access to mental healthcare resources”, inadequate identification of mental illnesses in inmates along with heightened vulnerability and stigma.

**CONCLUSION:** The alarming prevalence of suicides and custodial deaths in Indian prisons underscores the urgent need for comprehensive reform. Overcrowding, inadequate healthcare, and a shortage of trained staff contribute to this crisis. To address these issues, the government must invest in infrastructure, prioritize mental healthcare, and ensure the rights and well-being of inmates while maintaining a balance between security and human rights.

it has struggled to keep pace with the rapid changes in technology and user behavior. The DIA aims to address this gap by providing a comprehensive legal framework for the digital age.

The emergence of new forms of user harm: The IT Act does not adequately address new forms of user harm that have emerged in recent years, such as cyberstalking, trolling, and doxing. The DIA includes provisions to protect users from these harms and to hold perpetrators accountable.

The need to protect the privacy of users’ data: Data has become the new oil in the digital economy, and users need to be assured that their data is being collected and used in a responsible and transparent manner. The DIA includes provisions to strengthen data privacy protections and to give users more control over their data.

The need to foster innovation and economic



growth: The DIA is designed to create a favourable environment for innovation and economic growth in the digital sector. It includes provisions to reduce regulatory burdens on businesses and to promote the adoption of new technologies.

### OTHER REASONS FOR ADOPTION OF DIGITAL INDIA ACT 2023

- The increasing reliance of businesses and governments on digital technologies.
- The growing importance of data in the digital economy.
- The rise of new digital business models and platforms.
- The increasing interconnectedness of the global digital landscape.

### POSSIBLE IMPACT OF DIGITAL INDIA ACT 2023

The DIA is expected to have a significant impact on the digital landscape in India. It is likely to bring about greater accountability for online platforms, while also promoting innovation and protecting the rights of users. The DIA is also expected to align India's digital regulations with international standards and best practices.

Here are some specific examples of how the DIA is expected to impact different stakeholders:

**Tech giants:** Tech giants such as Google, Facebook, and Amazon will be subject to stricter regulations under the DIA. For example, they will be required to takedown harmful content more promptly and to provide more transparency

about how they collect and use user data.

The DIA includes provisions to regulate online platforms and social media intermediaries. This will help to reduce the spread of harmful content and to hold platforms accountable for their actions.

**Start-ups and entrepreneurs:** The DIA is expected to create a more supportive environment for start - ups and entrepreneurs in the digital sector. For example, it includes provisions to promote innovation and to reduce regulatory burdens on small businesses.

To promote innovation and economic growth in the digital sector. For example, it establishes a regulatory sandbox that will allow businesses to test new technologies and products without having to comply with all of the usual regulations.

**Users:** Users will benefit from the DIA's focus on online safety and trust. For example, they will have more control over their personal data and will be able to seek redressal more easily in the event of online harm.

It also includes provisions to protect the privacy of users' data. For example, it requires data fiduciaries to obtain consent from users before collecting or processing their data.

**SIGNIFICANCE:** The Digital India Act 2023 is a significant step forward for India's digital ecosystem. It is expected to have a major impact on the way that businesses, governments, and individuals operate in the digital world.

## HC RULES AGAINST QUOTA IN MINORITY INSTITUTIONS

**CONTEXT:** *The Madras High Court has ruled that educational institutions run by religious and linguistic minorities need not follow the rule of reservation with respect to the Scheduled Caste, Scheduled Tribe, and Other Backward Class students.*

**EVENT:** The petitioner college had approached the court assailing a Government Order (GO) issued on November 20, 2021 rejecting the plea for extension of religious minority status to it since it had admitted 52% minority students in the academic years 2018-19 and 2019-20.

Advocate-General R. Shunmugasundaram contended such admission had been made in violation of a 1998 GO which restricts admission of minorities to 50%. On the other hand, senior counsel Vijay Narayan, representing the college, claimed minority educational institutions should be granted a permanent status without being forced to get it extended from time to time.

He also argued the Tamil Nadu Backward Classes, Scheduled Castes and Scheduled Tribes (Reservation of Seats in Private Educational Institutions) Act, 2006 would not be applicable to minority institutions.

### OBSERVATIONS OF THE HIGH COURT:

The court has also held that the government cannot compel such institutions to provide reservation to such candidates. The Court held that the status, once granted, would continue until the National Commission for Minority Educational Institutions cancels it on valid grounds and State government would not have any right to restrict the minority status of an institution to a particular period.

The Division Bench upheld the right of the State

government to insist that the minority institutions could admit students from the religious and linguistic minorities concerned only up to 50% of the sanctioned intake and that the rest must be filled on the basis of merit. The Bench clarified that the minorities who gain admission on merit should be excluded while calculating the first 50% of students.

Article 15(5) of the Constitution, introduced through the 93rd amendment in 2005, specifically excludes minority institutions while enabling the State government to make special provisions by law for the advancement of any socially or educationally backward classes of citizens or for the Scheduled Castes or Scheduled Tribes relating to their admission to educational institutions.

Further, the definition of 'private educational institution' under Section 2(d) of the 2006 Act also excludes minority institutions established under Article 30(1) of the Constitution.

**SIGNIFICANCE:** The Madras High Court's ruling that minority educational institutions need not follow reservation quotas for Scheduled Caste, Scheduled Tribe, and Other Backward Class students is significant as it upholds their autonomy and permanent minority status. This decision clarifies the legal framework and ensures that such institutions can admit students based on merit while safeguarding their minority rights.





## RELEASE OF BIHAR CASTE SURVEY UPHELD

**CONTEXT:** Supreme Court declines to halt Bihar's caste-based survey data release despite pending legality challenges.

**BACKGROUND:** Justice Sanjiv Khanna's bench, despite pending petitions challenging a survey's legality, declined to intervene in the state government's decision to release data. The case is scheduled for a January 2024 hearing, with the state required to respond to the petitions.

### NEWS HIGHLIGHTS

- **Data Collection Challenge:** The issue revolves around the legality of unlawfully collected data, and whether it can be used for public welfare.
- **Patna High Court Judgment:** Justice Khanna mentioned that they had reviewed the Patna High Court judgment, which supported the survey's legality.
- **Transparency vs. Privacy:** The central question is the extent of data transparency, with the court dismissing concerns about privacy infringement.
- **Status Quo Denied:** The court declined to issue a stay order despite the request, stating that the case was still at a pre-admission stage.
- **Bihar's Defense:** Bihar argued that the data was voluntarily provided by the people and needed analysis to identify welfare areas.
- **Previous Supreme Court Decision:** Earlier, the Supreme Court had refused to stay the uploading of caste-based survey data.
- **Centre's Stand:** The Union government insisted that only the Centre had the authority to conduct census-like actions.
- **Commitment to Welfare:** The Centre reaffirmed its commitment to uplifting marginalized communities according to constitutional and legal provisions.

## SUPREME COURT TO HEAR ELECTORAL BONDS CHALLENGE ON OCTOBER 31

**CONTEXT:** The Supreme Court of India has scheduled a hearing for October 31, 2023, to address petitions challenging the electoral bonds scheme. The scheme, introduced in 2017, allows anonymous donations to political parties through interest-bearer instruments.

### WHAT ARE ELECTORAL BONDS?

Electoral bonds are bearer instruments that can be purchased from authorized branches of the State Bank of India (SBI) in denominations of ₹1,000, ₹10,000, ₹1 lakh, ₹10 lakh, and ₹1 crore. The bonds can then be donated to political parties registered with the Election Commission of India (ECI).

### Rationale Behind Electoral Bonds

The electoral bonds scheme was introduced to address the issue of opaque political party funding in India. Before the scheme's introduction, political parties were allowed to receive donations in cash or kind. However, this system was prone to corruption and abuse, as it was difficult to track the sources and amounts of donations.

The government argued that electoral bonds would make political party funding more transparent and accountable. The bonds are anonymous, but donors must provide their PAN details to SBI when purchasing them. This information is then shared with the ECI.

### Legal Challenge and Criticisms

The electoral bonds scheme has been challenged by various parties, including NGOs Common Cause and Association for Democratic Reforms (ADR). Critics argue that the scheme is opaque and lacks adequate oversight. They also point out that the scheme has benefited the ruling party at the expense of other parties.

Some of the key concerns raised against electoral bonds include:

- **Anonymity:** Critics argue that the anonymity of electoral bonds undermines transparency and accountability in political funding. It also raises concerns about the potential for interference by the government in the political process.
- **Dominance of high-denomination bonds:** The overwhelming majority of electoral bonds sold are in the highest denomination (₹1 crore). This suggests that

the scheme is primarily benefiting large corporations and wealthy individuals, rather than common people.

- **Impact on elections:** Critics argue that the electoral bonds scheme has tilted the balance in favour of the ruling party, which has received the lion's share of donations. This has created an uneven playing field for other parties and reduced the competitiveness of elections.

### SIMILAR INSTRUMENTS IN OTHER DEMOCRACIES

There are a few instruments similar to electoral bonds in other democracies in the world. However, it is important to note that the Indian electoral bonds scheme is unique in some aspects, such as its anonymity and the lack of a cap on corporate donations.

### Some examples of similar instruments in other democracies include:

- **Australia:** In Australia, political parties can receive donations from individuals and entities, but these donations must be disclosed to the Australian Electoral Commission (AEC). There is a cap on donations from individuals and entities, and the AEC conducts regular audits to ensure compliance.
- **Canada:** In Canada, political parties can receive donations from individuals and entities, but these donations must also be disclosed to Elections Canada. There is a cap on donations from individuals and entities, and Elections Canada conducts regular audits to ensure compliance.
- **Germany:** In Germany, political parties can receive donations from individuals and entities, but these donations must be disclosed to the Federal Electoral Commission (BEC). There is a cap on donations from individuals and entities, and the BEC conducts regular audits to ensure compliance.
- **United Kingdom:** In the United Kingdom, political parties can receive donations from individuals and entities, but these donations must be disclosed to the



Electoral Commission. There is a cap on donations from individuals and entities, and the Electoral Commission conducts regular audits to ensure compliance.

### NEED FOR EVALUATION

The legal challenge and criticisms against electoral bonds highlight the need for a comprehensive evaluation of the scheme and its impact on political funding transparency in India. The Supreme Court's hearing on October 31, 2023, will be a crucial step in this process.

## USING AI FOR AUDIT TECHNIQUES

**CONTEXT:** *The Comptroller and Auditor General of India (CAG) warns against excessive reliance on AI in auditing, citing accuracy concerns and emphasizing ethics.*

**BACKGROUND:** The CAG conducts diverse audits, but AI's challenges include transparency, objectivity, and bias prevention. Ethical, inclusive AI enhances audit credibility.

Accurate, timely, and integrity-maintained data are crucial; vigilance is needed when using unauthorized sources like social media due to inherent bias risks.

### INDIA NEEDS AI REGULATION

**Global Standard:** The EU AI Act sets a precedent as the world's first comprehensive AI regulation, prompting India to establish similar standards for ethical AI use.

**Copyright and Content Ownership:** AI-generated content poses potential copyright challenges, necessitating regulations to protect intellectual property rights in India.

**Bias Mitigation:** India must address AI bias, as seen in European discussions, by implementing measures to ensure fairness, transparency, and accuracy in AI systems.

**Ethical Considerations:** Elon Musk's 'Truth GPT' highlights the importance of harmonizing technological progress with ethical concerns, a principle India should embrace in its AI legislation.

**International Competitiveness:** Following the UK's aim to be a hub for AI safety regulation, India needs AI laws to compete globally and foster responsible AI development

### CONCLUSION

The electoral bonds scheme has generated mixed reactions, with some arguing that it has improved transparency in political funding, while others raising concerns about its anonymity and potential for misuse. The Supreme Court's hearing on October 31, 2023, is likely to shed light on the legality of the scheme and its impact on Indian democracy.

and adoption.

### CHALLENGES BEFORE THE CAG

**Challenges for CAG in Auditing AI:** AI regulation and data standardization are essential for effective audits due to diverse data sources and platforms.

**Data Integration:** Government entities should synchronize data platforms to facilitate audits and prevent reliance on unauthorized data sources.

**Digitalization Efforts:** A web-enabled IT application, "One Indian Audit and Accounts Department One System," will digitalize audits, except for defense, from April 1, 2023.

**International Audit Framework:** The SAI G20 conference emphasizes the need for a common international audit framework for AI-related matters.

**Capacity Building and Ethical Focus:** Auditors need training in AI technology, ethics, transparency, and collaboration with AI specialists for comprehensive AI audits and risk assessment.

Global organizations have developed AI auditing frameworks, with Data Protection Impact Assessments being legally required for AI systems processing personal data. Auditors must assess risks, controls, and governance for effective operation.

## SUPREME COURT SCRUTINISES MAHARASHTRA ASSEMBLY ANTI DEFECTION LAW PROCEEDINGS

**CONTEXT:** *In a recent development, the Supreme Court (SC) has admonished the Speaker of the Maharashtra Assembly for unnecessarily delaying the Anti-Defection proceedings involving the Chief Minister and other MLAs. The SC expressed its dissatisfaction with the protracted nature of the proceedings, highlighting the importance of a swift and equitable resolution in such cases. Previously, the court had directed the speaker to prepare a timeline for completing the disqualification proceedings under the Tenth Schedule of the Constitution.*

**BACKGROUND:** In 2022, a faction of the Shiv Sena led by Eknath Shinde overthrew the Uddhav Thackeray-led government. Shinde then became the new Chief Minister of Maharashtra.

- The Thackeray faction challenged the then-Maharashtra Governor's decision to call for a trust vote before his resignation.
- If disqualification is imposed on the Thackeray faction, it would affect not only the Shiv Sena MLAs but also Shinde's position as Chief Minister.

### WHAT IS AN ANTI-DEFECTION LAW?

The anti-defection law is a constitutional provision that punishes individual members of parliament (MPs) and members of the legislative assembly (MLAs) for leaving one

political party for another. It was added to the constitution as the tenth schedule in 1985 in order to bring stability to governments by discouraging legislators from changing parties.

### KEY FEATURES OF THE ANTI-DEFECTION LAW

- The anti-defection law applies to both MPs and MLAs.
- A legislator is disqualified from the House if he or she:
  - Voluntarily gives up membership of their political party.
  - Votes or abstains from voting in the House contrary to the party's direction, without obtaining prior permission.
  - Being an independent member, joins any political party.
  - Being a nominated member, joins any political party





after six months.

### Group MP/MLAs Are Not Penalized for Defection

The anti-defection law does not penalize groups of MP/MLAs who merge with another political party. This means that if at least two-thirds of the members of a political party agree to merge with another party, they are not disqualified from their seats. This provision was introduced in the 91st Constitutional Amendment Act, 2003, to prevent opposition parties from toppling governments by engineering mergers.

It is important to note that political parties are also not penalized for encouraging or accepting defecting legislators. This is another loophole in the anti-defection law that has been criticized by many experts.

### Members Disqualified Under the Law Can Stand for Re-election

Members who are disqualified under the anti-defection law are still eligible to stand for re-election from any political party for a seat in the same House. This means that they can still serve as elected representatives, even if they have defected from their original party.

### Presiding Officers Have Discretion in Defection Cases

The decision on whether or not a legislator has defected is made by the Speaker or Chairman of the House. This means that the presiding officer has a lot of discretion in these cases. However, the presiding officer's decision is subject to judicial review.

### Law Does Not Provide Time Frame for Deciding Defection Cases

The anti-defection law does not provide a timeframe within which the presiding officer has to decide a defection case. This has led to delays in many cases, and has been criticized by experts.

- However, a group of legislators can merge with another political party without inviting the penalty for defection, provided that at least two-thirds of the members of the party agree to the merger.
- The decision on whether or not a legislator has defected is made by the Speaker or Chairman of the House, and is subject to judicial review.

### REASONS FOR THE ANTI-DEFECTION LAW

The anti-defection law was enacted in response to a series of political crises in the 1960s and 1970s, when many state governments were toppled due to defections by MLAs. The law was intended to bring stability to governments and to prevent legislators from being bribed or pressured to change parties.

### IMPACT OF THE ANTI-DEFECTION LAW

The anti-defection law has had a significant impact on Indian politics. It has reduced the number of defections and has made it more difficult for opposition parties to topple governments. However, the law has also been criticized for reducing the independence of legislators and for making it difficult for them to hold their parties accountable.

### ADDITIONAL RELEVANT INFORMATION

- The anti-defection law has been amended several times since it was enacted in 1985. The most important amendment was the 91st Constitutional Amendment

Act, 2003, which increased the required majority for a merger of political parties from one-third to two-thirds.

- The anti-defection law has been the subject of several judicial challenges. In 1992, the Supreme Court ruled that the law is valid and that it does not violate the fundamental rights of legislators. However, the Court has also held that the law should be applied in a fair and reasonable manner.
- The anti-defection law has been used by both ruling and opposition parties to their advantage. For example, in 2020, the BJP used the anti-defection law to disqualify 18 MLAs in Madhya Pradesh, which helped the party to retain power in the state.
- The anti-defection law has been challenged in the Supreme Court on several occasions. However, the Court has upheld the law, stating that it is necessary to maintain stability in the political system.
- The anti-defection law has been credited with helping to bring stability to Indian politics. However, it has also been criticized for reducing the independence of legislators and for making it difficult for them to hold their parties accountable.

### HOW DEFECTION AFFECTS THE POLITICAL SYSTEM

Defection is the act of a legislator leaving the party on whose ticket they were elected and joining another party. It has a number of negative consequences for the political system:

- **Subversion of electoral mandates:** Defection subverts the electoral mandate by allowing legislators to represent a different party than the one they were elected on. This can lead to a crisis of legitimacy and erode public trust in the political system.
- **Instability and horse-trading:** Defection can lead to instability in the government and promote horse-trading among legislators. This can make it difficult to pass legislation and implement policies.
- **Disruptions to the Smooth Operation of Government:** The well-known slogan "Aaya Ram, Gaya Ram" emerged in response to a series of legislators' frequent defections during the 1960s. Such defections result in political instability within the government and have a direct impact on the effective functioning of the administration.
- **Undermining of representative and parliamentary democracy:** The anti-defection law requires legislators to follow the party whip, which can limit their ability to exercise their independent judgment and represent the interests of their constituents. This can undermine the principles of representative and parliamentary democracy.

### SIMILAR PROVISIONS ACROSS THE WORLD

There are similar provisions to anti-defection laws in other democratic countries. Some examples include:

- **Bangladesh:** The Bangladesh Constitution has a provision that allows the Speaker of the Parliament to disqualify a member if they vote against the party whip on a "vote of confidence or no-confidence" or on a "money bill."
- **Pakistan:** The Pakistan Constitution has a provision



that allows the Speaker of the National Assembly to disqualify a member if they vote against the party whip on a "vote of confidence or no-confidence" or on a "budget bill."

- **Sri Lanka:** The Sri Lankan Constitution has a provision that allows the Speaker of Parliament to disqualify a member if they vote against the party whip on a "vote of confidence or no-confidence" or on a "money bill."
- **Nigeria:** The Nigerian Constitution has a provision that allows the Speaker of the House of Representatives or the President of the Senate to disqualify a member if they vote against the party whip on a "vote of confidence or no-confidence" or on a "budget bill."
- **Kenya:** The Kenyan Constitution has a provision that allows the Speaker of the National Assembly to disqualify a member if they vote against the party whip on a "vote of confidence or no-confidence" or on a "money bill."

These provisions are designed to prevent defections by legislators and to ensure the stability of the government. However, they have also been criticized for undermining the principles of representative and parliamentary democracy.

In addition to these specific provisions, many democratic countries have broader laws that regulate political parties and their activities. These laws may include provisions that require parties to have a certain number of members or that restrict their ability to merge with other parties. These laws can also be used to prevent defections by legislators.

For example, the United Kingdom has a law that requires political parties to have at least 500 members in order to be eligible to contest elections. This law can be used to prevent defections by legislators, as they would lose their seats if they left their party and joined another party that did not meet the membership requirement.

Overall, there is a trend in many democratic countries towards enacting laws that regulate political parties and their activities in order to prevent defections by legislators and to ensure the stability of the government.

### CHALLENGES WITH THE ANTI-DEFECTION LAW

The anti-defection law has a number of loopholes and challenges:

- **Paragraph 4 of the law:** Paragraph 4 of the law allows for the merger of political parties, without disqualifying the members of the merged parties. This has been criticized for providing a loophole for legislators to defect to another party without penalty.
- **Controversial role of Speaker:** The Speaker of the

House has the power to decide on defection cases. This has been criticized for giving the Speaker too much power and for creating a risk of bias.

- **No recognition of split:** The anti-defection law does not recognize splits within political parties. This means that a group of legislators can only defect to another party if they have the support of two-thirds of the party's members in the House. This has been criticized for making it difficult for legislators to hold their parties accountable.
- **Only allows wholesale defection:** The anti-defection law only penalizes individual defections. This means that a group of legislators can defect to another party without penalty, as long as they have the support of two-thirds of the party's members in the House. This has been criticized for allowing for wholesale defection.

### WAY FORWARD

A number of experts have suggested reforms to the anti-defection law, including:

- **Restricting the law to certain votes:** The law could be restricted to certain votes that determine the stability of the government, such as votes on the budget or no-confidence motions.
- **Transferring the power to disqualify members to the President or Governor:** The power to disqualify members for defection could be transferred to the President, on the advice of the Election Commission. This would make the decision-making process more independent and impartial. NATIONAL COMMISSION TO REVIEW the WORKING of The CONSTITUTION(NCRWC) was of similar opinion
- **Allowing for splits within political parties:** The law could be amended to recognize splits within political parties. This would make it easier for legislators to hold their parties accountable and to represent the interests of their constituents.
- **Penalizing wholesale defection:** The law could be amended to penalize wholesale defection, as well as individual defections. This would make it more difficult for legislators to defect to other parties in order to form a majority.

### SUMMARY

The Anti-Defection Law of India was enacted in 1985 to bring stability to the political system by preventing legislators from changing parties. The law has been credited with reducing defections, but it has also been criticized for undermining the independence of legislators and for making it difficult for them to hold their parties accountable.

*"Be not afraid of greatness. Some are born great, some achieve greatness, and others have greatness thrust upon them."*

- WILLIAM SHAKESPEARE





# **INTERNATIONAL RELATIONS**





**CREATING THE BRICS FUTURE TOGETHER  
NOW**

**THE MALDIVES, THE EVOLUTION OF A  
DEMOCRACY**

**MYSTERY TRIAL**

**OPERATION TOOFAN AL AQSA**





## CREATING THE BRICS FUTURE TOGETHER NOW

**CONTEXT:** BRICS welcomed six new members in August during its meeting in South Africa.

**BACKGROUND:** Six new members joined the BRICS group during a meeting in South Africa. Despite concerns about the meeting's productivity, it's essential to assess BRICS' evolution over time, rather than judging it solely by one gathering's outcomes.

### ECONOMIC RELEVANCE

BRICS is not a security grouping. It does not provide military support or peace keepers. It primarily emerged as an economic alliance without military or security roles, in contrast to NATO.

**Global Influence:** The group presently accounts for 36% of global GDP and is expected to have 47% of the world's population by 2050,

**Long term opportunities:** With addition of new members BRICS could challenge the G7's dominance.

### HIGHLIGHTS OF BRICS SUMMIT 2023

The BRICS countries such as Brazil, Russia, India, China, and South Africa held its annual leader's summit in Johannesburg, South Africa on August 22–24, 2023.

Highlight of 15th BRICS summit 2023 was the agreement that admit six new member countries:

- Argentina
- Egypt
- Ethiopianran
- Saudi Arabia
- United Arab Emirates

These countries will officially join the group in January 2024.

### PRESENCE OF INDIA AND CHINA

- **China and India's Role:** China and India, as BRICS members, hold significant economic power and continue to foster trade growth. Both are fastest growing economies and India is expected to be among top three economies by 2030.
- **Bilateral Challenges:** Despite political differences, economic cooperation between China and India remains robust and prioritizes business over politics. This is despite Doklam stand off in 2017 and Galwan valley incident.
- **Long-Term Opportunities:** BRICS offers long-term potential for economic collaboration and growth, driven

by the economic strength of its member countries.

### SEARCH FOR AN ALTERNATIVE

- **BRICS as a Counterbalance:** BRICS provides a platform for countries seeking an alternative to the U.S.'s stance on China and its global influence.
- **Increasing Chinese Reach in the world:** China has advanced in certain areas like communication infrastructure (BRI) and electric mobility.
- **Global Issues:** Refugee treatment and trade disputes have led countries to seek alternatives to traditional alliances like the Non-Aligned Movement.
- **Economic Alliances:** BRICS' growth may lead to the creation of trade, business, and investment protocols, similar to other economic blocs.
- **Digital Currency:** India and China's advancements in digital currency technology position them to promote their currencies as alternatives to the U.S. dollar. Despite short-term challenges and differences, India and China share an interest in reducing reliance on the U.S. dollar, driving convergence in the long run.

### AFRICA BECKONING – CONTINENT OF FUTURE

**Africa's Economic Promise:** Africa is seen as a key region for economic growth in the 21st century.

**Negative Image of Europe:** European interventions and migrant treatment have created a negative perception among Africans. The manner in which France has intervened in Niger or the way in which Africans have been treated in Europe conveys a negative image of Europe with Africans.

**Changing Partnerships:** Visa restrictions have led Africans to explore opportunities in China, while India seeks closer ties with African nations.

**India & Africa:** India had proposed full membership to African Union at G20 Summit in New Delhi. India is committed to increase its reach and partnership with Africa.

**SIGNIFICANCE:** BRICS may fade from headlines between summits, but each meeting lays the foundation for future networks. This enduring group, as recognized by Goldman Sachs in 2003, holds the potential to rival the G6 economies in the long term.



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## THE MALDIVES, THE EVOLUTION OF A DEMOCRACY

**CONTEXT:** Maldives' recent democratic presidential election signals a thriving democracy, driven by voters' economic concerns, not geopolitical rivalry.

**BACKGROUND:** A recent free and fair election in the Maldives has enhanced the country's international reputation. Key voter concerns, particularly among the youth, revolve around economic well-being, employment, housing, tourism, education, and healthcare. The portrayal of the election as a competition between China and India, as some Western news agencies have done, overlooks the nuances of the Maldivian political landscape. The people of the Maldives are better informed about their nation's functioning.

### FIVE MEN, SHARED FUTURE

The Maldives has experienced a transition from one-party rule under Maumoon Abdul Gayoom to multiparty democracy, with leaders like Mohamed Nasheed and Abdulla Yameen. Ibrahim Mohamed Solih, the architect of an 'India First' policy, served as president but was defeated in the recent election. His defeat can be attributed to historical voting patterns, party splits, and the absence of charismatic leader Mohamed Nasheed, which hindered the ruling party's ability to counter opposition disinformation campaigns.

### THE PATH AHEAD

- **Transition in Maldivian Politics:** The election results signal a shift in Maldivian politics, marked by the change in power dynamics between President-elect Momed Muizzu and former President Yameen.
- **Domestic and Regional Priorities:** President-elect Muizzu may initially focus on domestic development priorities and recognize his regional responsibilities as he transitions from Mayor of Male to the President of Maldives.
- **Foreign Policy Choices:** The new administration faces choices in foreign relations: continue with former

President Yameen's 'India Out' campaign, maintain the 'India First' policy of the outgoing President, or develop a balanced approach towards key partners like India and China.

- **Changing Global Dynamics:** The Belt and Road Initiative (BRI) has faced challenges, and the evolving dynamics between India, the Gulf States, and West Asia will impact Maldives' foreign policy choices.
- **Shifting Regional Alliances:** The evolving geopolitical landscape and the waning interest of West Asia in Pakistan may influence extremism in the Maldives and regional dynamics.

### NOTES FOR NEW DELHI

India's regional diplomacy faces complexities but possesses positive assets and achievements. A positive mind-set exists among the people of the Maldives, reinforced by development projects and youth training in India. Strengthening the Colombo Security Conclave (comprising India, Srilanka, Maldives, Mauritius, Bangladesh and Seychelles), in terms of maritime security and BLUE Economy reimagining regional cooperation, and allocating more resources for engagement with the Maldives are suggested for bolstering relations.

## MYSTERY TRIAL

**CONTEXT:** In Qatar, a court recently sentenced eight former Indian Navy personnel to death on espionage charges. In August 2022, the individuals were arrested and charged with breaching sensitive secrets.







**BACKGROUND:** In August 2022, eight former Indian Navy personnel were arrested in Doha, Qatar, on charges of espionage. The men were accused of breaching sensitive secrets while employed by Al Dahra Global Technologies and Consultant Services, a company that provides training and related services to Qatar's armed forces.

Al Dahra has been linked to the production of advanced Italian-origin submarines known for their stealth capabilities. This has led to speculation that the eight men may have been involved in the theft of submarine secrets. However, the specific charges against the men have not been made public by Qatari authorities.

**TIMELINE OF THE INDIAN NAVY PERSONNEL CASE IN QATAR:**

**2022**

- August 30: Eight Indian Navy personnel are arrested in Qatar on charges of espionage.
- September 20: The first bail plea of the jailed officers is held a month after they were picked up and detained in solitary confinement. The plea is rejected.
- October 1: India's Ambassador in Doha and Deputy Head of Mission meet the eight naval veterans.
- October 3: First Consular access is granted.

**2023**

- March 1: The veterans' multiple bail pleas are rejected.
- March 25: Charges are filed against the eight men.

- March 29: The trial, following Qatari law, begins.
- May 30: Dahra Global closes its operations in Doha, and its former employees, mostly Indians, return home.
- August 4: The arrested men get some relief when they are shifted from solitary confinement and put in a jail ward with their colleagues, with two men to each cell.
- October 26: The court sentences all eight men to death

**INDIA'S RESPONSE**

India has conveyed its profound shock and concern regarding the imposition of death sentences on its citizens and is actively pursuing all available legal avenues to secure their release. The Ministry of External Affairs (MEA) has emphasized the utmost significance of this case and reaffirmed its dedication to extending consular and legal support to the detained individuals.

**DIPLOMATIC IMPLICATIONS**

The verdict could potentially strain relations between India and Qatar, where over 700,000 Indian migrants live and work. These migrants contribute significantly to the Qatari economy and foster economic and diplomatic ties between the two countries.

**ADDITIONAL CONTEXT**

India is a major importer of liquefied natural gas (LNG), and Qatar is a significant supplier. The two countries have also engaged in high-level meetings, with the Prime Minister of India visiting Doha in 2016, followed by meetings with the Emir of Qatar.



## ANALYSIS

The case of the eight Indian Navy personnel is the first major crisis in the India-Qatar relationship. The verdict has raised concerns in India about the safety of its nationals working in Qatar and the security of its sensitive military secrets. It has also put pressure on the Indian government to act at the highest level to save the lives of the detainees. A rift in ties, which a sentence like this is bound to engender, will be to the detriment of both countries, and India must make this clear to Qatar.

### Similar cases In Qatar Earlier

In 2016, six Iranian nationals were sentenced to death in Qatar on charges of espionage. The men were arrested in 2013 and accused of spying for Iran's Revolutionary Guards Corps. The Iranian government denied the charges and called for the men's release. The men were eventually released in 2017 after Iran and Qatar reached a prisoner exchange agreement.

In 2019, an Egyptian national was sentenced to death in Qatar on charges of espionage. The man was arrested in 2018 and accused of spying for Egypt's General Intelligence Service. The Egyptian government denied the charges and called for the man's release. The man is still on death row in Qatar.

In 2021, a Turkish national was sentenced to life in prison in Qatar on charges of espionage. The man was arrested in 2020 and accused of spying for Turkey's National Intelligence Organization. The Turkish government denied the charges and called for the man's release. The man is still in prison in Qatar.

These cases show that it is not uncommon for foreign nationals to be accused of espionage in Qatar. However, it is also rare for foreign nationals to be sentenced to death for espionage in Qatar. The cases of the eight Indian Navy personnel are the first known cases of foreign nationals being sentenced to death for espionage in Qatar in recent years.

It is important to note that the legal systems of Qatar and other countries in the Middle East are different from the legal systems of Western countries. In Qatar, the death penalty can be imposed for a wide range of crimes, including espionage. There is also less due process in Qatari courts than in Western courts. This means that foreign nationals accused of crimes in Qatar may be more likely to be convicted and sentenced to harsh punishments, such as the death penalty.

The cases of the eight Indian Navy personnel are a reminder of the risks that foreign nationals face when working or living in Qatar and other countries in the Middle East. Foreign nationals should be aware of the legal systems in these countries and take steps to protect themselves, such as avoiding discussing sensitive topics in public and being careful about what they post on social media.

## POSSIBLE OPTIONS BEFORE INDIA

### Legal options

The legal options available to the Indian government in the case of the naval personnel sentenced to death in Qatar are as follows:

**Appeal:** The Indian government can appeal the verdict to the Court of Appeal of Qatar. The Court of Appeal is the highest court in Qatar and has the power to overturn or uphold the verdict of the lower court.

**Cassation:** If the appeal is unsuccessful, the Indian government can file a cassation appeal to the Court of Cassation of Qatar. The Court of Cassation is the supreme court of Qatar and has the power to review and overturn verdicts based on errors of law.

**Plea for clemency:** The Indian government can also submit a plea for clemency to the Emir of Qatar. The Emir has the power to pardon or commute the sentences of prisoners.

**International Court of Justice (ICJ):** If the Indian government believes that Qatar has violated its international obligations, it can invoke the jurisdiction of the ICJ. The ICJ is the principal judicial organ of the United Nations and has jurisdiction to settle legal disputes between states.

### DIPLOMATIC OPTIONS

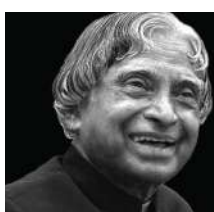
India can engage in direct diplomatic talks with Qatar to find a solution to the case. Diplomatic leverage could play a significant role, given the strategic and economic importance of the relationship between the two countries. The government could also use diplomatic pressure to prevent the death penalty from being carried out.

Some of the options being considered include filing an appeal against the verdict or using a 2015 agreement between India and Qatar on the transfer of convicted prisoners so that they can finish their sentences in their home countries. NGOs and civil society can raise the issue internationally, and pressure from the United Nations could also be sought.

### CONCLUSION

The sentencing of eight Indian Navy personnel to death in Qatar has sparked diplomatic tensions between the two countries. The Indian government has expressed deep concern over the verdict and is exploring all possible legal and diplomatic options to secure the release of the personnel. The outcome of the case will have significant implications for the India-Qatar relationship and for the safety of Indian nationals working abroad.

While there are reports trying to connect the verdict to bigger geopolitical issues like differences between Qatar and India on their policies about Israel and Palestine, it's important for the government to demonstrate that these individuals' safety is a major concern. This aligns with the government's claim of leaving no Indian behind.



*You have to dream before your dreams can come true..*

- A. P. J. ABDUL KALAM





## OPERATION TOOFAN AL AQSA

**CONTEXT:** *The Israel Palestine conflict is one of the oldest and persisting conflicts in the world.*

On October 7, 2023, Hamas, the militant group ruling the GAZA STRIP fired over 5,000 rockets from Gaza towards Israel. Tragically, this resulted in the loss of approximately 1,400 lives among the Israeli population, with both civilians, including women and children, and Israeli soldiers affected. Some of them were taken captive into the Gaza Strip. In response, Israel initiated counterattacks and officially declared war against Hamas a day later.

This has revived the century-old dispute between Israel-Palestine Conflict once again, necessitating the intervention by global and regional powers.



Babylon. In 538 BCE, under Emperor Cyrus's Achaemenid Empire, Jews were permitted to return and rebuild Solomon's Temple, known as the Second Temple.

However, in 70 CE, during the first Jewish-Roman War, the Romans destroyed the Second Temple, with its resources believed to have contributed to the construction of the Roman Colosseum.

Following the Bar Kokhba Revolt (132-136 AD), Roman Emperor Hadrian expelled Jews from Jerusalem and renamed the province from Judea to Syria Palaestina, intending to erase Jewish identity.

After the Bar Kokhba Revolt in 132-136 AD, Jews were expelled from Jerusalem, and Hadrian renamed the region Syria Palaestina. Israel saw the rule of various groups, including Persians, Greeks, Arabs, and Ottomans, shaping its complex cultural and religious history.

### MODERN HISTORY

From 1517 to 1917, the Ottoman Empire ruled over much of West Asia including the region of Israel.

In the 19th century, the population in the region of Israel/Palestine was almost 87% Muslim, 10% Christian and 3% Jewish. From all accounts, the communities lived in peace with each other. In the city of Jerusalem, the population of the three communities was roughly equal.

In the 19th century, an Austro-Hungarian Jewish journalist, Theodor Herzl, propagated the idea of a Jewish homeland in Palestine for the Jews. This idea came to be known as Zionism, which found many followers among the Jews in Europe, where Jews were facing discrimination and even pogroms.

### THE BALFOUR DECLARATION

In 1917, the Balfour Declaration, a British initiative to secure Jewish support during World War I, pledged to establish a "national home for the Jewish People" in Palestine. However, this posed significant issues due to prior agreements.

In 1916, Britain had covertly divided Arab territories with the French, designating Palestine under British control after the war. Additionally, in 1915, Britain had assured Sharif Hussein, the ruler of Mecca, that he would govern the region, including Palestine, if he led an Arab revolt against the Ottoman Empire.

Consequently, Palestinians vehemently opposed the declaration, fearing its implications for their autonomy and well-being.

### PRESENT STATUS OF ISREAL

Present-day Israel, situated in West Asia, is relatively compact, comparable in size to one of India's northeastern states like Manipur. It is geographically defined by the Mediterranean Sea on the west, Egypt to the south, Jordan and Syria to the east, and Lebanon to the north.

Israel is home to numerous sites of profound religious importance for Jews, Christians, and Muslims. Its history is characterized by a rich tapestry of complex events and influences.

The population of Israel today primarily consists of Jewish residents, although there are minority communities of both Christians and Muslims.

### ANCIENT HISTORY OF ISREAL

The ancient history of Israel, primarily documented in the Hebrew Bible, traces its origins to the biblical figure Abraham, recognized as the patriarch of both Judaism (through his son Isaac) and Islam (through his son Ishmael). Descendants of Abraham endured Egyptian enslavement before establishing themselves in Canaan, the region approximating modern-day Israel.

Around 1000 BCE, King David ruled the land, and his son Solomon constructed the First Temple in Jerusalem circa 957 BCE. By 931 BCE, the territory was divided into two kingdoms: Israel in the north and Judah in the south.

In 722 BCE, the Assyrians invaded and dismantled the Kingdom of Israel. In the 6th century BCE, the Babylonians conquered Jerusalem, leading to the First Temple's destruction and the Jewish population's exile to



## MANDATORY PALESTINE

After World War I, the Ottoman Empire was dissolved and Palestine became a British Mandate.

The British, after the First World War, established a colony in Palestine maintaining that they would rule the area until the Palestinians were ready to govern themselves. This was called Mandatory Palestine as it was according to the League of Nations mandate.

## CREATION OF PALESTINE

Unable to quell Arab-Jewish violence, Britain withdrew from Palestine in 1948, deferring the issue to the United Nations. The UN proposed a partition plan for independent Jewish and Arab states, largely rejected by Arab nations.

## CREATION OF ISREAL

In May 1948, Israel declared independence with David Ben Gurion as Prime Minister. This sparked the 1948 Arab-Israeli War, as Iraq, Syria, Lebanon, Jordan, and Egypt invaded Israel. A 1949 ceasefire resulted in the West Bank going to Jordan and the Gaza Strip to Egypt.

Despite the UN plan, Israel gained more territory, as a result of the Arab Isreal war of 1948. East Jerusalem was under Jordan's control. Over 700,000 Palestinians became refugees, a tragedy they term the Nakba. In 1956, tensions flared when Egypt's Gamal Abdel Nasser nationalized the Suez Canal, leading to the Suez Crisis. Israel, with British and French support, attacked the Sinai Peninsula and reclaimed the canal.

## UN PARTITION PLAN:

As per the Plan, Jordan controlled the West Bank and Jerusalem's holy sites, and Egypt controlled the Gaza Strip. But it fell short of solving the Palestinian crisis which led to the formation of Palestinian Liberation Organisation in 1964.

## SIX DAY WAR (1967) and YOM KIPPUR WAR (1973)

The Six-Day War was fought in 1967, and the Yom Kippur War was fought in 1973. Both wars were between Israel and a coalition of Arab states, led by Egypt and Syria. In the Six-Day War, Israel pre-emptively attacked Egypt, Syria, and Jordan, and emerged victorious. In the Yom Kippur War, Egypt and Syria launched a surprise attack on Israel, but Israel was able to reverse the initial gains and eventually win the war.

## THE CAMP DAVID ACCORD (1978)

The Camp David Accords were two agreements signed by Egyptian President Anwar Sadat and Israeli Prime Minister Menachem Begin on September 17, 1978, following secret negotiations at Camp David, the country retreat of the President of the United States in Maryland. The first agreement, entitled "A Framework for Peace in the Middle East," outlined a broad vision for peace in the region. The second agreement, entitled "A Framework for the Conclusion of a Peace Treaty between Egypt and Israel," led directly to the 1979 Egypt-Israel peace treaty.

## EMERGENCE OF PALESTINE LIBERATION ORGANISATION

The Palestine Liberation Organization (PLO), established in 1964, is the internationally recognized representative of the Palestinian people, unifying various

resistance movements. Originally seeking Israel's destruction, it shifted its stance in 1988 to acknowledge Israel's right to exist within pre-1967 borders and renounced terrorism.

The PLO played a vital role in Palestinian self-determination, negotiating with Israel and forming institutions like the Palestinian Authority, governing parts of the West Bank and Gaza. Criticized for past ties to terrorism, it remains the primary Palestinian representative and contributes to the Middle East peace process. Key milestones include Arab League recognition, UN observer status, Oslo Accords, and the establishment of the Palestinian Authority. The PLO aspires to create a Palestinian state along 1967 borders, with East Jerusalem as its capital.

## EMERGENCE OF HAMAS

Hamas, a Sunni Islamist militant group, emerged in 1987 as an offshoot of Egypt's Muslim Brotherhood, with a focus on violent jihad. It is designated as a terrorist organization by the U.S. government.

In 2006, Hamas won the Palestinian Authority's legislative elections and later ousted Fatah from Gaza in 2007, creating a geographical split in the Palestinian movement.

Tensions in the occupied territories led to the First Intifada in 1987, escalating into a conflict between Palestinian militants and the Israeli army.

Since then, Hamas, while viewed as a terrorist group by many, has engaged in significant conflicts with Israel in 2008, 2012, and 2014.

## OSLO ACCORD

The Oslo Accords, comprising the Oslo I Accord (1993) and Oslo II Accord (1995), marked a pivotal development in the Israeli-Palestinian conflict. These agreements, brokered between Israel and the Palestine Liberation Organization (PLO), were signed in Washington, D.C., and Taba, Egypt, respectively. They represented the first official mutual recognition of each other's right to exist, offering a framework for Palestinian self-governance in the West Bank and Gaza Strip. The establishment of the Palestinian Authority (PA) aimed to administer these areas.

These accords generated hope for Middle East peace but faced considerable challenges, including opposition from extremists on both sides and disputes over implementation. While they have not resulted in a final peace agreement, the Oslo Accords remain a significant milestone. They provide a foundation for a two-state solution, seen as the most viable path to achieve lasting peace between Israel and the Palestinians. However, negotiations have stalled over issues like the status of Jerusalem, the right of return for Palestinian refugees, and final border delineations. Despite these challenges, the Oslo Accords symbolize hope for peace in the Middle East.

## SIGNIFICANCE OF JERUSALEM

Jerusalem is a city of profound significance to both Israel and Palestine, with each claiming it as their rightful capital. Israel asserts its claim over the entire city, while Palestinians seek it as part of their quest for freedom and self-determination. This ancient city holds immense religious importance for Judaism, Christianity, and Islam, making it a focal point for the Abrahamic faiths.





After Israel's declaration of independence in 1948, Jerusalem was divided into two parts – West and East. West Jerusalem became Israel's capital, while East Jerusalem came under Jordanian control. In the Six-Day War of 1967, Israel captured East Jerusalem and subsequently absorbed it into West Jerusalem, including nearby West Bank villages. The international community has largely regarded Israel's occupation of East Jerusalem as illegal.

The city's status remains a central issue in peace talks. While both Israel and Palestine claim Jerusalem as their capital, Palestinians predominantly refer to East Jerusalem as the capital of the State of Palestine. In 2017, former U.S. President Donald Trump recognized Jerusalem as the capital of Israel, sparking controversy.

Jerusalem's Old City, located in East Jerusalem, features four quarters – Muslim, Jewish, Christian, and

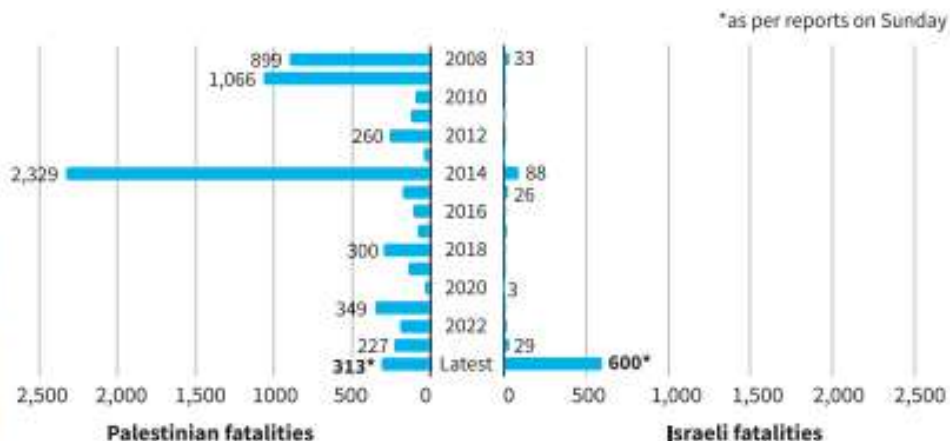
Armenian. It holds immense religious significance for various groups. For Jews, it was the capital of the ancient Kingdom of Israel, traditionally linked to King David and King Solomon's First Temple. The Western Wall is a sacred site for Jews. Muslims consider Jerusalem the third holiest city after Mecca and Medina, with the Al-Aqsa Mosque at the center of their reverence. Christians cherish the Church of the Holy Sepulchre, which includes the sites of Jesus Christ's crucifixion and his empty tomb.

Temple Mount, known as Haram al-Sharif in Arabic, is a site revered by both Jews and Muslims. Israel manages security in the area, controlling access, while religious aspects are overseen by the Jordanian Waqf. The complex situation makes Jerusalem a crucial element of peace negotiations between Israel and Palestine due to the presence of these revered holy sites.

## Israel-Palestine conflict in numbers

The data for the charts were sourced from the United Nations Office for the Coordination of Humanitarian Affairs

**Chart 1:** The chart shows the number of Palestinians and Israelis killed since 2008. The latest attack is the deadliest on Israel but Palestinian fatalities due to the conflict outnumber Israel's

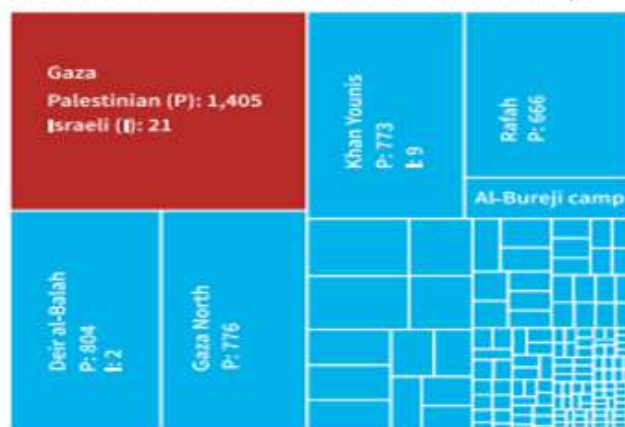


### INDIA ON ISREAL – PALESTINE CONFLICT

- In 1947, India was among the few countries opposing the UN's partition plan, drawing from its own recent experience gaining independence.
- Although India recognized Israel in 1950, it also became the first non-Arab nation to acknowledge the Palestine Liberation Organisation (PLO) as the sole representative of the Palestinian people.
- Additionally, India was among the early supporters of Palestine's statehood, backing it in 1988.
- Recent developments indicate a shift in India's approach, moving from a historically pro-Palestine stance to a more nuanced strategy. This approach involves maintaining its three-decade-long friendly relationship with Israel, leading to perceptions of a pro-Israel stance.
- India's current position advocates a Two-State Solution for the Israel-Palestine conflict, emphasizing the right to self-determination for both nations in a peaceful manner.
- Israel and Saudi Arabia are crucial legs of recently unveiled India Middle East Europe Economic Corridor.

### PALESTINE ISRAEL CONFLICT SOME FIGURES

**Chart 2:** The chart shows the number of Palestinians and Israelis who were killed since 2008, across cities and camps

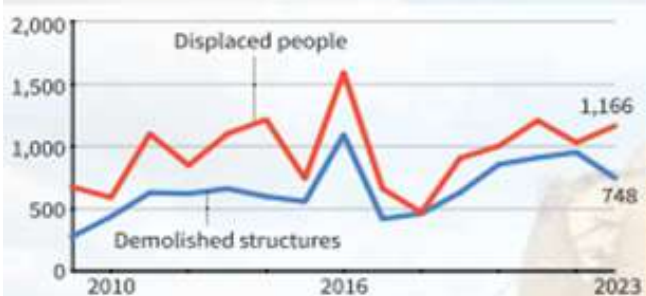


### TENSIONS IN THE WEST BANK

Over the past year, tensions in the West Bank have escalated due to increased settlement construction, settler violence, and disputes around the al-Aqsa mosque in Jerusalem, a sensitive holy site. The chart displays the demolition of Palestinian-owned structures and resulting displacements in the West Bank since 2009.



**Chart 4:** The chart shows the demolition of Palestinian-owned structures and the resulting displacement of people



### HISTORICAL PARALLELS

The operation Toofan Al-Aqsa by Hamas bears striking similarities to the start of the Yom Kippur War, which occurred 50 years ago. Although the Yom Kippur War was inconclusive, it eventually led to a regional shift with Israel accepting a 'land for peace' formula at the Camp David Accords six years later.

### GEOPOLITICAL CONSEQUENCES/ REASONS


- Following reasons can be behind the recent escalation in Conflict
- Concerns about the possible normalization of relations between Israel and regional countries, including Saudi Arabia.
- Desire to prevent this normalization process, which they view as detrimental to their cause and the broader Palestinian issue.

- Citing threats to the Al-Aqsa Mosque in Jerusalem as a contributing factor to their actions.
- Ongoing Israeli blockade of Gaza as a motivating factor.
- Belief that separating Saudi Arabia from Israel would align with the interests of the Muslim Brotherhood and promote territorial sovereignty in the Arab and Middle East region.
- Assertion that increased normalization between regional powers and Israel could enhance Israel's position in territorial disputes to the detriment of the Palestinian cause.
- Concern that strengthening ties between countries like the UAE, Egypt, and Saudi Arabia and Israel could result in greater infrastructural development and interconnected relationships in the region, which Hamas sees as detrimental to the Palestinian cause.

### CONCLUSION

The recent conflict between Israel and Hamas in Palestine has once again highlighted the complex and longstanding nature of the Israel-Palestine conflict. The reasons behind the escalation are multifaceted, including concerns about regional normalization with Israel, threats to the Al-Aqsa Mosque, and the ongoing blockade of Gaza. The conflict has resulted in loss of life and suffering on both sides, necessitating international intervention. It underscores the pressing need for a comprehensive, peaceful resolution to this enduring dispute, one that respects the rights and aspirations of both Israelis and Palestinians.

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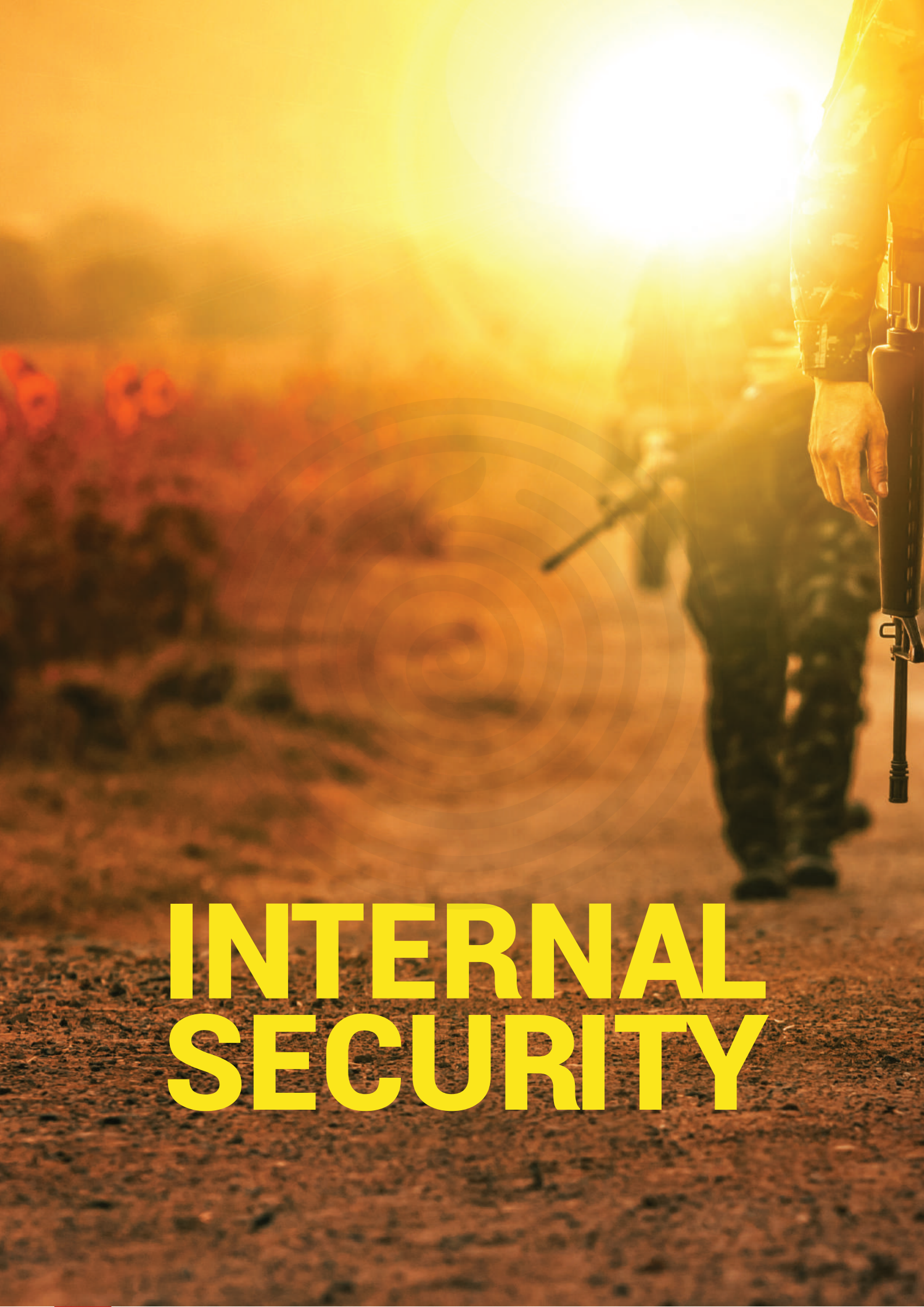
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*You have to dream before your dreams can come true..*

- A. P. J. ABDUL KALAM





# INTERNAL SECURITY



**ARMY CONCLUDES 70 SCHEMES UNDER EP-4 WORTH ₹11,000 CR**

**DEFENCE ACQUISITION COUNCIL (DAC) APPROVES MAJOR ACQUISITIONS**

**INDIAN AIR FORCE UNVEILS NEW ENSIGN**

**NEWSCLICK FOUNDER ARRESTED UNDER UAPA**

**NINE VERTICALS IDENTIFIED FOR INTEGRATION OF SERVICES: CDS**



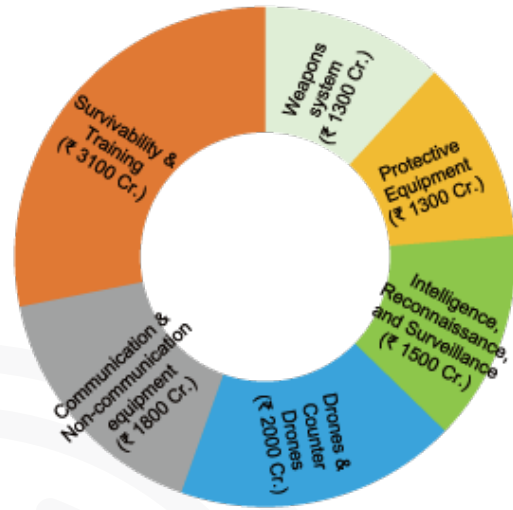


## ARMY CONCLUDES 70 SCHEMES UNDER EP-4 WORTH ₹11,000 CR

The Army has completed the fourth tranche of Emergency Procurements (EP) undertaken between September 2022 and September 2023 with over 70 schemes concluded worth nearly ₹ 11,000 Cr.

Emergency financial powers were granted to the armed forces by the Defence Ministry for the first time after the 2016 Uri terror attack, followed by the 2019 Balakot air strikes and the 2020 standoff with China in Eastern Ladakh. Under this, the services could procure weapons systems up to ₹ 300 Cr, on an “urgent basis without any further clearance to cut short the procurement cycle”.

The Indian Air Force has also concluded 64 contracts under EP-4 worth around ₹ 8,137 Cr. The Army finalised 68 contracts worth approximately ₹ 7,000 Cr in the earlier three tranches.



**FIGURE:** Pie chart representation of allocations under the Emergency Procurement Scheme.

## DEFENCE ACQUISITION COUNCIL (DAC) APPROVES MAJOR ACQUISITIONS

The Defence Acquisition Council (DAC), chaired by Defence Minister Rajnath Singh is expected to meet shortly for considering defence acquisition proposals from the Navy and the Air Force, cumulatively cost over ₹1 lakh Cr. expected to meet at the end of October, 2023. The Defence Procurement Board (DPB) has already cleared the proposals for a second indigenous aircraft carrier, IAC-II, and 97 LCA-Mk1A in mid-September.

The Air Force is looking to acquire 97 additional light combat aircraft, LCA-Mk1A, estimated to cost around ₹ 67,000 Cr. Air Force had moved a case for 97 additional LCA-Mk1A jets in addition to the 83 jets on order with Hindustan Aeronautics Ltd. (HAL), which would cumulatively cost around ₹ 1.15 lakh Cr., taking the fleet strength to 180 LCA-Mk1A jets and 220 jets of the Mk1 variant.

Another proposal for a major upgrade of 84 SU-30MKI fighter jets in service with the Air Force, at a cost of over ₹6,000 crore, is set to be taken up by the Defence Procurement Board (DPB). The long-pending Su-30MKI upgrade will be initially rolled out with 84 jets and will largely

be an indigenous effort. Air Chief Marshal Chaudhari had said that 51 systems would be upgraded in the 84 jets with an indigenous content of 78 %.

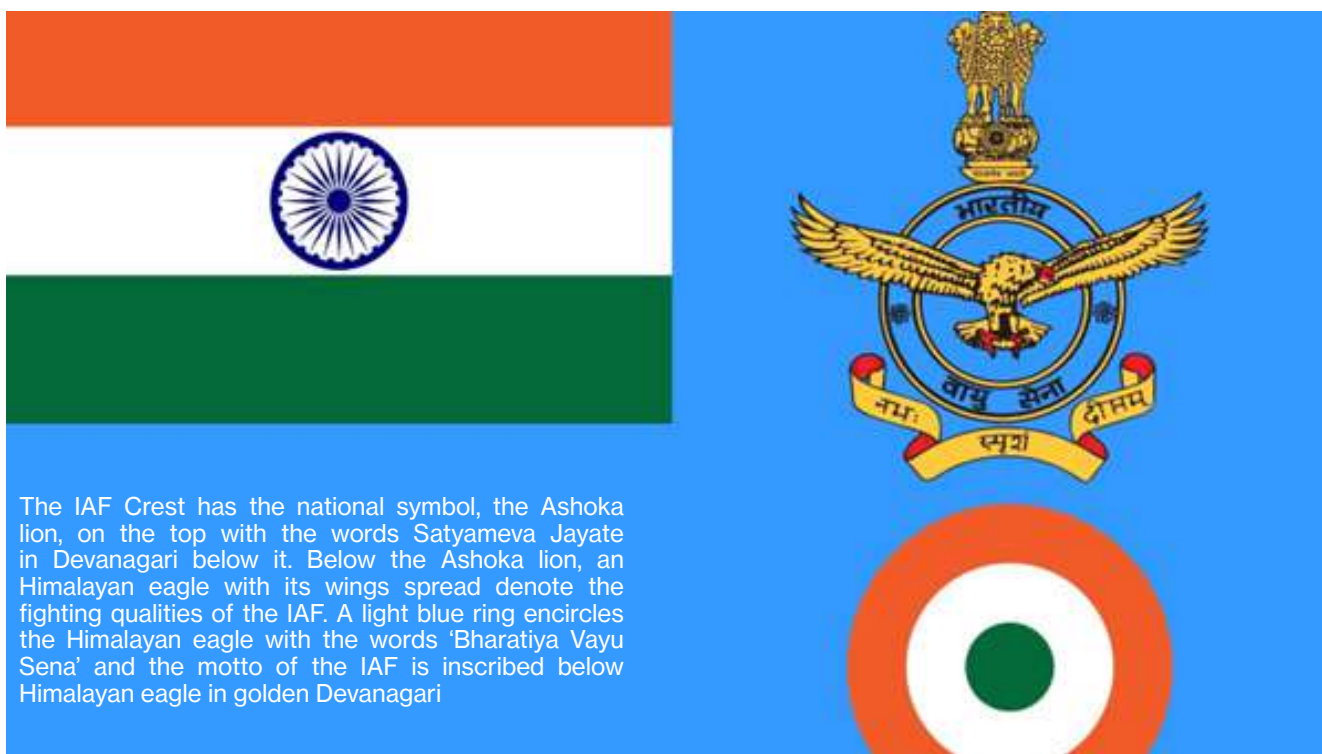
The Navy’s proposal is for a repeat order of a Vikrant-like aircraft carrier, estimated to cost approximately ₹ 40,000 Cr. The IAC-II, displacing 45,000 tonnes, will see some modifications and newer technologies being incorporated in the original design of the country’s first indigenous aircraft carrier, INS Vikrant, which was commissioned in September 2022. The second ship, if cleared, will also be manufactured by Cochin Shipyard Ltd. (CSL). The Indian Navy is proposing to order an aircraft carrier similar to the Vikrant, costing approximately ₹ 40,000 Cr. The Air Force is seeking 97 additional light combat aircraft (LCA-Mk1A) at an estimated ₹ 67,000 Cr. Meanwhile, the proposal for a significant upgrade of 84 SU-30MKI fighter jets, costing over ₹ 6,000 Cr, will be discussed by the Defence Procurement Board. A meeting of the Defence Acquisition Council (DAC) is expected on October 29 or 30 to review these proposals.





## INDIAN AIR FORCE UNVEILS NEW ENSIGN

The Chief of the Air Staff, Air Chief Marshal Vivek Ram Chaudhari unveiled a new Ensign for the force, as it marked its 91st anniversary, by the inclusion of the Air Force Crest in the top right corner of the Ensign, towards the fly side.



The IAF Crest has the national symbol, the Ashoka lion, on the top with the words Satyameva Jayate in Devanagari below it. Below the Ashoka lion, an Himalayan eagle with its wings spread denote the fighting qualities of the IAF. A light blue ring encircles the Himalayan eagle with the words 'Bharatiya Vayu Sena' and the motto of the IAF is inscribed below Himalayan eagle in golden Devanagari

The Air Force Day parade was held at the Air Force Station, Bamrauli in Prayagraj. The theme for this year's Air Force Day was "IAF – air power beyond boundaries", aptly reflecting the "inherent global reach of air power and how air power will prove decisive in future conflicts". This is the first Air Force Day Parade to be commanded by a woman officer, Group Captain Shaliza Dhani. She is also the first woman officer of the IAF to command a combat unit.

## NEWSCCLICK FOUNDER ARRESTED UNDER UAPA

The Delhi Police arrested Prabir Purkayastha, founder and Editor-in-Chief of news portal NewsClick and its Human Resources head Amit Chakraborty in an alleged terror case.

A total of 46 "suspects", including 9 women, were questioned and their phones, laptops and devices seized for further examination with regard to Delhi communal riots and the CAA agitation of 2019-20, the farmers protest of 2020-21 and whether they used encrypted messaging applications such as Signal on their phones.

The Special Cell of the Delhi police had registered a First Information Report (FIR) in the case on August 17 under Sections 13, 16, 17, 18 and 22 of the anti-terror Unlawful Activities (Prevention) Act and Sections 153A and 120B of the Indian Penal Code (IPC) for promoting religious enmity between groups and criminal conspiracy, respectively. The FIR was registered days after The New York Times published a report on August 8 that the portal received money from American businessman Neville Roy Singham to spread Chinese propaganda.

The allegations are already under investigation by the Enforcement Directorate (ED) since 2021. The ED has accused the company of money laundering, claiming that the portal received ₹77 crore as foreign remittance

between the years 2018-21.

### UNLAWFUL ACTIVITIES (PREVENTION) ACT, 1967

The Parliament of India amended the Unlawful Activities (Prevention) Act, 1967 to effectively prevent unlawful activities associations in India.

### SALIENT FACTS

- Both Indian and foreign nationals can be charged.
- Applicable to offenders in the same manner, even if crime is committed on a foreign land, outside India.
- Investigating agency can file a charge sheet in maximum 180 days after the arrests and the duration can be extended further after intimating the court.

### SECTION 15 UAPA, 1967

Section 15 defines a "terrorist act" as any act committed with intent to threaten or likely to threaten the unity, integrity, security, economic security, or sovereignty of India or with intent to strike terror or likely to strike terror in the people or any section of the people in India or in any foreign country.



# INDIA'S LARGEST ONLINE IAS COACHING ACADEMY





## UNLAWFUL ACTIVITIES (PREVENTION) (AMENDMENT) ACT, 2019

~ Empowers the Director General of National Investigation Agency (NIA) to grant approval of seizure or attachment of property when the case is investigated by the said agency. Earlier, an investigating officer needs to take prior permission of the Director General of Police of a State for conducting raids, and seizing properties that are suspected to be linked to terrorist activities.

~ Central agencies such as the Central Bureau of Investigation (CBI) are required to obtain prior permission from the state government since law and order is a state subject under the Constitution.

~ Empowers the officers of the NIA, of the rank of Inspector or above, to investigate cases of terrorism. Earlier, only officers of the rank of Deputy Superintendent or Assistant Commissioner of Police of the NIA shall have the power to investigate offence under the UAPA law.

~ Included the provision of designating an individual as a "terrorist" if they are found committing, preparing for, promoting, or involved in an act of terror.

~ Empower individual designated as a "terrorist" with the "Right to seek a review" within one month of rejections of the application by the government. The Centre will set up the review committee consisting of a chairperson (a retired / Sitting Judge of a State High Court) and three other members to order the government to delete the name of the individual from the schedule that lists "terrorists", if it considers the order to be flawed.

## UNLAWFUL ACTIVITIES (PREVENTION) ACT, 1967

ENACTMENT: 1967

**OBJECTIVE:** Effective prevention of unlawful activities associations in India.

**CRITICISM:** Assigns absolute power to the Centre to assign an activity as unlawful via Official Gazette.

**PUNISHMENT:** Prescribe death penalty and life imprisonment.

### GROUND FOR DESIGNATION:

- ~ Commits or participates in acts of terrorism, or
- ~ Prepares for terrorism, or
- ~ Promotes or encourages terrorism
- ~ otherwise involved in terrorism.

## NINE VERTICALS IDENTIFIED FOR INTEGRATION OF SERVICES: CDS

General Anil Chauhan, Chief of Defence Staff (CDS) noted the process of theatrisation, part of a reorganisation effort undertaken by the armed forces, is one of the most ambitious reforms post-independence.

As part of the process they have identified nine verticals for integration which include operations, operational logistics, training, HR, administration and supply chain management.

Army Chief Gen. Manoj Pande said they have 340 indigenous defence industries working towards fructification of 230 contracts by 2025, that entails an outlay of ₹ 2.5 lakh Cr., while stating that Indian defence industry is investing significantly in the Research and Development to meet the requirements of the Services.

### INTEGRATED THEATRE COMMANDS

An Integrated (Joint) Theatre Command envisages a UNIFIED COMMAND of the THREE SERVICES, under a SINGLE COMMANDER, for geographical theatres (areas) that are of strategic and security concern. The Shekatkar committee has recommended the creation of THREE INTEGRATED THEATRE COMMANDS – Northern for the China border, Western for the Pakistan border, and Southern for the maritime role.

### PROPOSED JOINT THEATRE COMMANDS

- **WESTERN THEATRE COMMAND (WTC):** The WESTERN THEATRE COMMAND (WTC) would be oriented towards India-Sino border, pooling all the relevant assets of three branches of the Indian Armed Forces - Army, Navy and Air Force with a specialised focus upon mountain warfare.
- **EASTERN THEATRE COMMAND (ETC):** The EASTERN THEATRE COMMAND (ETC) would be oriented towards India-Pakistan border, pooling all the relevant assets of three branches of the Indian Armed Forces - Army, Navy and Air Force with a specialised

focus upon plain and desert warfare.

- **MARITIME THEATRE COMMAND (MTC):** The MARITIME THEATRE COMMAND (ETC) would be oriented towards command and control of the entire Indian naval fleet and coastal defence operations would be headed by a 3-star officer from Indian Navy will report to the Joint Chiefs of Staff Committee headed by the Chief of Defence Staff (CDS) would pool assets from all the branches of the Indian military.
- **AIR DEFENCE COMMAND (ADC):** The AIR DEFENCE COMMAND (ADC) headed by a three-star officer from the Indian Air Force will look after the air defence operations of the Indian military. The AIR DEFENCE COMMAND (ADC) \* will integrate all the relevant assets of three branches of the Indian Armed Forces - Army, Navy and Air Force under a single command authority.
- **LOGISTICS COMMAND:** The LOGISTICS COMMAND would be pool logistics resources from all 3 services – Army, Navy and Air Force to cater to supply and transportation troops, armoured vehicles for all 3 operational commands.
- **TRAINING COMMAND:** The TRAINING COMMAND would serve as a nodal institution, with all the training institutions were placed under the jurisdiction of the Training Command to facilitate the training for all personnel of the Armed Forces of India.
- **DOCTRINE COMMAND:** The DOCTRINE COMMAND would be charged with overseeing training of Army forces and the development of operational doctrine.

### THEATRE COMMANDER

Mobilise all resources at his disposal – from the Army, the Indian Air Force, and the Navy – with seamless efficacy.

Independent to act without prior permission of individual Service Chiefs.



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# ECONOMICS





**STATE OF INDIAN ECONOMY – OCTOBER, 2023  
UPDATES**

**CENTRE RAISES MSP FOR RABI CROPS**

**GOVT. EASES AIRCRAFT RECOVERY RULES**

**HOUSEHOLD SAVINGS**

**INDIA TO DOUBLE INFRASTRUCTURE  
SPENDING TO ₹143 TRILLION**

**INDIA'S MARITIME ECONOMY**

**NATIONAL STRATEGY ON ROBOTICS**

**GST COUNCIL CLEARS MEASURES TO BOOST  
FOREIGN TRADE**

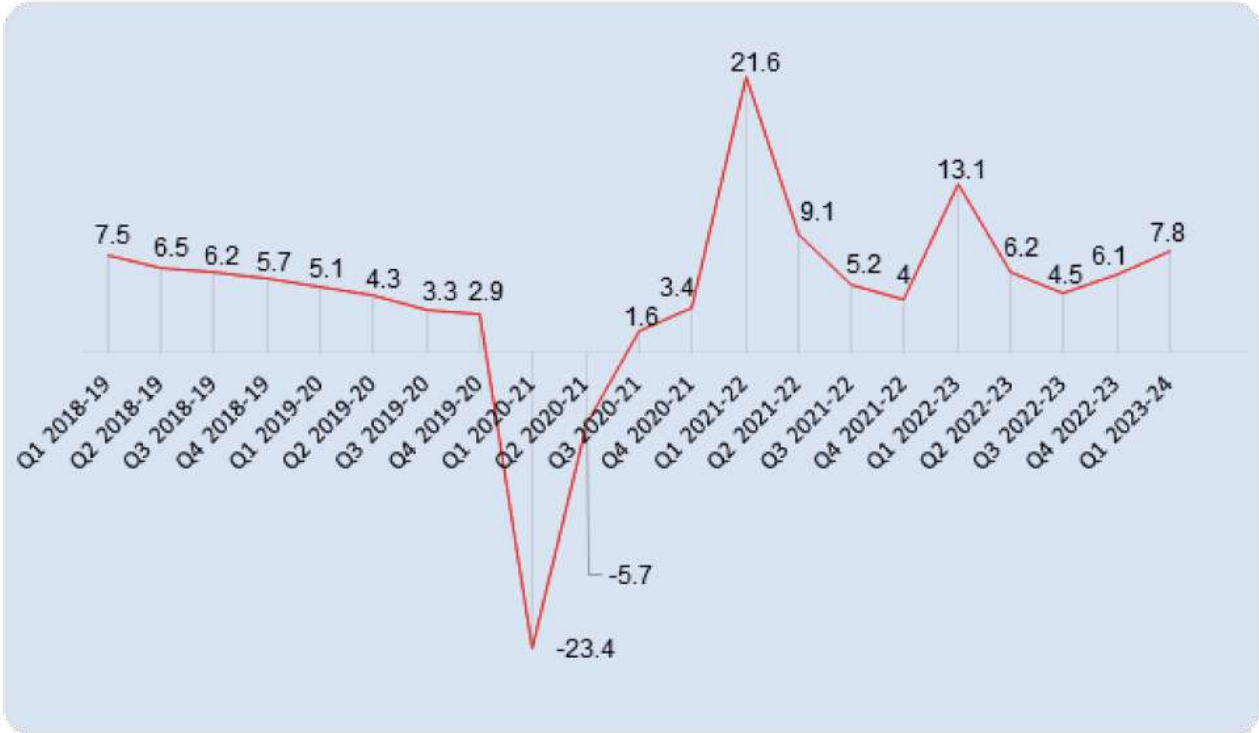
**NEW INVESTMENTS SLOWED AGAIN IN Q2 OF  
2023-24**



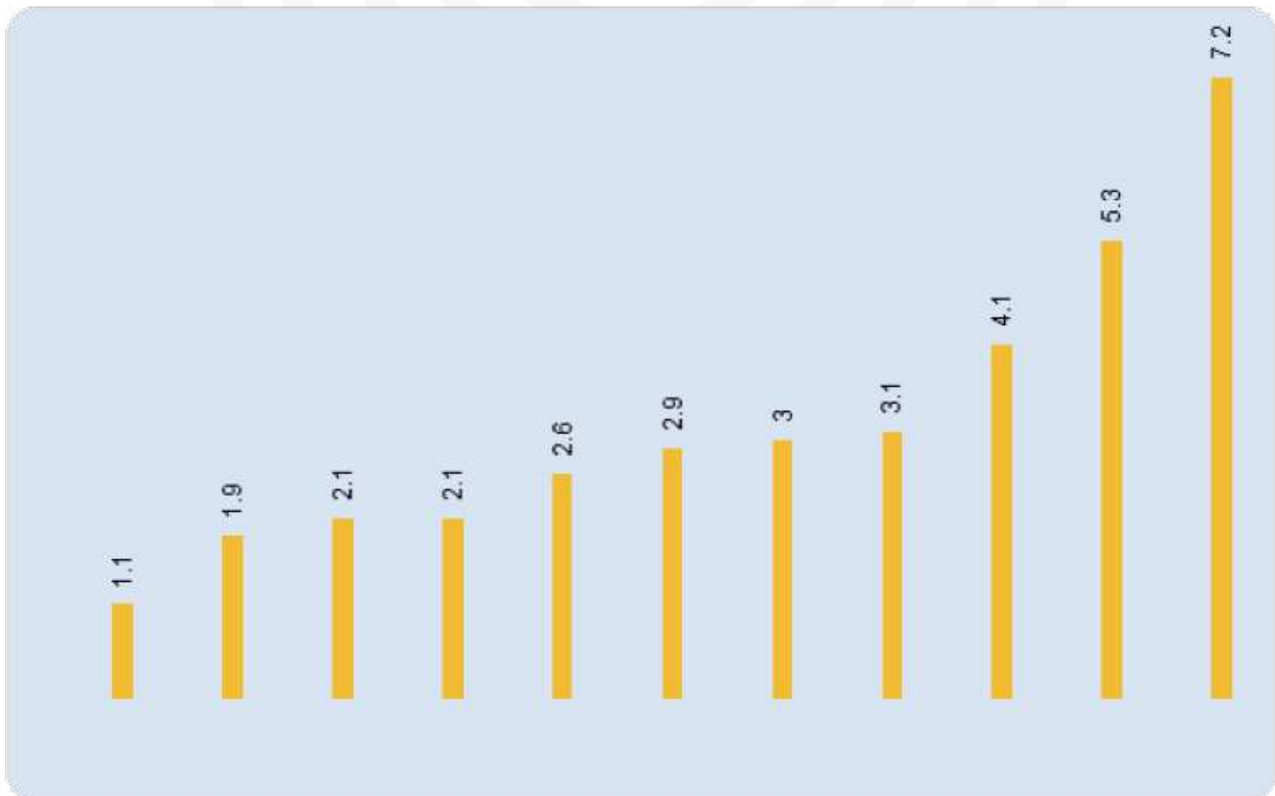


### STATE OF INDIAN ECONOMY – OCTOBER, 2023 UPDATES

India has retained its status as the world's fastest growing major economy with its Gross Domestic Product (GDP) registering a four-quarter high of 7.8 % in the Q I of the current Financial Year (FY 2023-24). China so far, the world's largest economy recorded a GDP growth rate of 6.3 % in the same quarter amid a fresh slowdown. India was one of the fastest-growing major economies in 2022-23 at 7.2 %. India's growth rate was the second-highest among G20 countries and almost twice the average for emerging market economies.



**FIGURE:** Bar chart representation of the Quarter-wise Real GDP Growth Rates (%) for FY 2018-19 to FY 2023-24 (Q I).



**FIGURE:** Column chart representation of the Real GDP growth rates of major economies in 2023-24.

With the Indian economy projected to grow faster in the coming years, India's contribution to global economic growth will rise by 2 percentage points in the next 5 years.

Currently, India contributes approximately 16 %, while China contributes 34 % to the global growth. India's contribution is likely to grow from 16 % to 18 % in the next five years.



Currently India and China together contribute 50 % the global growth.

The Asia Pacific region grew by 4.6 % in 2023 and by 4.2 % in 2024 contributing about two-thirds to global growth and remain a relatively bright spot despite a challenging global

environment. India is projected to growth for FY2023-24 at 6.3% supported by strong government capital expenditure with some crowding in for private sector investment, along with continued consumption growth and despite weakening external demand.



**GROWTH PROJECTIONS:**

The Reserve Bank of India (RBI) estimates a growth rate of 6.5 % for 2023-24, forecasting a slowdown in each of the subsequent quarters of this year, with a growth rate of 5.7 % in the last quarter. The RBI has projected Consumer Price Index (CPI)-based inflation for the current fiscal year at 5.4 %. Monetary policy projections are consistent with achieving the Indian central bank’s inflation target over the medium term.

The World Bank (WB) in April, 2023 projected India’s growth forecast at 6.3% for the year 2023-24. The World Bank forecast the Current Account Deficit (CAD) of India to moderate to 1.8 % of GDP in FY24 and FY25. The World Bank in its latest India Development Update forecast service sector activity to grow at 7.4 % and investment growth projected to remain robust at 8.9 %. The average level of Female Labour Force Participation Rate (FLPR) for

emerging market economies is about 50 %, compared to only 25 % for India. A higher FLPR is necessary to ensure India to become a high-income country.

**PERIODIC LABOUR FORCE SURVEY (PLFS)**

The Periodic Labour Force Survey (PLFS) is carried out by the National Sample Survey Office (NSSO), has reported that unemployment rate in urban areas of the country has shown a decrease during the period April-June 2023. The national survey processed details from 5,639 first-stage sampling units (FSUs) and 1,67,916 people from 44,190 urban houses.

The unemployment rate ranged between 7.8 % and 9.7% during the pre-pandemic period and at the latest survey it was 6.6%, which, according to the Centre, is lower than the unemployment rates observed in the quarters covered in the pre-pandemic period.

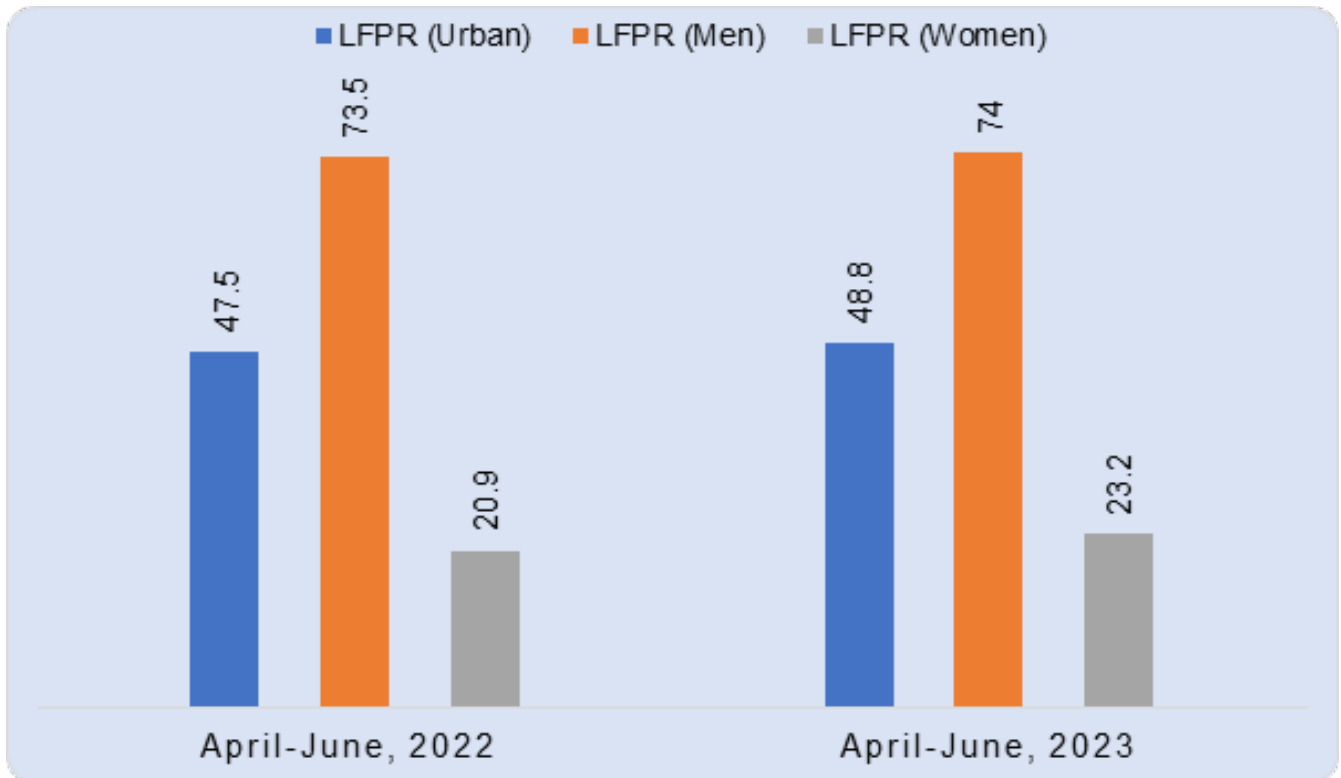
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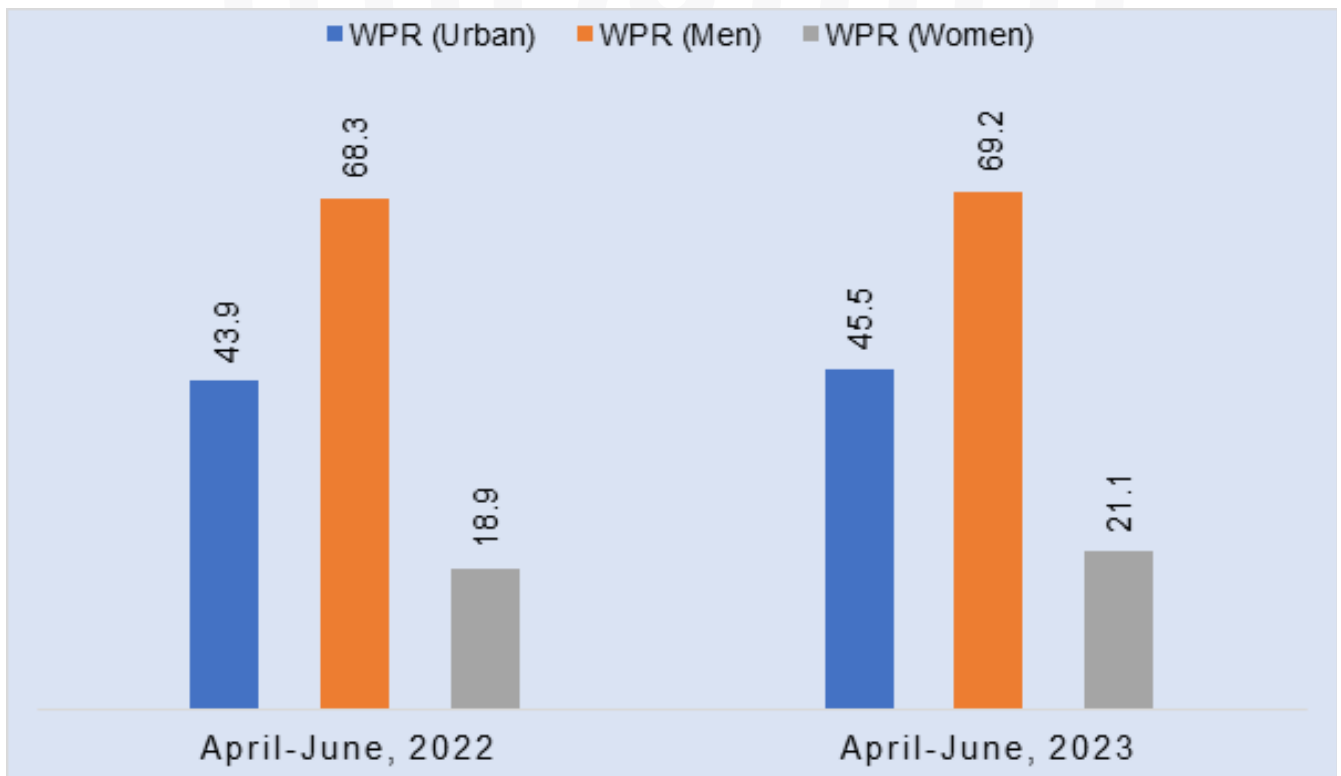
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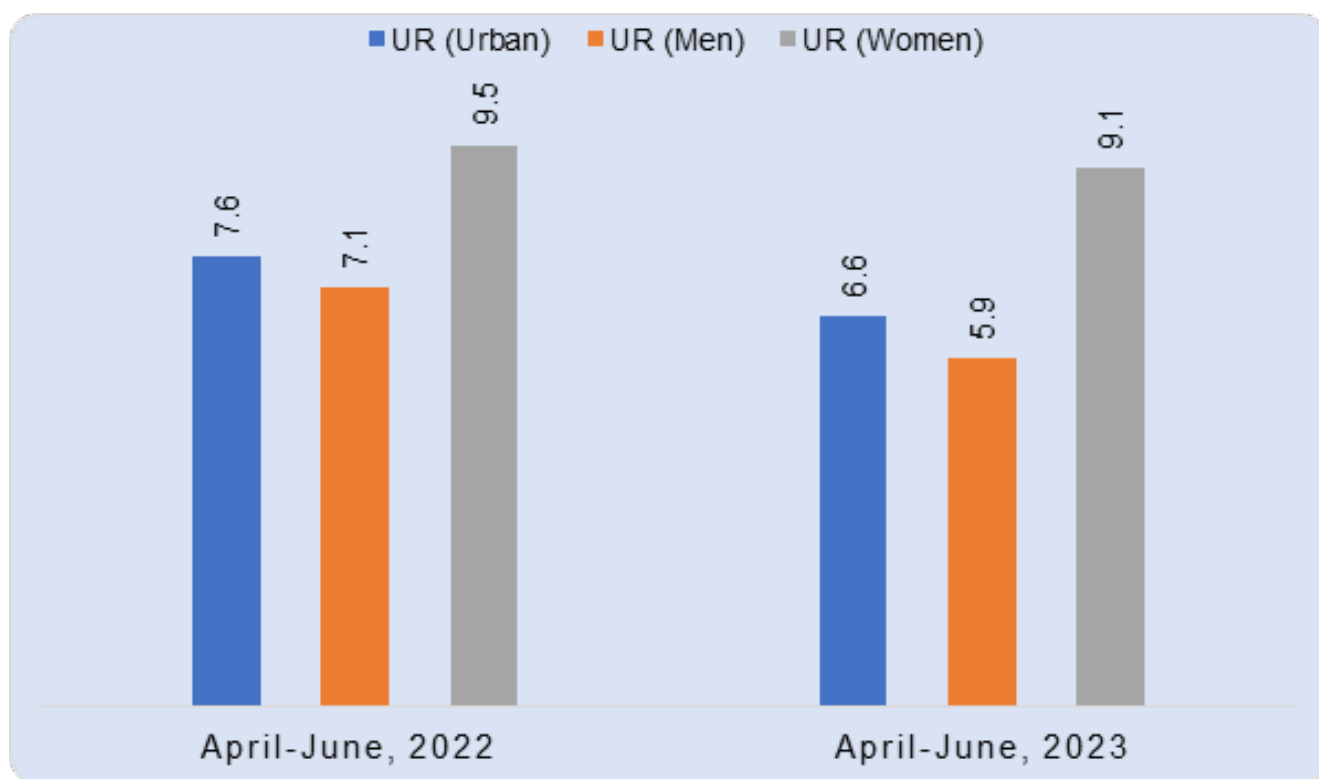


**FIGURE:** Column chart representation of the Labour Force Participation Rate (LFPR).



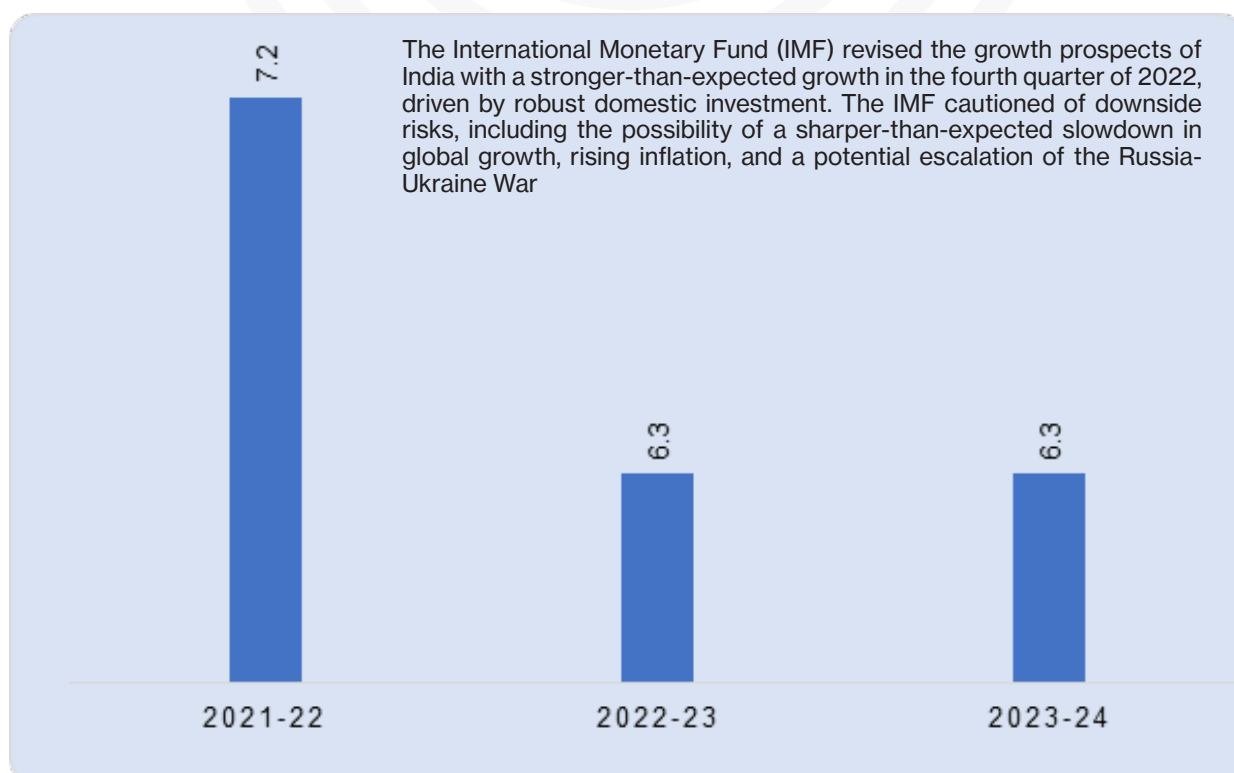
**FIGURE:** Column chart representation of the Worker to Population Ratio (WPR).

The Centre claimed improvement in key labour market indicators in urban areas compared with those in pre-pandemic period (April-June 2018 to October–December 2019). The LFPR ranged from 46.2% to 47.8% during the pre-pandemic period and in the latest report it was 48.8 %. The WPR was between 41.8 % and 44.1 % before the pandemic and now it is 45.5 %.



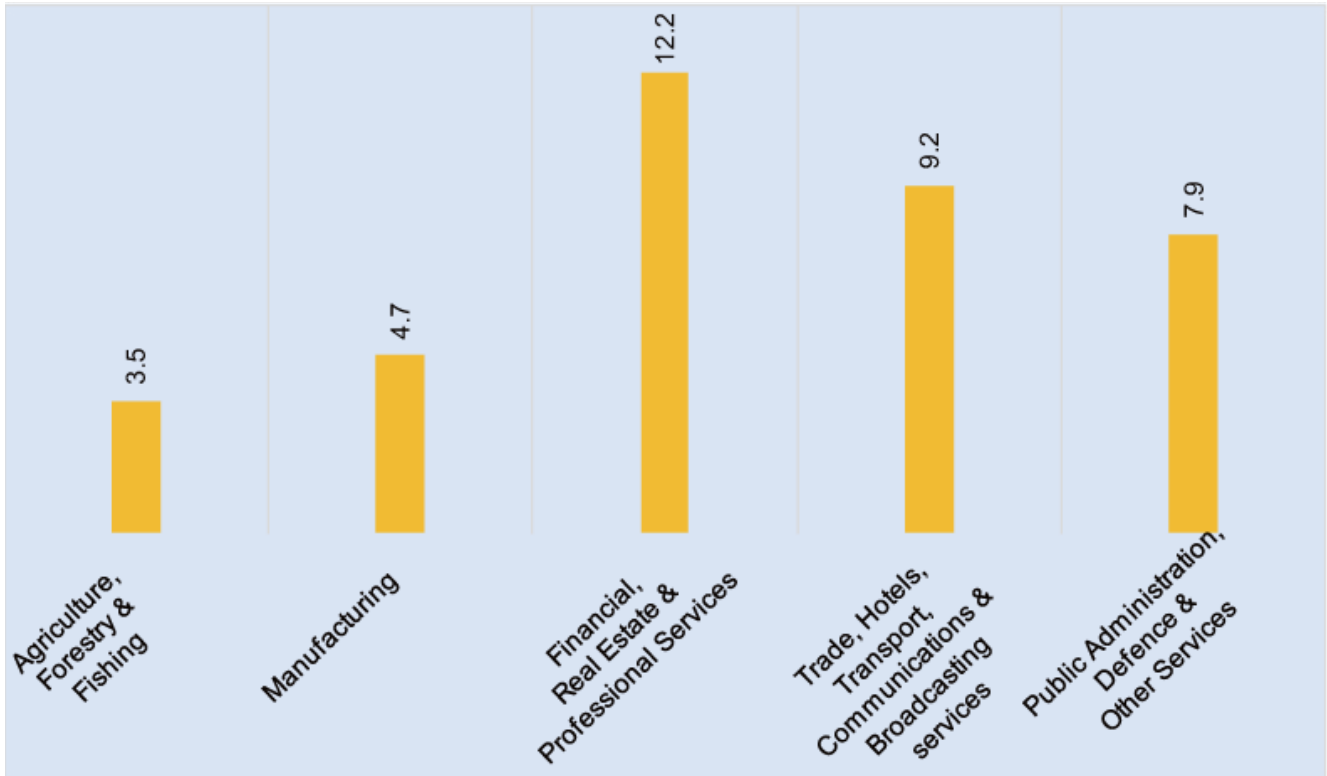
**FIGURE:** Column chart representation of the Unemployment Rate (UR) for persons aged 15 and above.

The International Monetary Fund (IMF) raised India's economic growth forecast for the current fiscal year to 6.3 %, from 6.1 % earlier. The IMF expects retail inflation in the South Asian nations including India to approach 5.5 % in 2023-24 before easing to 4.6 % in 2024-25. The GDP growth rates are projected to remain strong, at 6.3 % in both 2023 and 2024, with an upward revision of 0.2 percentage points for 2023, reflecting stronger-than-expected consumption during April-June. The IMF cut its growth forecasts for China and the Euro Zone overall global growth to moderate, despite the "remarkable strength" of the U.S. economy. The IMF also left its forecast for global real GDP growth in 2023 unchanged at 3.0 %. The IMF has asked countries to retain a sufficiently restrictive monetary stance until inflation is firmly on track.



**FIGURE:** Column chart representation of the IMF growth forecasts of India. Source: International Monetary Fund)





**FIGURE:** Bar chart representation of the sectorial growth rates for the Quarter I, FY 2023-24.

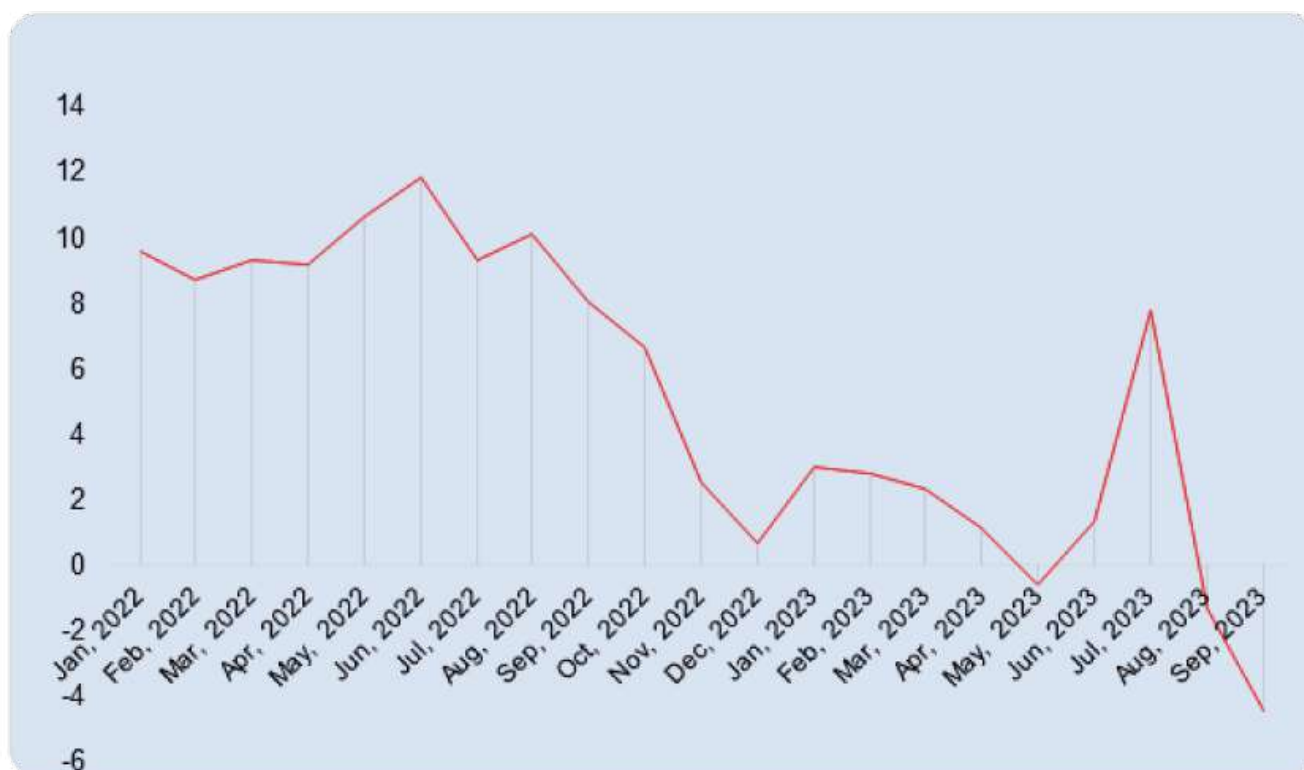
## INFLATION PROJECTIONS

### WHOLESALE PRICE INDEX INFLATION

India's wholesale prices stayed in deflationary mode for the sixth month in a row this September, albeit only fractionally with inflation at - 0.26 % compared to - 0.52 % in August. The Wholesale Price Index (WPI) based inflation of 10.55 % in September 2022, created a high base effect.

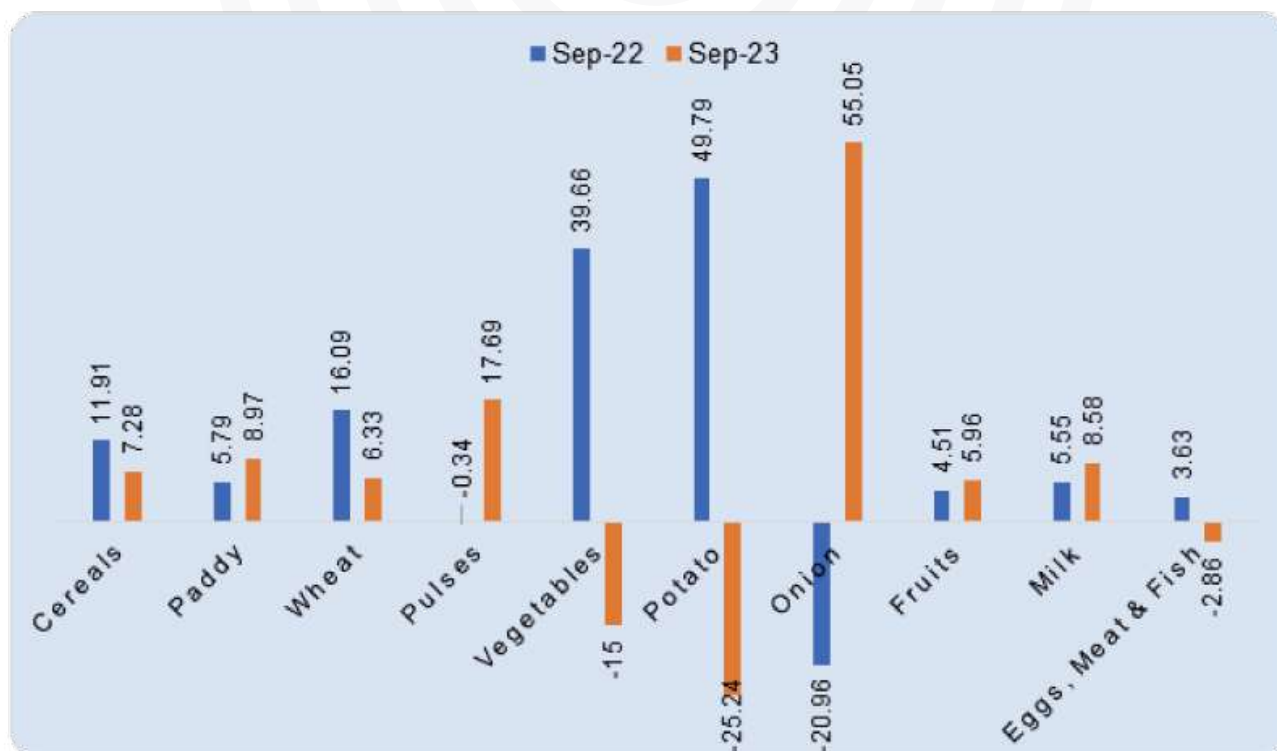


**FIGURE:** Line chart representation of wholesale price index-based inflation rates. Inset. Bar chart representation of the All India Wholesale Price Indices for food articles and Rates of Inflation (Base Year: 2011-12=100) for September, 2023.



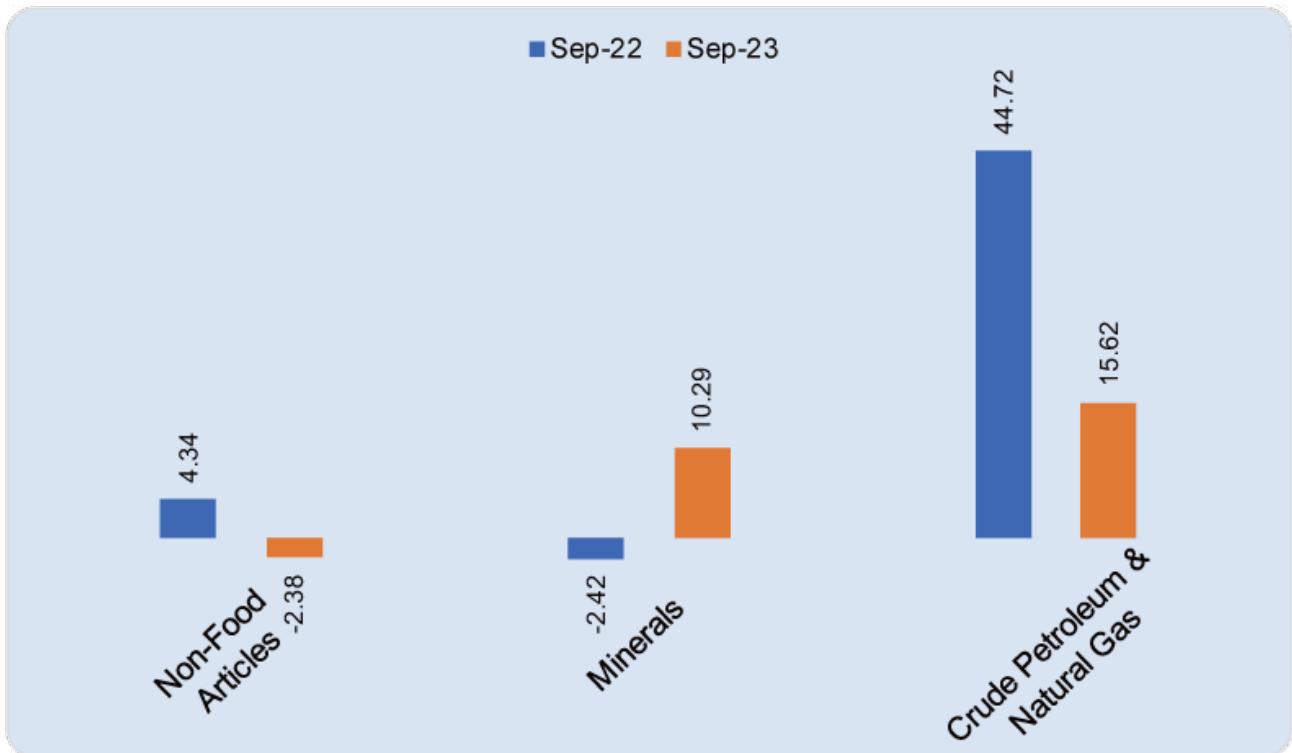
**FIGURE:** Line chart representation of wholesale food price index-based inflation rates.

Price rise in primary articles and food items eased sharply to 3.7 % and 1.5 %, respectively, from 6.34 % and 5.62 % in August. However, within food items, the price rise in onions accelerated to cross 55 % from 31.4 % in August, while inflation in pulses sped to 17.7 % from 10.45% in the previous month.



**FIGURE:** Column chart representation of All India Wholesale Price Indices for food articles and Rates of Inflation (Base Year: 2011-12=100) for September, 2023.





**FIGURE:** Column chart representation of All India Wholesale Price Indices and Rates of Inflation (Base Year: 2011-12=100) for September, 2023.

**RETAIL INFLATION:**

India's retail inflation eased from 6.83 % in August to 5.02 % in September, with food prices easing from almost 10 % to 6.6 %. Retail inflation had dropped to 6.83 % in August from a 15-month high of 7.44% in July, but food price inflation stood at about 10 %. Headline inflation has resumed its downward trend and has returned within the RBI's tolerance band after prices start moderating after sharp increase in price in tomatoes and other vegetables in the summer. India's government was likely to meet its 5.9 % fiscal deficit target in FY24. Revenue is expected to reach budgeted levels. Increased expenditures over subsidies, with higher-than-budgeted expenditure expected in some areas (such as additional LPG subsidy for the poor, higher MNREGA expenses) is expected. State governments' deficit is expected to be 2.8 % of GSDP, below the deficit target of 3 %, in line with past budget execution.

**COST OF THALI**

The cost of a vegetarian thali fell 1% year-on-year (Y-o-Y), while the cost of a non-vegetarian thali increased 1 % year-on-year (Y-o-Y) in September, 2023. However, the cost of a vegetarian thali fell 17 % from August levels, while the cost of non-vegetarian thali declined at a slower pace of 9% from August due to a 2-3% estimated increase in the price of broiler, which accounts for more than 50 % of the total thali cost. Fuel costs, which accounts for 14 % and 8 % of total cost of vegetarian and non-vegetarian thalis, respectively.

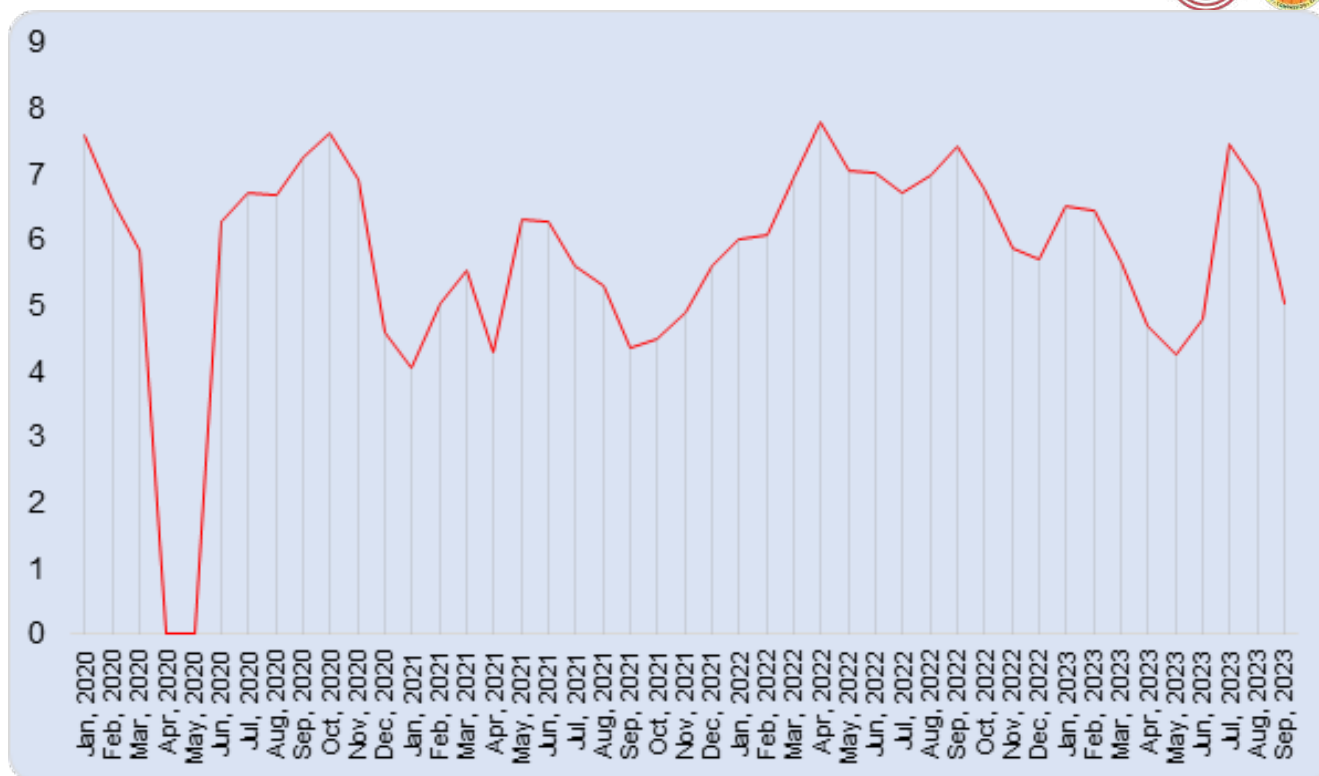
The cost of a 14.2 kg LPG cylinder fell to ₹ 903 from ₹ 1,103. Tomato prices declined around 62 % from ₹ 102 per kilogram (kg) in August to ₹ 39 per kg. The onion prices rose about 12 % between August and September, a 31 % decline in chili prices over the previous month offered some comfort.

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**FIGURE:** Line chart representation of the Consumer Price Index based inflation.

### BI-MONTHLY POLICY REVIEW

The Reserve Bank of India Monetary Policy Committee (MPC) in its recent Bi-monthly Policy Review raised its average inflation projection for the Second Quarter (July - September) from 6.2 % to 6.4 %. In the current quarter, the MPC forecast the average inflation of 5.6 % for the full year 2023-24. The RBI has projected an average inflation of 5.4 % in 2023-24, the International Monetary Fund and World Bank raised their estimates this month to 5.5 % and 5.9 %, respectively.

Headline retail inflation during the First Quarter averaged 4.63 % as against the RBI's projection of 4.6 %. Consumer Price Index (CPI) accelerated sharply in the last quarter with July and August seeing readings of 7.44 % and 6.83 %, respectively.

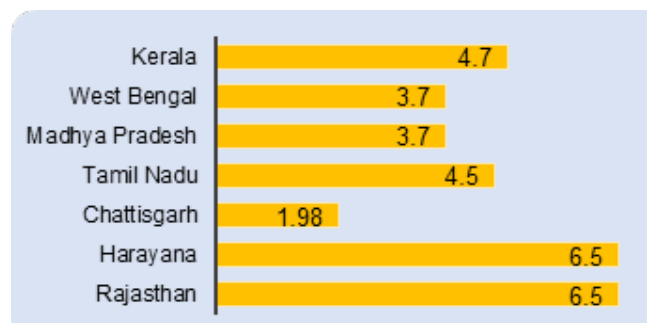
Retail Inflation during September eased to 5 % in September marking a return to the 2 % to 6 % tolerance range of the Reserve Bank of India (RBI). Retail inflation eased since July's 15-month high inflation rate of 7.44 %. The easing of inflation to 5 % in September but also matches the bank's upgraded estimate of 6.4 % average inflation between July and September. The easing of inflation to 5 % was partly aided by base effects from 2022 when the inflation pace was 7.4 % and partly by a sharp dip in volatile prices of tomatoes and vegetables and on LPG price cuts.

Rajasthan and Haryana recorded the steepest inflation at 6.5%. Inflation was the lowest in Chhattisgarh at 1.98 % and below the 5 % mark in eight other States, including Tamil Nadu (4.5 %), Madhya Pradesh and West

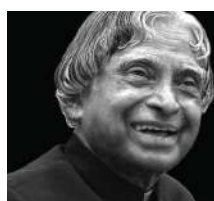
Bengal (3.7 % each), and Kerala (4.7 %). However, 13 of the 22 States for which the NSO had released inflation rates recorded a higher price rise than the headline figure of 5.02 %.

The Kharif harvest will have a bearing on inflation along with the El-Niño effect in Asia, and the evolution of the Israel-Palestine crisis. Moreover, costs of services like health, up 5.9% in September, and personal care, up 8.5 %, are still rising.

The RBI Monetary Policy Committee (MPC) decided to leave interest rates unchanged. The MPC last week raised its projection for average second-quarter inflation by 20 basis points, from the August forecast of 6.2 % to 6.4 %. The MPC is hoping that the recent reduction in domestic LPG prices combined with a lowering of vegetable prices would provide some near-term respite to price pressures.



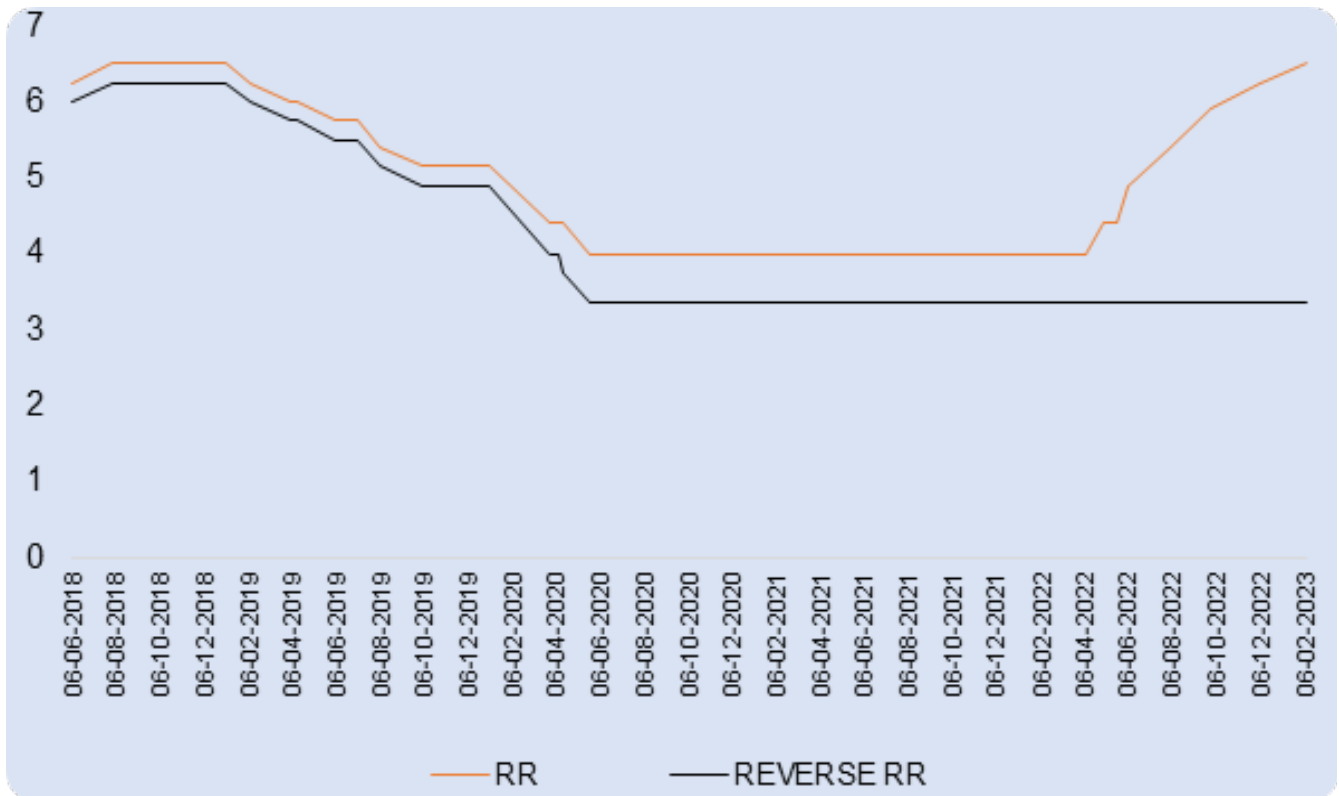
**FIGURE:** Bar chart representation of the Consumer Price Index based inflation of different states of India.



*You have to dream before your dreams can come true..*

- A. P. J. ABDUL KALAM





**FIGURE:** Line chart representing the Liquidity Adjustment Facility (LAF). Source: Reserve Bank of India (RBI) Handbook of Statistics

*“policy pertaining to the deployment of monetary resources under its control for the purpose of achieving GDP growth and lowering the inflation rate.”*

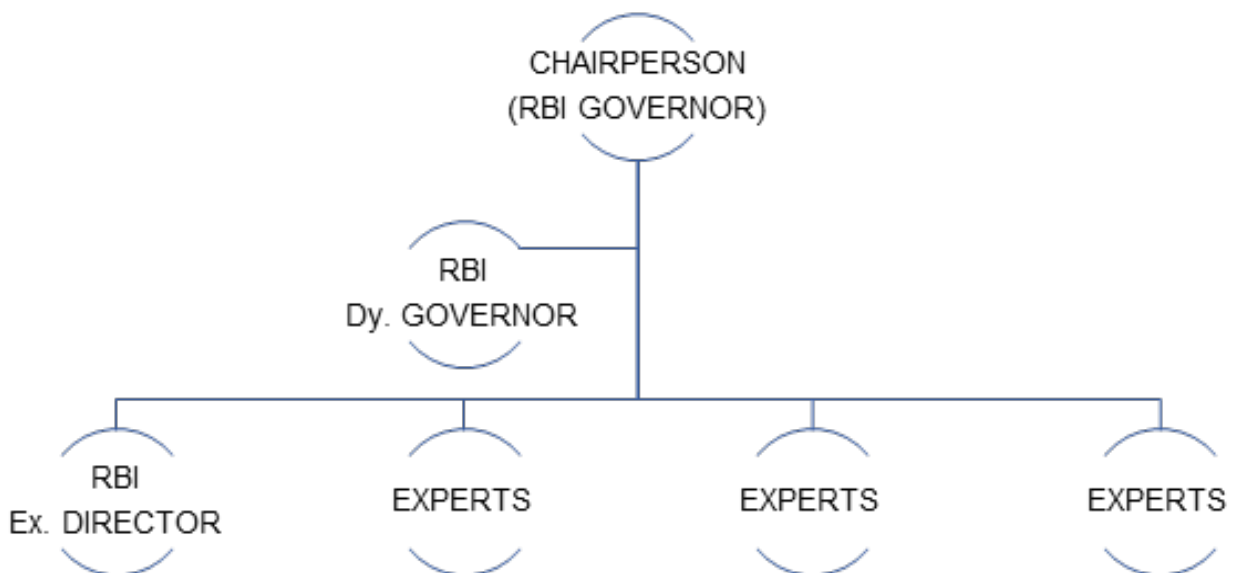
-MONETARY POLICY

**MONETARY POLICY COMMITTEE (MPC)**

- **CONSTITUTING ACT:** Section 45ZB - Reserve Bank of India Act, 1934.
- **MANDATE:** Frame monetary policy to limit CPI (All India) between 2 % – 6 %
- **STRATEGY:** Flexible Inflation Targeting.
- **CONSTITUTION:** The B N Srikrishna Financial Sector

Legislative Reforms Committee and later Ujjit Patel Panel on Monetary Policy recommended for replacing Technical Advisory Committee (TAC) with a Monetary Policy Committee. The Union Finance Ministry constituted MPC as a statutory body under Section 45ZB of Reserve Bank of India (RBI) Act, 1934.

- **MANDATE:** Frame monetary policy using quantitative and qualitative tools.
- **COMPOSITION:**





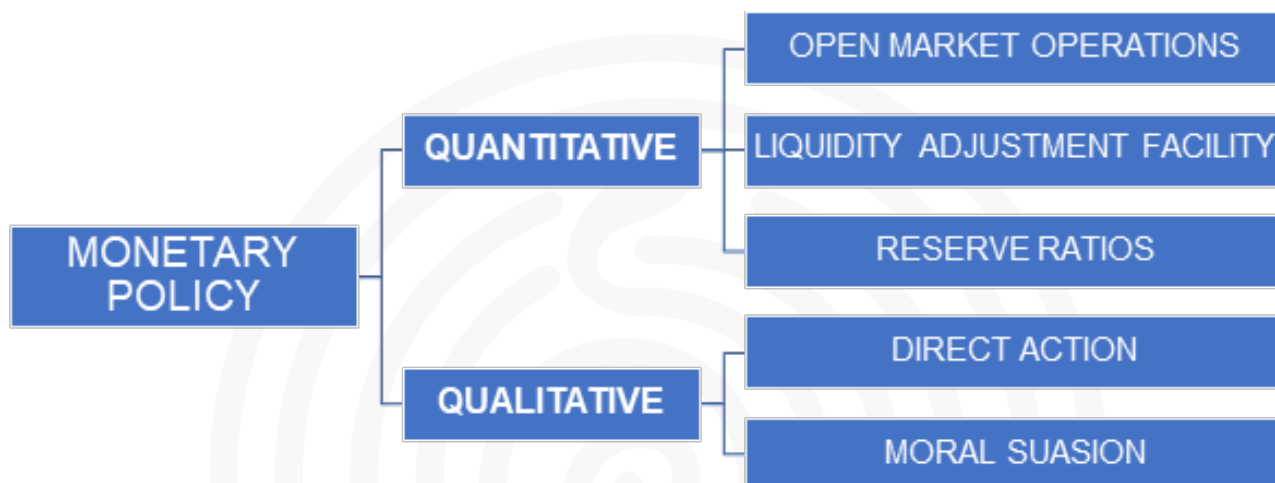
- **SELECTION:** The Financial Sector Regulatory Appointments Search Committee (FSRASC), headed by the Cabinet Secretary with RBI Governor and Economic Affairs Secretary and 3 experts in the field of economics or banking or finance or monetary policy recommends the nominees to be appointed by the Centre.
- **TERM:** Enjoy a tenure of 4 years and shall not be eligible for reappointment.
- **VOTING:** Decisions will be taken by majority vote with each member having a vote.

- **ROLE OF RBI GOVERNOR:** The RBI Governor do not enjoy a veto power to overrule the other panel members, but will have a casting vote in case of a tie.

'policy of the Central Bank related to the deployment of monetary resources under its control for the purpose of achieving GDP growth and lowering the inflation rate.'

- RBI MONETARY POLICY

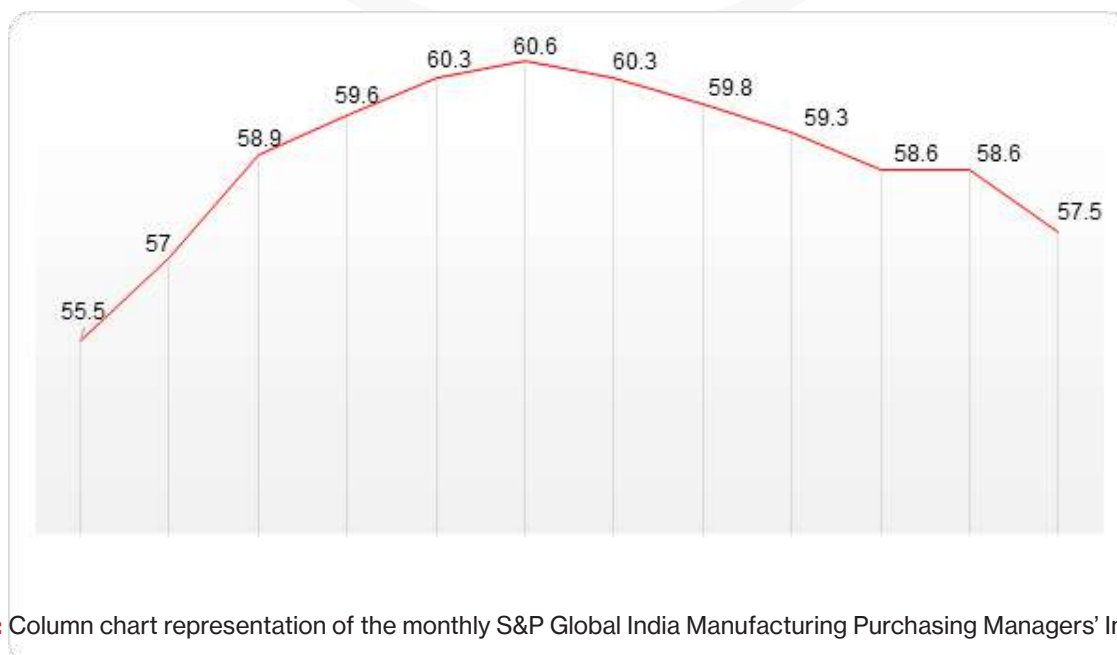
Monetary policy instruments are of two types namely qualitative instruments and quantitative instruments.



### MANUFACTURING PMI

The seasonally adjusted S&P Global India Manufacturing Purchasing Managers' Index (PMI) slid from 58.6 in August to 57.5 in September. The S&P Global India Manufacturing PMI was the 27th straight month of increase in manufacturing activity but the softest pace since April, as output expanded the least in five months amid a slowdown in new orders. Also, growth in foreign sales eased from August's 9-month peak but remained sharp. Meantime, employment picked up and was strong by historical standards while backlogs fell fractionally. Buying levels increased at a robust rate that was aligned with

those seen for new orders and production. Delivery times lengthened a bit following a six-month period of improving vendor performance. On prices, input cost inflation eased to its lowest mark in over three years, mainly due to lower costs for aluminium and oil. Meantime, prices charged rose at a solid and faster rate that outpaced its long-run average. Finally, confidence hit its highest in 2023 so far, supported by buoyant customer appetite, advertising, and expanded capacities. Manufacturers cited higher labour costs combined with upbeat business confidence and buoyant demand to raise output charges at a sharper pace than the long-run average. The input cost inflation slowed to the lowest in more than three years.



**FIGURE:** Column chart representation of the monthly S&P Global India Manufacturing Purchasing Managers' Index (PMI).





India's manufacturing industry showed mild signs of a slowdown in September, primarily due to a softer increase in new orders which tempered production growth. Both demand and output saw significant upticks and manufacturers held a strongly positive outlook for production.

Growth of new export orders softened from August's nine month high, but remained sharp. Firms noted new business gains from clients in Asia, Europe, North America and the Middle East. Factories' output rose at the slowest pace in five months, but was still above the

long-term average and firms exuded the highest optimism about business prospects a year ahead so far in 2023. This spurred a pick-up in hiring growth over August levels at a pace that S&P Global reckoned was strong by historical standards. Together, these indices point towards a favourable trajectory for the Indian manufacturing industry.

### SERVICES PMI

New orders rose to its second-fastest rate since June 2010 pushing the S&P Global India Services Purchasing Managers' Index (PMI) from 60.1 in August to 61 in September.



**FIGURE:** Column chart representation of the monthly S&P Global India Services Purchasing Managers' Index (PMI).

Participants cited growth in demand from clients in Asia, Europe and North America. Growth in new international orders slowed to a three-month low, yet was one of the quickest since September 2014. The S&P Global India Services Purchasing Managers' Index (PMI) reading in September is lower than July's 13-year high of 62.3. The input cost inflation slowed to one of the lowest levels since late 2010, services firms raised prices at the slowest pace in six months.

Services charges rose at a softer rate as cost pressures receded to one of the lowest in two-and-a-half years. Although the latter indicates that near-term output price

inflation may cool, worries about potential fluctuations in food prices due to El Nino means the RBI is highly unlikely to cut rates until early next year. Improved optimism and buoyant demand conditions augured well for further growth in the sector.

### INDEX OF INDUSTRIAL PRODUCTION

India's industrial output surged at a 14-month high pace of 10.3 % in August, from a revised 6 % rise in July, aided by favourable base effects from last year when production levels had contracted 0.7 % and the best manufacturing performance since this April.

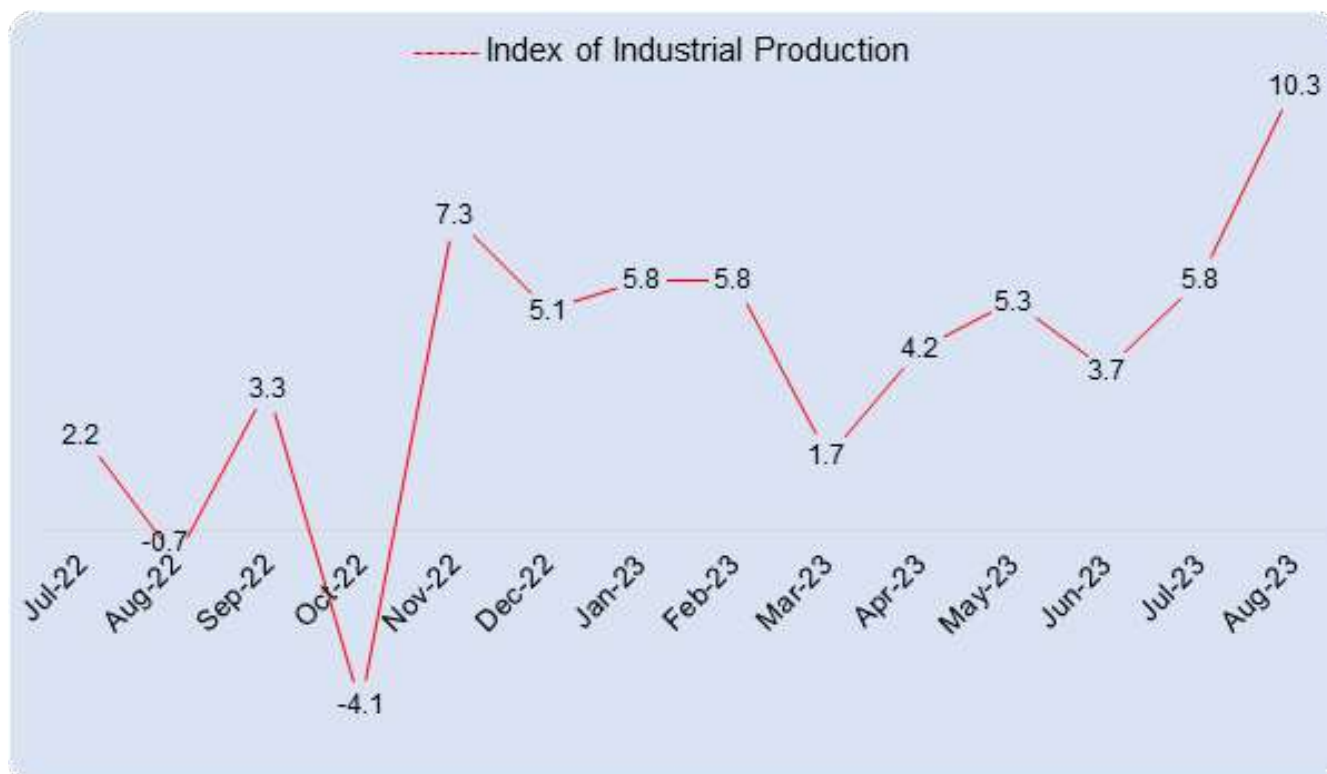
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**FIGURE:** Line chart representation of the Index of Industrial Production growth rates (on Y-o-Y basis in per cent).

Electricity and mining rose a sharp 15.3 % and 12.3 %, respectively. Manufacturing output grew 9.3 % in August, with just seven of 23 major segments recording a contraction compared with nine in July. Production in the export-dependent apparel and chemicals sectors dropped 17.1 % and 4.3 %, respectively. Computers and electronics also fell 8.7 %.

Consumer durables output grew for the first time in three months, at 5.7 %, and hit the highest levels since September 2022. Non-durable consumer items' output jumped 9 % year, but was 3.9% below July levels. Moreover, base effects played a role in their uptick, as durables' output had dropped 4.4% last August, while non-durables had plummeted 9 %. Three of the six use-based segments recorded a double-digit surge, on top of positive growth recorded last year, led by infrastructure and construction goods which grew in double digits for the fifth successive month, at 14.9 %. Capital goods jumped 12.6 %, with production reaching the highest levels in 2023-24, indicating strengthening investment demand. Primary goods grew 12.4 % and intermediate goods rose 6.5 %.

The production of consumer durables contracted

for the seventh time in eight months, though the extent of shrinkage dropped from 6.9 % in June to 2.7 % in July. The demand for non-durable consumer goods appeared to be strengthening, with an uptick of 7.4 % in their output compared with just 1.2 % in June. For the first four months of 2023-24, this is the only use-based segment of industry with negative growth, down 2.7 % from a year earlier.

Capital goods output, a reflection of planned investment activity, rose 4.6 % YoY in July, recovering from an eight-month low of 2.2 % in June. However, in absolute terms, the output levels were at a three-month low and 4.6 % below June's production. Nine manufacturing industries witnessed negative growth including electronics, which is disappointing given that it is part of the production-linked incentive schemes, and textiles continue to underperform due to the hard hit on exports.

The sustenance of this industrial growth will depend on consumer goods reviving, and can only be ascertained by data for the next three months. High inflation as well as dilution of pent-up demand will dampen future growth.



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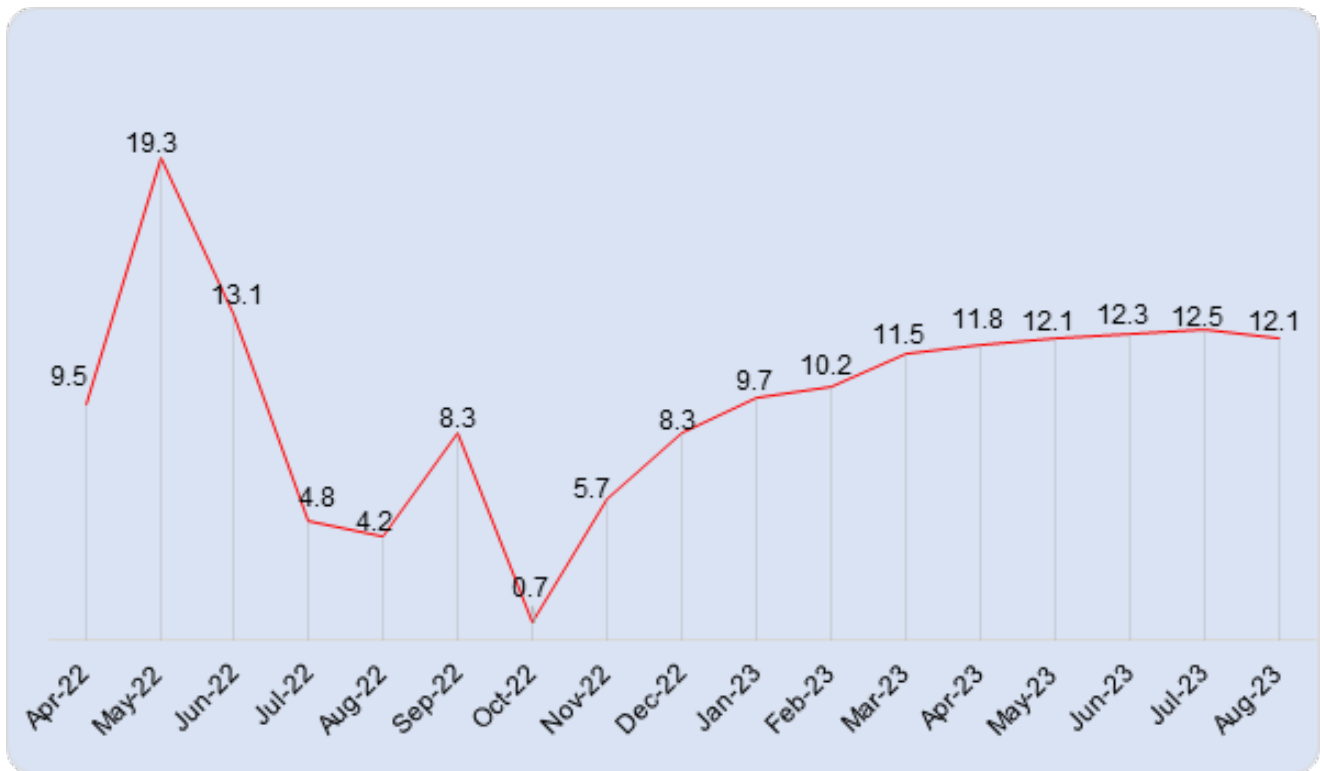
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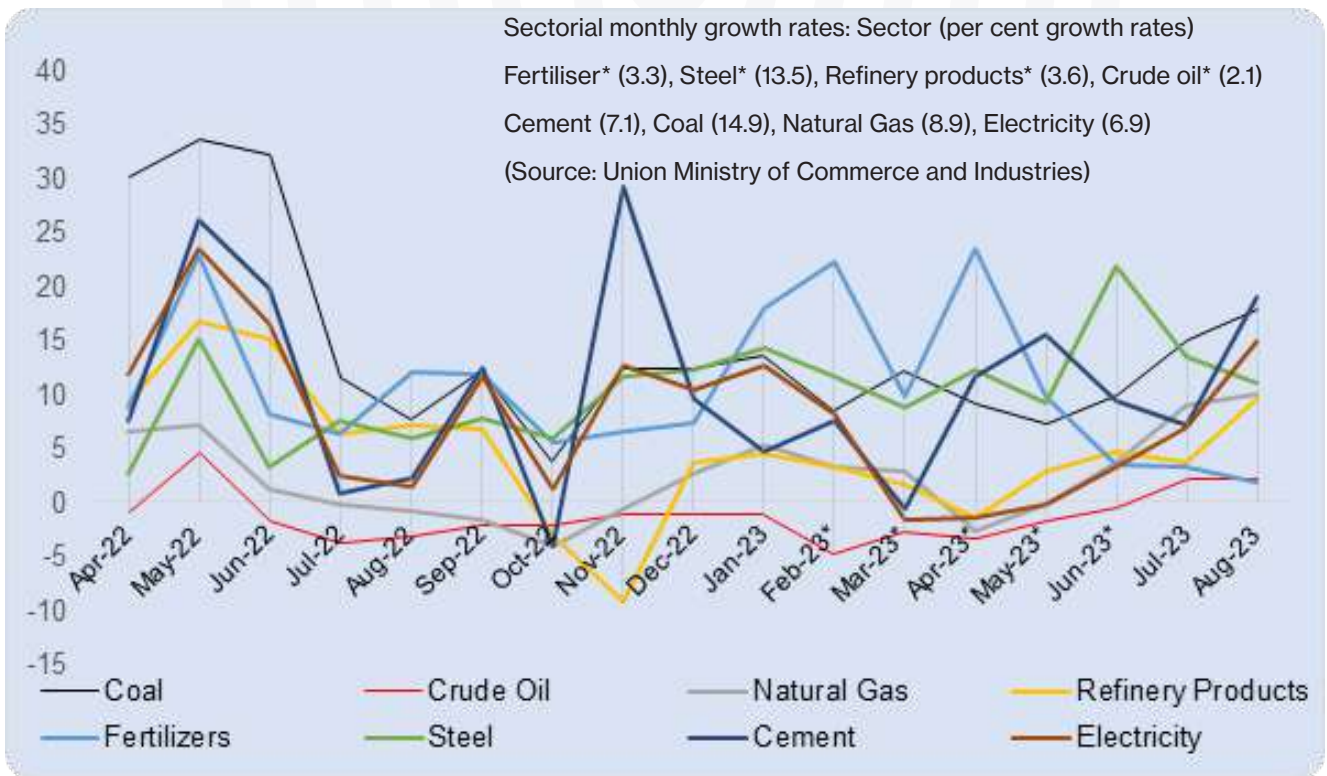




**CORE SECTOR INDUSTRIES**



**FIGURE:** Line chart representation of the core sector growth rates (on Y-o-Y basis in per cent)



**FIGURE:** Line chart representation of the sub-sectorial growth rates (on Y-o-Y basis in per cent) of core sector industries.

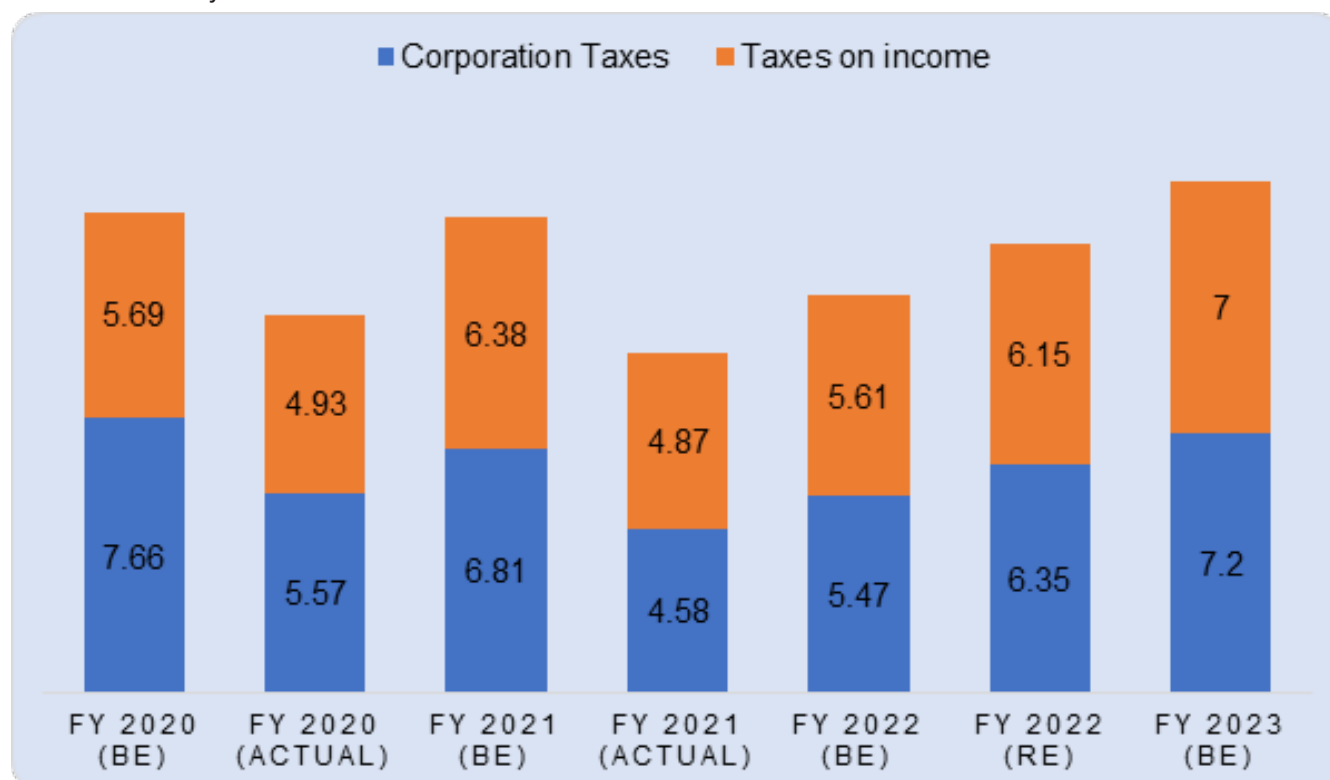


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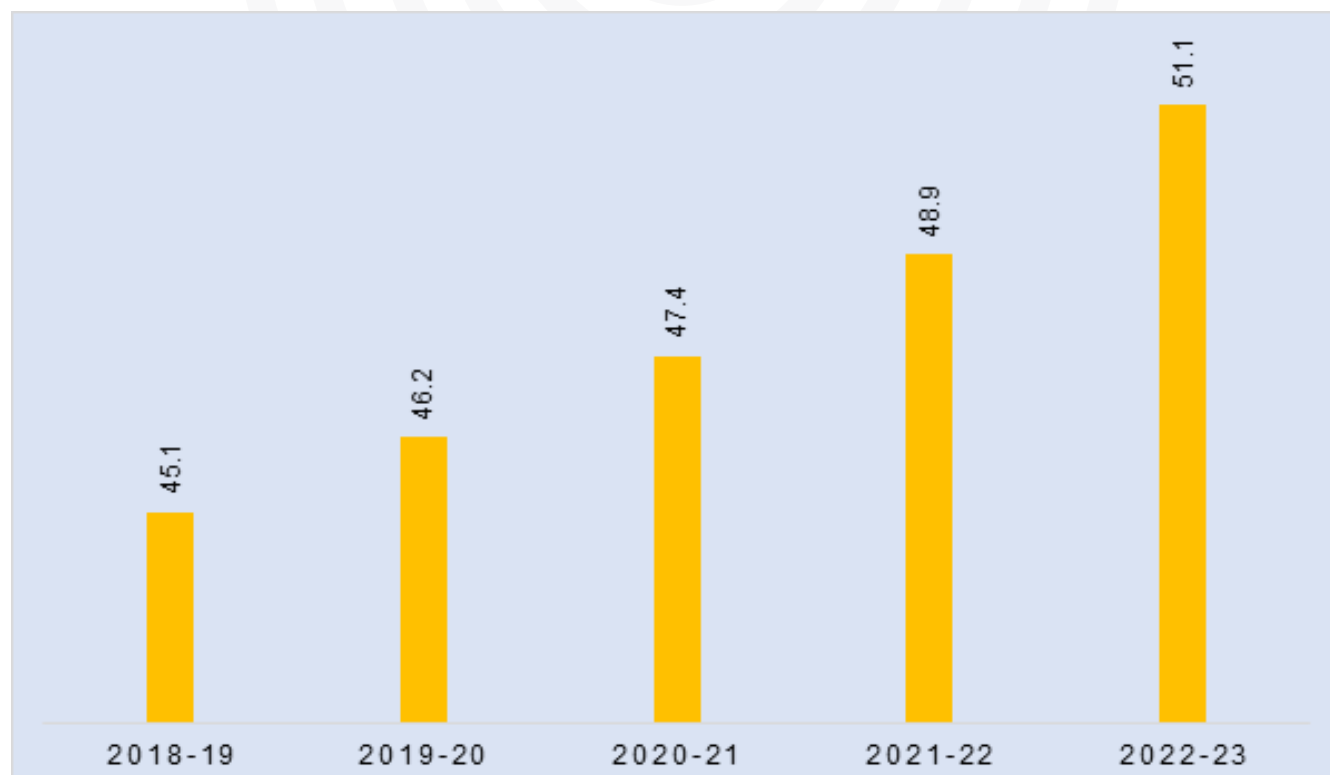


## TAX COLLECTIONS

India's net direct tax collections grew 21.8 % to ₹ 9.57 lakh crore by October 9, surpassing over half of the Budget estimates for this year.



**FIGURE:** Column chart representing the Gross Direct Tax collections.



**FIGURE:** Column chart representing the gross direct tax collections in total tax revenue

### PERSONAL INCOME TAXES

According to the provisional figures released by the Union Ministry of Finance, personal income tax receipts in India for the financial year 2023-24 (up to 9th October, 2023) stood

at ₹ 9,57,000 Cr., 21.82 % higher than the net collections for the corresponding period of the previous financial year. The growth in personal income tax receipts can be attributed to a number of factors, including:





1. Strong economic growth of India in recent years, which has led to an increase in incomes.
2. Focus on widening the tax base and simplifying the tax filing process.
3. Increase awareness among taxpayers of the importance of paying taxes.

The government is targeting to collect ₹ 12,10,000 Cr in personal income tax receipts for the financial year 2023-24. This is a significant increase over the previous year's collections, but it is achievable given the strong economic growth and the government's efforts to improve tax compliance. The share of direct tax receipts in India's total tax revenue has been increasing steadily over the past few years. In 2022-23, direct taxes accounted for 51.1 % of total tax revenue, up from 48.9 % in 2021-22.

### CORPORATE TAXES

According to the provisional figures released by the Union Ministry of Finance, corporate tax receipts in India for the financial year 2023-24 (up to 9th October, 2023) stood at ₹ 10,04,118 Cr., 17.95 % higher than the net collections for the corresponding period of the previous financial year. The growth in corporate tax receipts can be attributed to a number of factors, including:

1. Strong economic growth of India in recent years, which has led to an increase in corporate profits.
2. Focus on attracting foreign investment and boosting corporate tax collections.
3. Simplification of the corporate tax regime and the introduction of tax incentives for manufacturing and innovation.

The government is targeting to collect ₹ 12,55,000 Cr in corporate tax receipts for the financial year 2023-24. This is a significant increase over the previous year's collections, but it is achievable given the strong economic growth and the government's efforts to attract foreign investment and boost corporate tax collections.

### SECURITIES TRANSACTION TAXES

According to the provisional figures released by the Union Ministry of Finance, securities transaction tax (STT) receipts in India for the financial year 2023-24 (up to 9th October, 2023) stood at ₹ 2,37,000 Cr., 23.52 % higher than the net collections for the corresponding period of the previous financial year. The growth in STT receipts can be attributed to a number of factors, including:

1. Strong growth of the Indian stock market in recent years.
2. Increasing participation of retail investors in the stock market.
3. Focus on encouraging investment in the stock market through tax incentives and other measures.

The government is targeting to collect ₹ 3,00,000 Cr. in STT receipts for the financial year 2023-24. This is a significant increase over the previous year's collections, but it is achievable given the strong stock market growth and the government's efforts to encourage investment in the stock market.

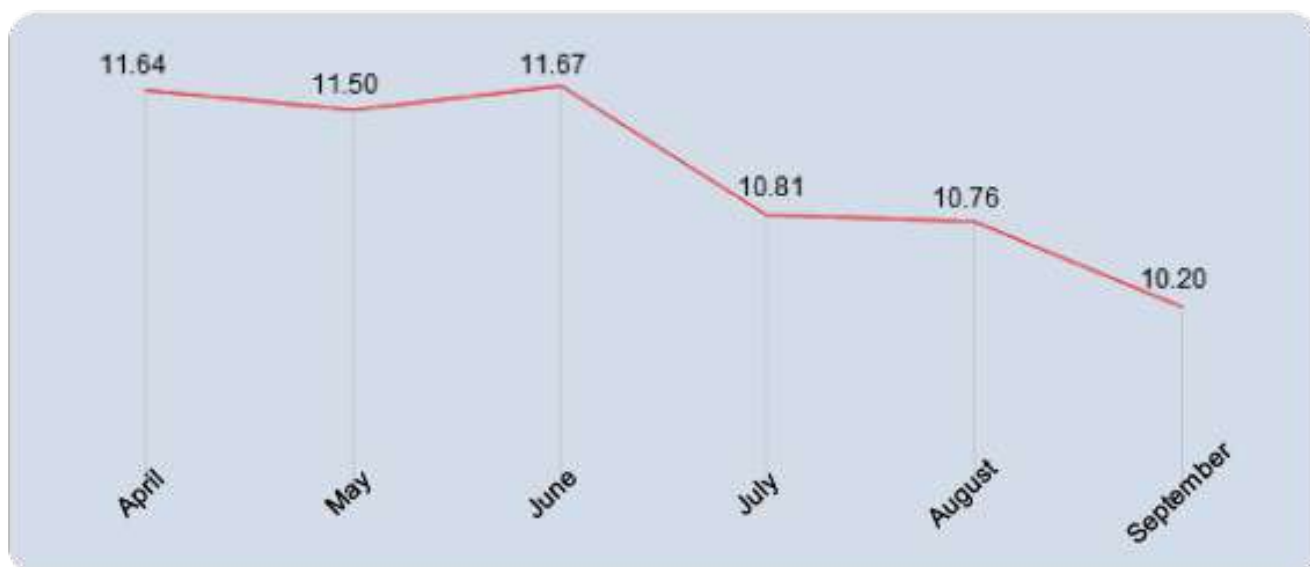
### INDIRECT TAX COLLECTIONS

India's GST revenues surpass ₹9.92 lakh crore, with an 11.1% YoY increase for the first half of the fiscal year. In the fiscal year 2023-24, average monthly GST revenues are robust at ₹1,65,418 crore, with September's collections slightly below the average but 2.3% higher than August, indicating potential for sustained ₹1.6 lakh crore collections during the festive quarter.

India's gross Goods and Services Tax (GST) receipts crossed the ₹ 1.60 lakh Cr. mark for the fourth time in 2023-24 during September, 2023 collecting ₹ 1,62,712 Cr., a 2.3 % increase over August GST figures of ₹ 1,59,069 Cr. The GST revenues for June 2021, based on domestic transactions between June 5 and July 5, rose a mere 2 % amid the second wave of the COVID-19 pandemic. However, India's gross Goods and Services Tax (GST) revenue growth slowed to a 27-month low of 10.2 % in September, from around 10.8 % in the previous two months.



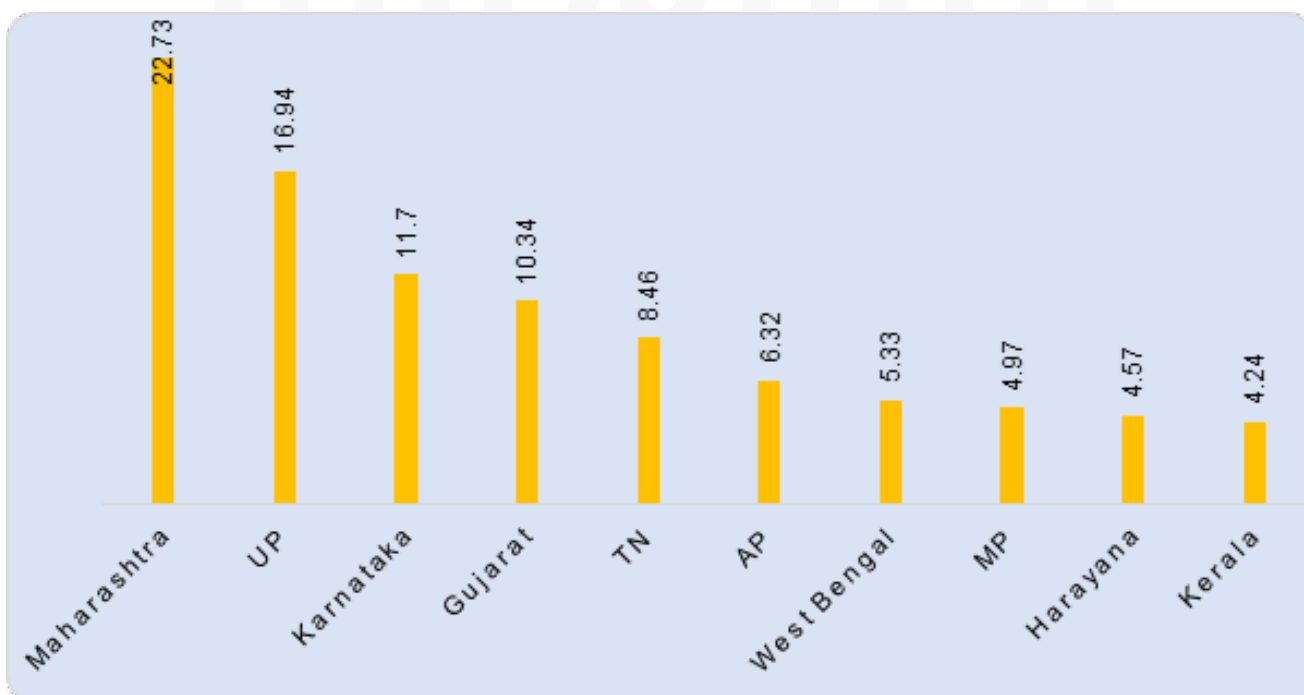
**FIGURE:** Column chart representation of Goods & Services Tax (GST) receipts (Cr.) (on Y-o-Y basis).



**FIGURE:** Line chart representation of growth rate of Goods & Services Tax (GST) receipts (Cr.) (on Y-o-Y basis).

**FIGURE:** Bar chart representation of Goods & Services Tax (GST) receipts (Cr.) (on M-o-M basis).

As per the recommendations of the Fifteenth Finance Commission, the share of states in the net proceeds of shareable central taxes has been fixed at 41%. This includes the share of states in GST receipts. The share of states in GST receipts varies from state to state depending on their consumption patterns. The states with higher per capita consumption have a higher share in GST receipts. The top 10 states account for over 80% of the total GST receipts.



**FIGURE:** Column chart representation of the share of states in GST receipts for the financial year 2023-24 (up to 9th October, 2023)



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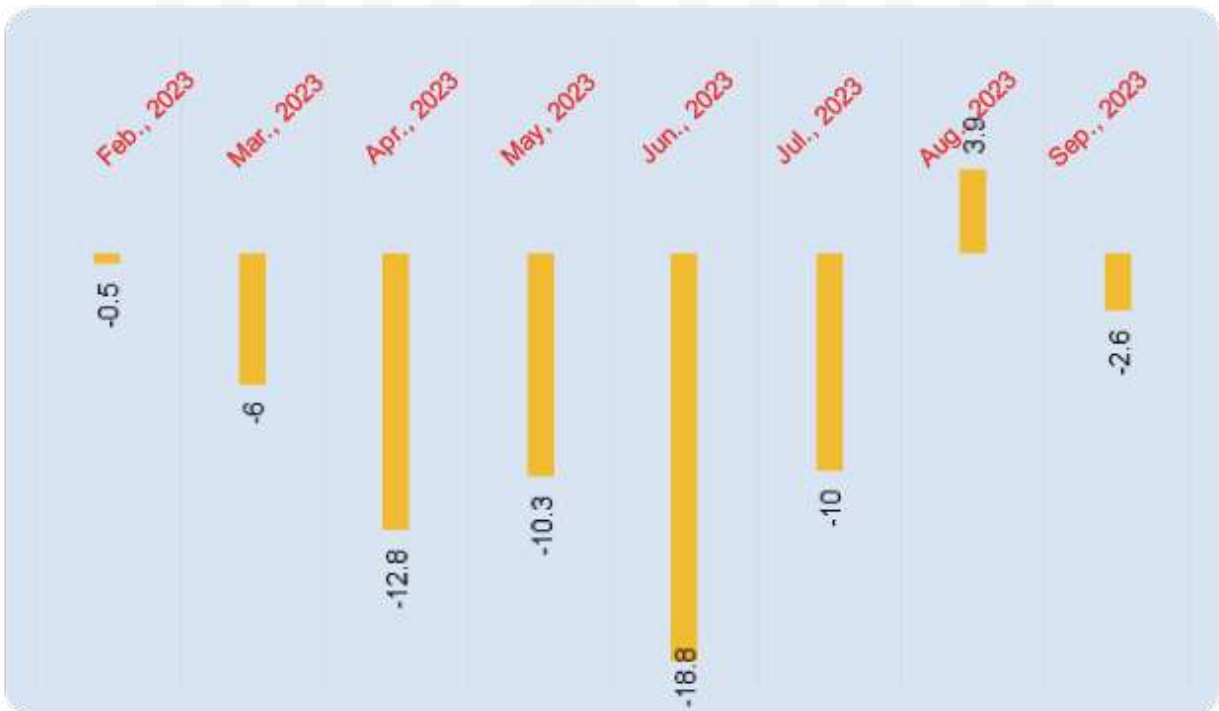




**FIGURE:** Column chart representation of the GST revenue growth rates.

**MERCHANDISE AND SERVICE TRADE**

According to the Ministry of Commerce and Industry, India's merchandise exports in September 2023 were estimated at US \$ 34.47 billion, a decline of 1.20% over September 2022. Merchandise imports in September 2023 were estimated at US \$ 53.84 billion, a decline of 13.67 % over September 2022. India's service exports in September 2023 were estimated at US \$ 29.37 billion, while service imports were estimated at US \$ 14.91 billion.



**FIGURE:** Column chart representation of Year on Year (Y-o-Y) merchandise export growth rates.



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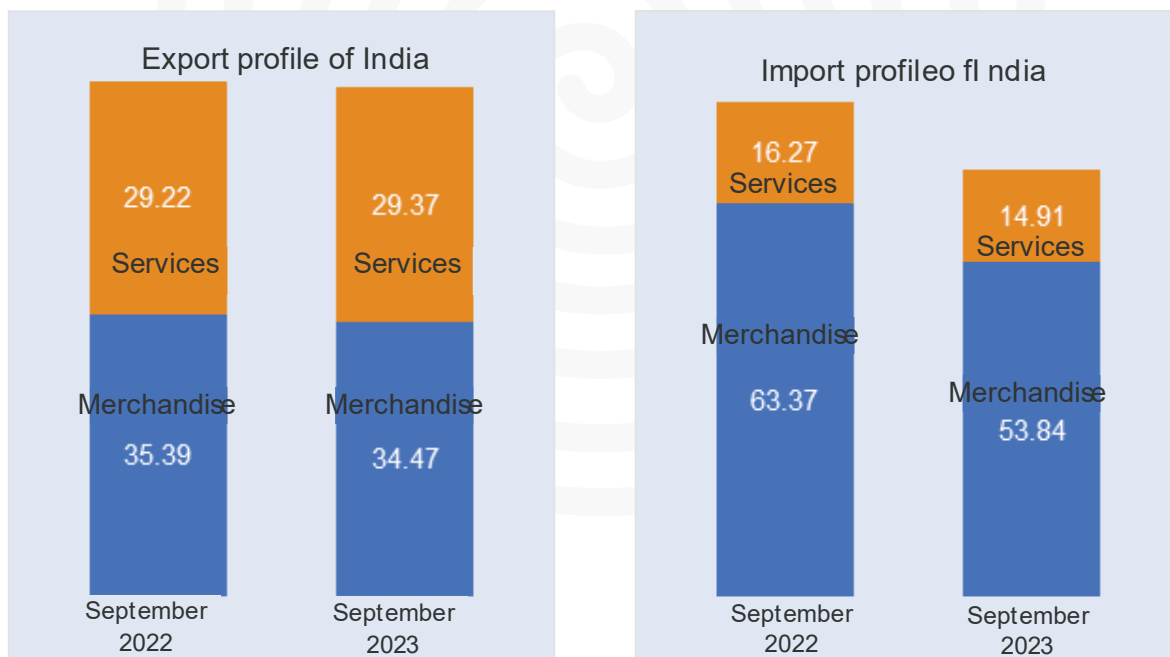
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**FIGURE:** Column chart representation of monthly value of merchandise exports and imports.



**FIGURE:** Column chart representation of monthly value of merchandise exports and imports.

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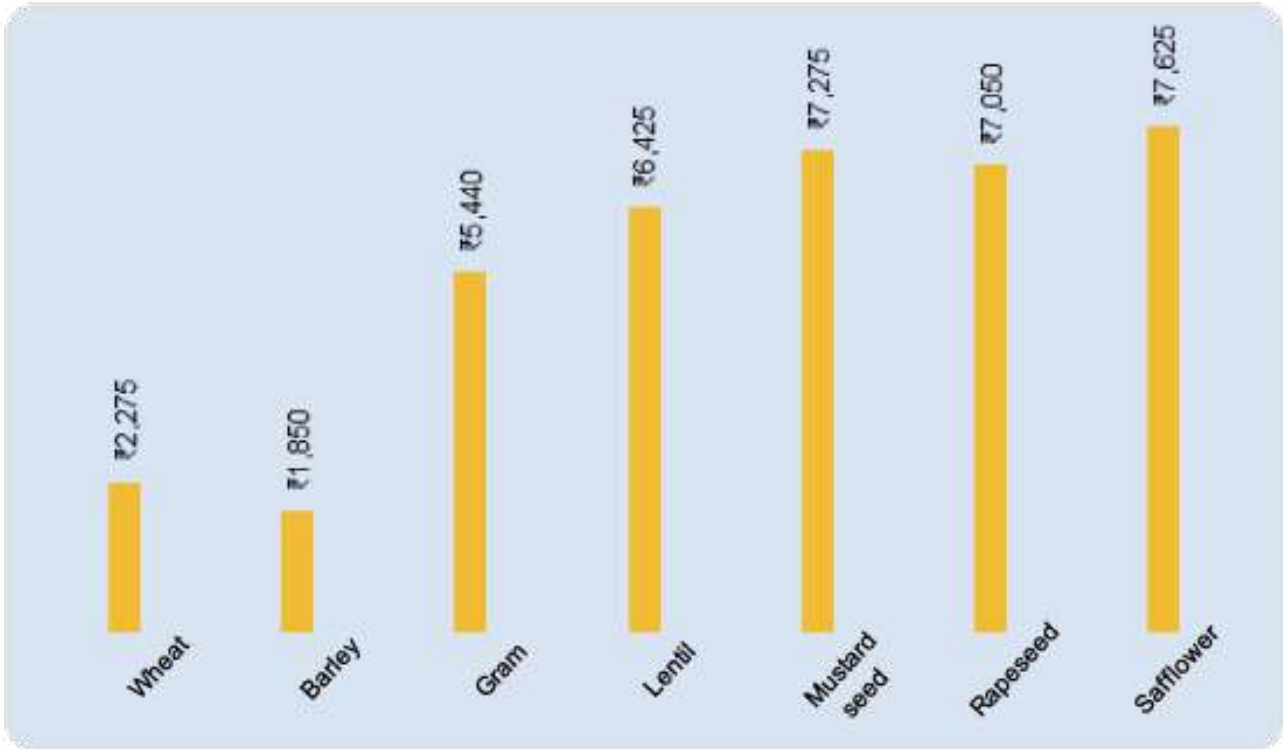


## CENTRE RAISES MSP FOR RABI CROPS

The Cabinet Committee on Economic Affairs (CCEA) has increased the Minimum Support Prices (MSP) for all Rabi crops for the financial year 2024-25.

The increase for wheat, the major Rabi crop, is ₹ 150 per quintal and the new price will be ₹ 2,275. The CCEA also increased the MSP for other Rabi crops, including barley,

gram, lentil, mustard seed, rapeseed, and safflower. The increase ranges from ₹ 105 per quintal for barley to ₹ 425 per quintal for lentil. The increase in MSP for Rabi crops is a welcome move for farmers. It will help them to get a better price for their produce and improve their income. The increase is also expected to boost agricultural production and ensure food security in the country.



**FIGURE:** Column chart representation of the Minimum Support Prices (MSPs) of Rabi crops per quintal

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## SALIENT FEATURES OF AGRICULTURAL PRICE POLICY

1. Remunerate farmers with stable and decent prices for their agricultural produce that ensure stable income, standard of living for farmers.
2. Provide staple food to consumer and raw material to the industries at reasonable price.
3. Achieve food self-sufficiency.
4. Meet other national policy objectives-nutritional security.

### MINIMUM SUPPORT PRICES

- **NATURE:** Prices announced by Government before the sowing season to encourage the farmers.
- **CALCULATION METHODOLOGY:**
  - The Cabinet Committee on Economic Affairs (CCEA) announce an MSP, based upon the recommendation of the Commission for Agricultural Costs and Prices (CACP)
- **CALCULATING AGRICULTURE PRODUCTION COSTS**
  - A2: Actual paid-out expenses incurred by farmers.
  - FL: Imputed value of unpaid family labour.
  - C2: Accounts for the rentals or interest loans, owned land and fixed capital assets over and above A2+FL.

\* CACP reckons only A2+FL cost for return; Actual paid-out expenses incurred by farmers and imputed value of unpaid family labour.

- **SIGNIFICANCE:**
  - Ensure stable prices for agricultural crops in the situation of a price fall in the market during bumper cropping seasons. The MSP mechanism shields farmers to an extent, from such risks, by guaranteeing a floor price for their produce.

- Ensure reasonable correlation between prices of agricultural commodities and manufactured goods.
- Ensure price parity in farm produce between two regions or the whole country.
- Helps to induce farmers to sow food crops to meet national policy objectives-nutritional security.
- Helps the farmers to accommodate higher standards of living with increased spending on durable consumer goods, automobiles or FMCG.

### LIMITATIONS OF MSP

Absence of government machinery for procurement for all crops except wheat and rice, which the Food Corporation of India actively procures under the PDS. As state governments procure the last mile grain, the Farmers of states where the grain is procured completely

by the government benefit more while those in states that procure less are often affected. The MSP-based procurement system is also dependent on middlemen, commission agents and APMC officials, which smaller farmers find difficult to get access to.

### CEREALS

- Paddy
- Wheat
- Maize
- Sorghum
- Pearl Millet
- Barley
- Ragi

### PULSES

- Gram
- Tur
- Moong
- Urad
- Lentil

### OILSEEDS

- Groundnut
- Rapeseed
- Soyabean
- Sesamum
- Sunflower
- Safflower
- Nigerseed

### COMMERCIAL CROPS

- Copra
- Sugarcane
- Cotton
- Raw Jute

## GOVT. EASES AIRCRAFT RECOVERY RULES

The Centre has notified the protection offered to a corporate debtor from recovery of dues under the Insolvency and Bankruptcy Code 2016 will not cover aircraft, helicopters and engines.

Go First had 54 aircraft in its fleet, and lessors of nearly all aircraft had sought de-registration of their assets over pending dues. Following the NCLT'S May order granting a blanket moratorium, lessors also approached the Delhi High Court to seek access to their aircraft. The lessors argued that the moratorium was in contravention of the Cape Town Convention and Protocol of 2001, to which India is also a signatory. The Convention states that in the event of a default, the lessor can terminate the agreement and take possession of the leased assets.

Lessors will now have to move NCLT or other Courts and seek deregistration and export of their aircraft. The Indian airlines leasing aircraft may have to pay a

premium due to the difficulties encountered by lessors to secure their assets.

The move may impact Go First's insolvency resolution proceedings under which the National Company Law Tribunal had granted it a blanket moratorium in May to shield it from lessors and creditors and also restrained the DGCA from accepting any applications for de-registration of aircraft from any lessors.

### Go First INSOLVENCY - HISTORY

Ashish Chhawchharia, the resolution professional for Go First, the erstwhile GoAir, has invited Expressions of Interest (EoI) from prospective Resolution Applicant in a prescribed format along with a non-refundable deposit of ₹ 25 lakh till August 9. The prospective Resolution Applicant should have a net worth of at least ₹ 3,000 Cr. and a track record of operating an airline.



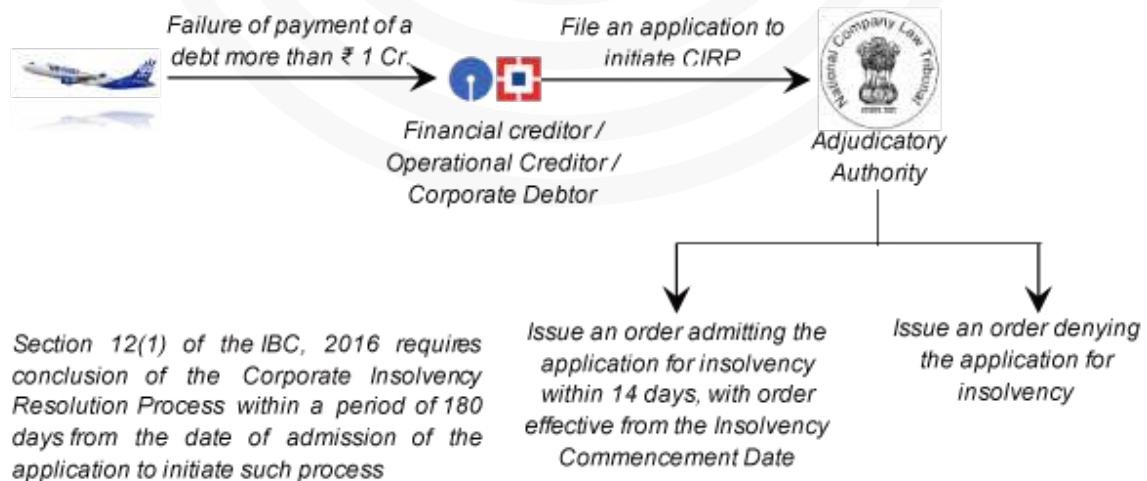


**FIGURE:** Bar chart representation of the net profit / loss (₹ Cr.) of Go First Airlines. Source: Go First.

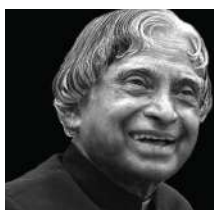
**BACKGROUND:** Go First Airlines claims to have been largely impacted by supply chain issues of Pratt & Whitney PW 1000G engines which power their A320neos. Go First Airlines filed for voluntary insolvency resolution proceedings before the National Company Law Tribunal in Delhi on 2 May 2023 following financial trouble and the cancellation of all its flights till 26 May due to a cash crunch. It also sued Pratt & Whitney in a US federal court seeking to enforce an arbitral award directing supply of engines as contracted.

### TIMELINE OF THE CORPORATE INSOLVENCY RESOLUTION PROCESS

**May 02, 2023:** Go First Airlines files for voluntary insolvency resolution proceedings before the National Company Law Tribunal (NCLT) under the Insolvency and Bankruptcy Code (IBC). **May 03, 2023:** Go First Airlines suspends all flights. **May 10, 2023:** The National Company Law Tribunal (NCLT) admits Go First's insolvency petition.



**May 12, 2023:** The National Company Law Tribunal (NCLT) appoints Ashish Chhabra as the Interim Resolution Professional (IRP) for Go First Airlines.

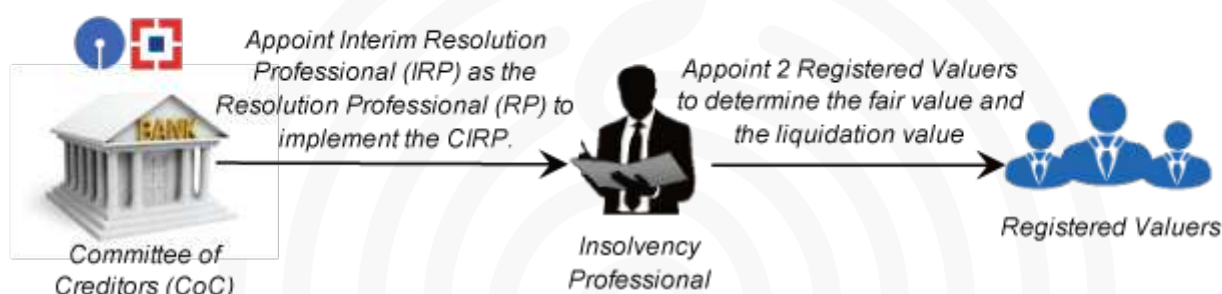


*You have to dream before your dreams can come true..*

- A. P. J. ABDUL KALAM

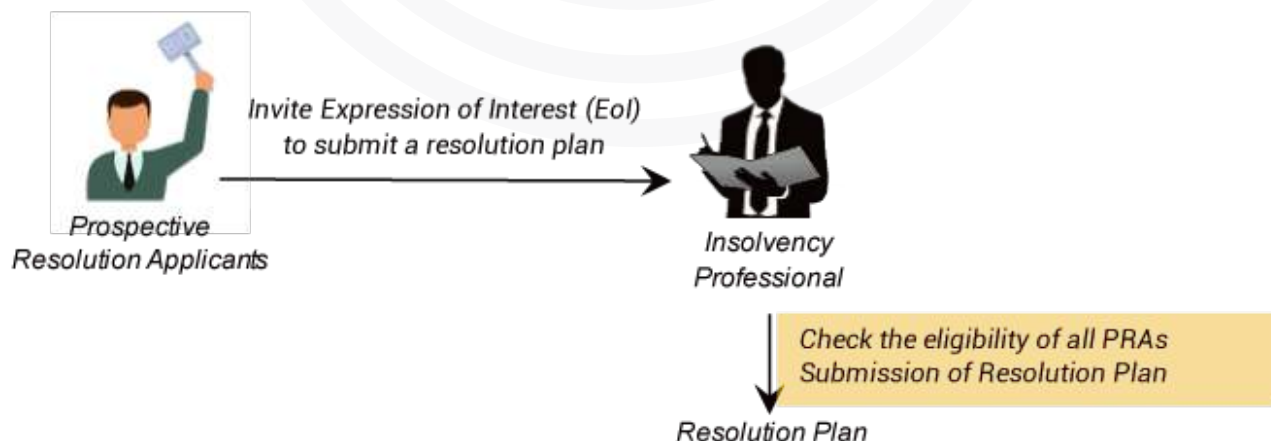


*Declare moratorium under Section 14 of the Code  
Transfer the control and custody of the corporate debtors to the IRP  
Suspend the powers of the Board of Directors or the partners of the corporate debtor*



*Appoint any professional, in addition to registered valuers to assist in discharging duties in the conduct of the corporate insolvency resolution process.  
Sell an unencumbered asset(s)\* of the corporate debtor, other than in the ordinary course of business.  
Resolution professional shall form an opinion on whether the corporate debtor, subject to any transaction covered under Sections 43, 45, 50, or 66 of the Code.*

**June 01, 2023:** The Insolvency Resolution Professional (IRP) invites Expression of Interest (Eoi) from potential investors.  
**June 15, 2023:** The Insolvency Resolution Professional (IRP) shortlists three Expression of Interests (Eoi).



*"Be not afraid of greatness. Some are born great, some achieve greatness, and others have greatness thrust upon them."*

- WILLIAM SHAKESPEARE







**July 10, 2023:** The NCLAT upholds the NCLT's order admitting Go First's insolvency petition. July 11, 2023: The IRP invites final bids from potential investors. August 15, 2023: The IRP is expected to submit a report to the NCLT on the status of the insolvency proceedings

#### **STEPS INVOLVED IN THE INSOLVENCY RESOLUTION PROCESS UNDER THE IBC:**

1. Filing of an insolvency petition by a creditor or the corporate debtor itself.
2. Admission of the petition by the NCLT.
3. Appointment of an interim resolution professional (IRP).
4. Preparation of a resolution plan by the IRP.
5. Approval of the resolution plan by a majority of the creditors and the NCLT.
6. Implementation of the resolution plan.
7. Liquidation of the corporate debtor if the resolution plan is not approved.

#### **TIMELINE**

1. May 2, 2023: Go First files for voluntary insolvency resolution proceedings before the National Company Law Tribunal (NCLT).
2. May 10, 2023: The NCLT admits Go First's petition and imposes a moratorium on the airline, preventing its creditors from taking any legal action against it.
3. May 12, 2023: The NCLT appoints an interim resolution professional (IRP) to oversee the insolvency process.
4. June 1, 2023: The IRP invites expressions of interest (EOI) from potential investors.
5. June 15, 2023: The IRP receives EOI from several potential investors.
6. July 15, 2023: The IRP submits a report to the NCLT on the progress of the insolvency process.
7. August 1, 2023: The NCLT extends the moratorium on Go First until September 1, 2023.
8. September 1, 2023: The NCLT extends the moratorium on Go First until October 1, 2023.

### **HOUSEHOLD SAVINGS**

As per the Reserve Bank of India's (RBI) Monthly Bulletin in September, the households' net financial savings had fallen to 5.1 % from 11.5 % in 2020-21. Households' financial liabilities rose faster than their assets.

**OPTIMISTIC CLAIM:** There is evidence to support the government's narrative of a shift from financial to physical assets. There has been an increase in household construction during the post-COVID period. Between 2020-21 and 2021-22, the construction sector was the fastest growing sector, growing at nearly 15 % (when measured in 2011-12 prices), and 10 % between 2021-22 and 2022-23. Only the trade, hotels, transport and communications sector grew faster in the latter period. Housing loans from Scheduled Commercial Banks (SCBs) grew at double-digit rates in all years between 2018-19 and 2022-23, with loans from housing finance companies growing almost 17 times between 2019-20 and 2022-23.

Liabilities in other non-financial assets have also increased. Education and vehicle loans from SCBs increased significantly between 2021-22 and 2022-23, growing at 17 % and around 25 % respectively. The share of physical assets – excluding gold and silver – is almost 60 % of households' total net savings, with the share of financial savings reducing from 39.6 % in 2017-18 to 38.77% in 2021-22. Households took advantage of the low interest rates set by the RBI in the wake of the pandemic to purchase non-financial assets such as houses

**PESSIMISTIC CLAIM:** The fall in household net financial savings was driven largely by a rise in liabilities. Gross

financial assets declined marginally as a share of GDP between 2021-22 and 2022-23 from 11.1 % to 10.9 %. Gross liabilities, remaining steady at roughly 3.8 % of GDP between 2019-20 and 2021-22, increased to 5.8 % of GDP in 2022-23. This rise in liabilities would not imply households have reduced savings if increasing loans financed the construction and purchase of homes. However, there is evidence to the contrary. While loans for housing, education and vehicles have no doubt increased, other components of personal loans have risen even faster. The share of housing loans in total non-food personal loans from SCBs – including priority sector lending – has fallen from 51.08 % in 2018-19 to 47.4 % in 2022-23. The share of education loans has fallen from 3.32 % to 2.37 %, while vehicle loans have remained constant at around 12 %.

Outstanding credit card loans increased from 3.8 % to 4.7 % over this period, with loans against gold jewellery rising from 1.07 % to 2.16 %, and the category of "Other Personal Loans" – which excludes loans for purchasing consumer durables – showing the largest rise from 24 % to 27.42 %. While one cannot say what these loans are being used for, these categories of loans do not necessarily indicate that they are being used solely for asset creation. Households may be taking on credit card debt and taking loans against jewellery to finance consumption. The biggest contributor to the large rise in financial liabilities between 2021-22 and 2022-23 has been loans from non-banking institutions, which grew by almost ten times in just the last year, contributing to 32.1 % of the total rise in financial liabilities over this period.

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## INDIA TO DOUBLE INFRASTRUCTURE SPENDING TO ₹143 TRILLION

According to a report by CRISIL, India is expected to double its infrastructure spending to ₹ 143 trillion on infrastructure between fiscals 2024 and 2030, more than twice the ₹ 67 trillion spent in the past seven financial years starting 2017. Of the total, ₹ 36.6 lakh crore will be 'green' investments, marking a five-time rise compared with the amount spent during fiscals 2017-2023. This is a significant increase, and it reflects the government's commitment to investing in infrastructure to boost economic growth and create jobs.

The government is focusing on a number of infrastructure sectors, including transport, energy, urban development, and rural development. Some of the major infrastructure projects that are currently underway in India include the Dedicated Freight Corridors (DFCs), Bharatmala Pariyojana, Sagarmala, and Smart Cities Mission.

The investment in infrastructure is expected to have a number of positive benefits for the economy. It will boost economic growth by creating jobs and generating demand for goods and services. It will also improve the quality of life of people by providing them with better access to essential services such as transportation, energy, and water.

India is investing heavily on infrastructure projects for a number of reasons.

1. **Boost economic growth:** Infrastructure is a key driver of economic growth. It provides the foundation for businesses to operate and for people to move around. By investing in infrastructure, the Indian government is hoping to create jobs, attract investment, and increase productivity.
2. **Improve the quality of life:** Infrastructure also plays a vital role in improving the quality of life of people. It provides access to essential services such as transportation, energy, and water. It also helps to reduce pollution and improve public health.

3. **Achieve sustainable development:** Infrastructure is also essential for sustainable development. By investing in renewable energy, public transportation, and green buildings, the Indian government is hoping to reduce its carbon footprint and create a more sustainable future.

Here are some specific examples of how infrastructure investment is benefiting India:

1. **Improved transportation:** New roads, railways, and airports are making it easier and faster for people and goods to move around India. This is helping to boost trade and investment and create jobs.
2. **Increased access to energy:** The Indian government is investing heavily in power generation and transmission. This is helping to provide more people with access to electricity and improve the reliability of the power supply.
3. **Better water supply and sanitation:** The Indian government is also investing in water supply and sanitation projects. This is helping to improve public health and reduce pollution.
4. **Smart cities:** The Indian government is developing 100 smart cities across the country. These cities will use technology to improve the efficiency and sustainability of urban services.

Overall, infrastructure investment is essential for India's economic growth, social development, and sustainable future. By investing heavily in infrastructure, the Indian government is hoping to create a better future for all Indians. India's gross domestic product is expected to grow at an average of 6.7% through fiscal 2031, to be the fastest-expanding large economy. Per capita income is seen rising from \$ 2,500 now to \$ 4,500 by 2031, creating a middle-income country, underpinned by massive infrastructure development.

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## INDIA'S MARITIME ECONOMY

Prime Minister Narendra Modi unveiled the 'Amrit Kaal Vision 2047', a long-term blueprint for the Indian maritime blue economy, while inaugurating Global Maritime India Summit 2023 in Mumbai through video conference.



**FIGURE:** Map of the Major Ports of India.

The blueprint outlines strategic initiatives aimed at enhancing port facilities, promoting sustainable practices, and facilitating global collaboration. The policy underscores the role of sea routes in global trade, emphasizing the need for a reliable global supply chain in the post-corona world. The capacity of major ports in India has doubled, and the turnaround time for big vessels has come down to less than 24 hours compared with 42 hours. The foundation stone for projects worth more than ₹ 23,000 crore that align with India's maritime blue economy.

India's ancient trade and cultural ties with Mesopotamia, Mediterranean rim countries; South East Asia, China, Middle East and Africa are testimonial to our rich maritime heritage. India is located strategically on key international maritime trade routes with a vast coastline, approximately 7500 km long and 14500 km of potentially navigable waterways. India is also strategically located in the corridor through which substantial part of the east-west seaborne traffic flows.

- 200 MAJOR AND MINOR PORTS

- 1400 vessels

GROSS TONNAGE - 12.2 million.

PORT CAPACITY - 1500 MMTPA



**FIGURE:** Column chart representation of the capacity of ports of India in Million Metric Tons in 2022.

India has 12 major ports and 185 minor or intermediate ports. It is estimated that the 12 major ports handle about 75 % of the country's oceanic traffic. Nearly 90 % of India's overseas trade by volume is carried through ships of which 92 % is carried by foreign flag vessels.

### SAGARMALA

"transforming the existing Ports into modern world-class Ports and integrate the development of the Ports, the Industrial clusters and hinterland and efficient evacuation systems through road, rail, inland and coastal waterways



resulting in Ports becoming the drivers of economic activity in coastal areas."

**NODAL MINISTRY:** Union Ministry of Ports, Shipping and Waterways.

**MANDATE:** Unlock the potential of waterways and the coastline to enhance the performance of the domestic logistics sector economically.

### COMPONENTS

MODERNIZATION OF EXISTING PORTS AND DEVELOPMENT OF NEW PORTS.

PORT-LED INDUSTRIALIZATION

ENHANCED CONNECTIVITY OF PORTS TO INDUSTRIAL CLUSTERS IN COASTAL AREAS AND HINTERLANDS.

COASTAL COMMUNITY DEVELOPMENT.

Double the current share of coastal shipping in India's overall modal mix from 6 % to 12 % by 2025 increasing the Port capacity of India to 2500 MMTPA by 2025.

### SAGARMALA DEVELOPMENT COMPANY (SDC)

The Centre constituted the Sagarmala Development Company (SDC) under the Companies Act, 2013.

- Identification of prospective projects.
- Assist the project SPVs to conduct pre-feasibility and feasibility studies,
- prepare DPR,
- obtain requisite approvals and clearances,
- bid out projects for private sector participation,
- putting in place suitable risk management measures for strategic projects.
- Raise long term financing from multilateral and bilateral agencies leveraging budgetary resources to support the project Special Purpose Vehicles (SPVs).
- Manage the coastal community development scheme and fund coastal community development projects identified under the Sagarmala Programme.

### Project UNNATI

- NODAL MINISTRY: Union Ministry of Shipping:
- Identify KPIs regarding operations and finance of the 12 major ports to benchmark its operational and financial performance with selected Indian private ports and best-in-class international ports for identifying improvement areas.
- Undertake capability maturity assessment for key processes and functional capabilities (e.g., IT, HR, Environment, and Health) and identify gaps and areas for further strengthening.
- Detailed deep-dive diagnosis and root cause analysis for the identified opportunity areas in each of the 12 major ports to understand underlying reasons for performance bottlenecks.
- Develop practical and actionable solutions on the basis of root cause findings, and develop a comprehensive improvement roadmap for each of the 12 major ports.

### Coastal Berth Scheme: Improve evacuation infrastructure for cargo and passenger by sea or NwS.

- Construction / up-gradation of coastal berths in Major Ports / Non-Major Ports;
- Construction of platforms / jetties for hovercrafts & seaplanes by Ports / State Governments & passenger jetties in National Waterways and islands by State Governments;
- Mechanization of berths by Major Ports / Non-Major Ports;
- Dredging of Major Ports/operational Non-Major Ports;
- Construction of breakwater for existing and Greenfield Ports.

It entails investing ₹ 8.5 trillion (equivalent to ₹9.7 trillion, US\$130 billion or €110 billion in 2020) (2018) to set up new mega ports, modernizing India's existing ports, developing of 14 Coastal Economic Zones (CEZs) and Coastal Economic Units, enhancing port connectivity via road, rail, multi-modal logistics parks, pipelines & waterways and promoting coastal community development, with the aim of boosting merchandise exports by US\$110 billion and generating around 10 million direct and indirect jobs

## NATIONAL STRATEGY ON ROBOTICS

**CONTEXT:** Six working groups, which had been formed to mull the Indian government's artificial intelligence (AI) roadmap, have submitted the first edition of their report, adding that the report's recommendations included public-private partnerships to make semiconductors for AI applications.

### NATIONAL STRATEGY ON ROBOTICS

The National Strategy on Robotics of India is a draft strategy released by the Ministry of Electronics and Information Technology (MeitY) in August 2023 for public consultation. The strategy aims to position India as a global leader in robotics by 2030 by enhancing the research and development capabilities of the robotics ecosystem, promoting the adoption of robotics in key sectors, and building public trust in the technology.

- Strengthening the robotics innovation ecosystem: This includes increasing funding for robotics research, establishing centers of excellence in robotics, and promoting global collaboration.
- Promoting the adoption of robotics in key sectors: The strategy identifies four sectors of strategic importance for adoption of robotics, manufacturing, agriculture, healthcare, and national security.
- Building public trust in robotics: The strategy emphasizes the importance of ensuring the responsible and safe adoption of robotics. This includes developing ethical guidelines for the use of robotics, raising public awareness of the benefits of robotics, and addressing potential concerns about the technology.
- Creating a conducive environment for the growth and development of the robotics sector: The strategy proposes a number of measures to create a favourable





environment for the growth of the robotics sector in India, such as providing tax incentives for robotics companies and simplifying regulations.

The National Strategy on Robotics is a comprehensive and

ambitious plan to make India a global leader in robotics. The strategy has the potential to drive innovation, economic growth, and job creation in India. It can also help to improve the quality of life for citizens by making essential services more accessible and affordable.

## GST COUNCIL CLEARS MEASURES TO BOOST FOREIGN TRADE

The Goods and Services Tax (GST) Council has cleared a few measures to boost foreign trade, including enabling tax credits for services exporters receiving payments in rupees, critical for trade with countries such as Iran and Russia that face global sanctions.

The Government has been pushing for rupee-based trading arrangements with several countries to reduce the dependence on the U.S. dollar, and banks from over 20 nations have opened special rupee (INR) Vostro accounts with Indian banks to remit payments for their imports from India. However, many exporters of such services were being denied input tax credits under the GST regime as the norms required foreign currency receipts to recognise the 'export' status.

Issue: GST officers deny refund applications on the ground that receipt of consideration in INR did not meet the condition prescribed for the purpose of qualifying as 'exports of services.'

Recommendations of the GST Council: Issue a circular to clarify the admissibility of export remittances received in

Special INR Vostro account, as permitted by the Reserve Bank of India, for the purpose of consideration of supply of services to qualify as export of services under the Integrated GST [IGST] Act, 2017.

Effect: Bring respite to the exporters whose refunds of GST were stuck for a long time on account of the disputes in respect of this particular aspect, and they were also being subjected to GST demands.

ISSUE: Ambiguity with the explicit inclusion of such supplies for rebate.

Recommendations of the GST Council: Issuance of a circular to clarify the place of supply treatment for services entailing transportation of goods in cases where the location of supplier or the location of recipient of services is outside India

Effect: Undo the effects of a July 31 notification that had made it difficult for firms supplying goods or services to special economic zones (SEZs) to claim tax refunds.

## NEW INVESTMENTS SLOWED AGAIN IN Q2 OF 2023-24

Fresh investment announcements in the second quarter (July-September) of 2023-24, have dropped to ₹ 6.9 lakh Cr., 13 % lower than in the first quarter, and 21.5 % down from a year ago. A sharp dip in proposed outlays by the Union government and foreign investors, and a broad-based contraction across the manufacturing, mining, infrastructure, and electricity sectors. A total of 2,238 new projects with an aggregate investment intention of ₹ 6.88 lakh Cr. were announced in Q2, including the ₹ 3.93 lakh Cr. of private investment projects. Almost 2,745 new projects worth ₹7.91 lakh Cr. in Q1, with the projects' tally contracting 18.5 %.

Public capital expenditures driving the investment cycle in recent times sequentially declined 25.6% in Q2 to about ₹ 2.96 lakh Cr. from ₹3.97 lakh Cr. in Q1, which marked a 3.2% fall from the previous quarter. New projects from Union government agencies dropped 47.4% in Q2 following a 20.6% contraction in Q1, bringing proposed outlays between July and September to ₹ 1.02 lakh Cr. from over ₹2.44 lakh Cr. in the January-to-March 2023 period. Foreign investments shrank 66.5 % from Q1 levels to

₹28,000 Cr. Though domestic private players announced 17.8 % larger outlays in Q2, the number of new projects fell to 844 from 1,180 in Q1.

States' investment plans recorded a milder 4.7 % shrinkage in Q2 vis-à-vis Q1, when they had crossed ₹2.03 lakh Cr. The irrigation sector, which is usually driven by smaller-ticket investments initiated by States, was the only segment to clock a sequential uptick in Q2, with project outlays more than doubling to ₹12,000 Cr. from under ₹5,000 Cr. in Q1.

Among the States, Odisha and Telangana emerged as the top two States, accounting for over a third of proposed investments in the last quarter. Maharashtra, which saw the highest number of new projects (436) worth ₹78,550 Cr., was ranked third, followed by Karnataka, with projects worth ₹53,565 Cr. Gujarat had the second-highest number of projects (222), but was ranked eighth in terms of outlays involved, followed by Madhya Pradesh, which pipped Tamil Nadu that was ranked 10th with 98 projects worth ₹22,347 Cr.

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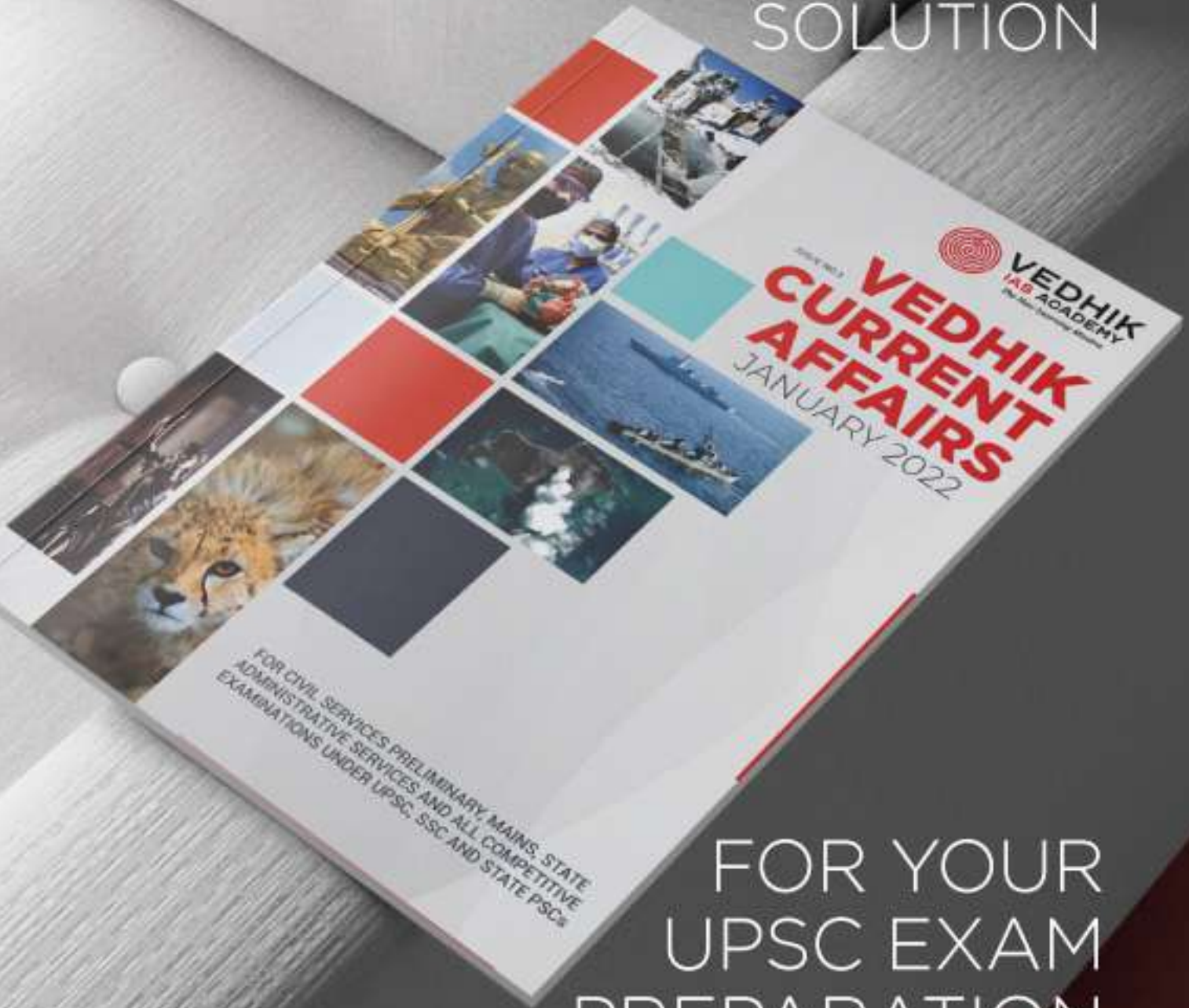
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# ECOLOGY







**CONTROVERSY SURROUNDS FUKUSHIMA  
NUCLEAR WASTEWATER DISPOSAL**

**TIGERS FACING MORTALITY CRISIS IN  
NILGIRIS**

**STATE OF THE RHINO 2023**

**CLIMATE POLYCRISIS AND CARBON  
ACCOUNTING**

**CLIMATE CHANGE THREATENS 2 IN 5  
AMPHIBIANS**

**CANALS IN GANGA-GHAGRA BASIN  
ENDANGER DOLPHINS: STUDY**

**HABITAT AND PREY SHAPE ASIATIC WILD  
DOG-TIGER COEXISTENCE: STUDY**

**THE HIGH COST OF CHEAP WATER REPORT**



## CONTROVERSY SURROUNDS FUKUSHIMA NUCLEAR WASTEWATER DISPOSAL

**CONTEXT:** Japan plans to release Fukushima's treated radioactive water into the sea, sparking concerns over health risks.

**BACKGROUND:** Japan's TEPCO is responsible for treating water at the Fukushima Daiichi power plant, which was damaged in 2011. The water undergoes various treatments, but tritium, a weak radioactive isotope, remains. TEPCO and the Japanese government argue its concentration is below international standards. Tritium, like hydrogen, can't be chemically extracted, so it's diluted with water before release into the sea.

### RADIOACTIVE WASTE WATER AND ENVIRONMENTAL POLLUTION

Radioactive waste water contains harmful radioactive materials, posing serious environmental pollution risks if improperly managed, potentially impacting ecosystems, human health, and water resources.

- **Dilution Effect:** The release of radioactive wastewater into the sea may be considered safe due to the vastness of the ocean, as it allows for significant dilution, reducing immediate harm.
- **Monitoring and Regulation:** Stringent monitoring and regulation are crucial to ensure that released radioactive waste is within safe limits and does not pose a threat to marine life or coastal communities.
- **Short-term Impact:** While initial dispersion may seem safe, short-term impacts on local marine ecosystems can still occur, affecting aquatic organisms and local fisheries.
- **Long-term Consequences:** The long-term consequences of radioactive contamination, such as bioaccumulation in marine life, can pose risks to human health through the consumption of contaminated seafood.

- **Ecosystem Vulnerability:** Delicate and vulnerable ecosystems near discharge sites are at higher risk, emphasizing the importance of careful location selection for wastewater release.

### VARIOUS REGULATION AT INTERNATIONAL LEVEL

- **IAEA Safety Standards:** The International Atomic Energy Agency (IAEA) establishes global safety standards for nuclear waste disposal to protect people and the environment.
- **Nuclear Waste Conventions:** International agreements like the Joint Convention on the Safety of Spent Fuel Management and the Safety of Radioactive Waste Management set guidelines for safe storage and disposal.
- **Ocean Dumping Ban:** The London Convention and Protocol prohibit the disposal of radioactive waste at sea, reducing marine contamination risks.
- **Basel Convention:** Regulates transboundary movements of hazardous waste, including some radioactive materials, to prevent improper disposal in developing countries.
- **Nuclear Liability Conventions:** International agreements like the Paris and Vienna Conventions establish liability frameworks to compensate for nuclear accidents, promoting accountability.
- **Radioactive wastewater poses a severe environmental threat, necessitating stringent containment and treatment measures. Its improper disposal can lead to long-lasting pollution, endangering ecosystems and human health. Effective management and regulation are imperative to mitigate these risks.**

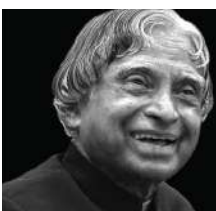
## TIGERS FACING MORTALITY CRISIS IN NILGIRIS

**CONTEXT:** 10 tigers, including cubs and adults, died in Nilgiris; Forest department's anti-poaching efforts to protect tigers.

**BACKGROUND:** Ten tigers, including six cubs and four adults, have tragically perished in the Nilgiris since mid-August. These losses occurred in separate incidents, with suspicions of poisoning in one adult tiger case. Concerns loom as the state forest department struggles to locate two mother tigresses, raising questions about the overall welfare of these endangered animals.

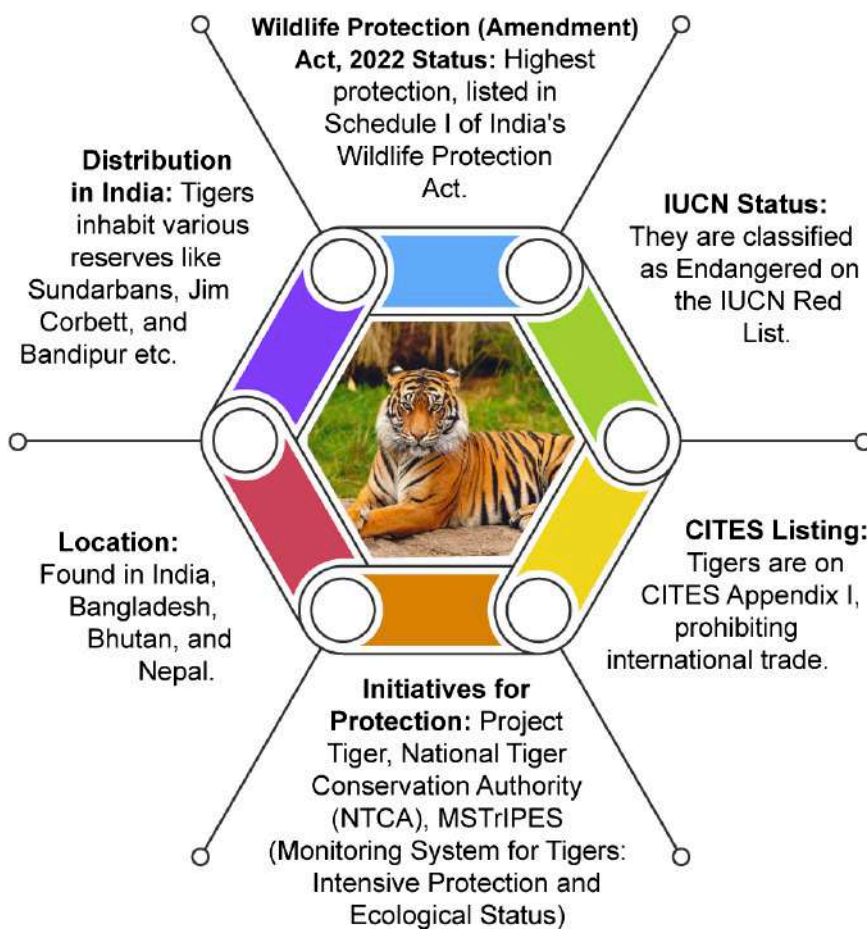
### Mudumalai Tiger Reserve

- **Location:** Mudumalai Tiger Reserve is situated in Tamil Nadu and Karnataka, India, near the Nilgiri Hills.
- **Biodiversity:** It boasts rich flora and fauna, including tigers, leopards, elephants, and over 300 bird species.
- **Habitats:** The reserve features diverse ecosystems, from dry deciduous forests to tropical evergreen forests.
- **Conservation:** Mudumalai plays a crucial role in conserving endangered species and preserving their natural habitats.
- **Tourism:** It attracts wildlife enthusiasts and offers safaris for visitors to observe the diverse wildlife.



*You have to dream before your dreams can come true..*

- A. P. J. ABDUL KALAM



## STATE OF THE RHINO 2023

**CONTEXT:** The International Rhino Foundation (IRF) released the "State of the Rhino, 2023" report, detailing rhino species populations in Africa and Asia.

### HIGHLIGHTS OF THE REPORT:

The main threats to rhino populations are poaching for their horns and habitat loss. Poaching, orchestrated by organized criminal groups, remains a significant danger, with shifting patterns and increased pressure on smaller rhino populations.

Climate change poses a growing risk to rhinos, leading to droughts, water resource competition, wildfires, flooding, and habitat degradation. These climate-related challenges exacerbate human-wildlife conflicts and poverty, potentially increasing poaching.

Despite these threats, there are positive signs of rhino conservation success, particularly in the case of greater one-horned rhinos in India and Nepal and black rhinos in Africa. Effective protection, conservation efforts, and community engagement can lead to rhino population growth and survival in a changing world.

### Findings on Greater One-Horned Rhinos

- **Habitat and Range:** Greater one-horned rhinos primarily inhabit India and Nepal, occasionally crossing into Bhutan.
- **Collaborative Conservation:** Bhutan, India, and Nepal jointly manage and protect rhino populations through trans-boundary efforts.

- **Population Growth:** Due to strict government protection and cooperation, the rhino population has increased by about 20% in the last decade.
- **Vulnerable Status:** Despite growth, the species remains "Vulnerable" due to poaching and habitat loss.
- **Conservation Challenges:** Ongoing threats include poaching, habitat loss, and invasive species that limit rhino food and habitat.

### Range Country Updates – India Specific Report

- **Rhino Population:** Approximately 3,262 rhinos are reported in the region, highlighting the significance of conservation efforts.
- **Poaching Incidents:** Despite conservation efforts, poaching remains a concern, with two rhino deaths reported in 2023.
- **Translocation Delay:** Rhino translocations to Manas National Park were postponed to 2024 due to heightened security measures following a poaching incident.
- **Habitat Expansion:** Orang National Park in Assam expanded by 200 sq km, creating additional space for rhino populations to grow and move freely.





- Protected Area Connectivity: The expansion connects various protected areas in Assam, forming a linked corridor for rhinos, enhancing long-term growth and security efforts.



### GREATER ONE-HORNED RHINOS (RHINOCEROS UNICORNIS)

- WPA Status: Listed in Schedule I of India's Wildlife Protection Act, providing the highest level of protection.
- IUCN Status: Classified as Vulnerable on the IUCN Red List due to ongoing conservation concerns.
- CITES Listing: Included in CITES Appendix I, prohibiting international trade to combat poaching and trade threats.
- Location: Primarily found in India and Nepal, with occasional sightings in Bhutan.
- Distribution in India: Inhabiting national parks and reserves, including Kaziranga, Manas, and Pobitora, with expanding populations.

## CLIMATE POLYCRISIS AND CARBON ACCOUNTING

**CONTEXT:** : The climate 'polycrisis': Interconnected crises from climate change impacting multiple sectors and domains, as coined by Adam Tooze.

**HIGHLIGHTS:** The climate 'polycrisis,' a concept popularized by Adam Tooze, denotes the multifaceted and interlinked crises stemming from climate change. It encompasses physical changes like rising temperatures and extreme weather, along with socio-economic and political challenges. India illustrates how diverse sectors like energy, health, migration, and food production are interconnected and impacted by climate change.

### Climate Polycrisis

- Complex Interconnections: Climate polycrisis underscores the intricate web of interconnections within the climate crisis, demanding a comprehensive approach.
- Holistic Perspective: It emphasizes equity, justice, and resilience, urging a holistic approach that considers various stakeholder viewpoints.
- Unforeseen Outcomes: Addressing climate issues in isolation can yield unexpected consequences due to their interrelated nature.
- Profound Transformation: Climate polycrisis calls for a transformative shift toward an environmentally sensitive

economy, akin to creating a "carbon infrastructure."

- Carbon Accounting: It stresses measuring and accounting for carbon emissions at all levels, with the proposal for a national carbon accounting system.

### Carbon Accounting

**Importance of Public Finance:** Public finance is vital for development, funded through taxation. Money accounting helps track financial flows. However, carbon flows lack tracking, hindering progressive carbon taxation and climate action.

**Need for National Carbon Accounting (NCA):** NCA, akin to financial accounting, would mandate individuals and businesses to report carbon emissions and offsets. It makes carbon circulation visible, aids target setting, and drives predictions for emission reduction.

**Future Implications:** NCA could lead to a transformative shift, introducing a carbon GDP alongside economic GDP, encouraging nations to reduce carbon emissions and fostering innovation in technology and collective efforts to combat climate change.

## CLIMATE CHANGE THREATENS 2 IN 5 AMPHIBIANS

**CONTEXT:** Climate change poses a major threat to global amphibian populations, according to a 20-year study in Nature.

**BACKGROUND:** The study 'Ongoing declines for the world's amphibians in the face of emerging threats' was published in Nature on October 4. It's the second global amphibian assessment led by the Amphibian Red List Authority, part of the International Union for Conservation of Nature's Amphibian Specialist Group, and managed by Re: wild, a wildlife conservation organization.

### STUDY HIGHLIGHTS

- Amphibian Extinction Risk: A global assessment involving 8,000 amphibian species found that 2 out of 5 are threatened with extinction.
- Climate Change Impact: Climate change is a major threat, affecting 39% of species, with amphibians being highly sensitive to environmental changes.
- Habitat Destruction: 93% of threatened amphibians face habitat destruction and degradation, emphasizing Expert Contribution: Over 1,000 experts worldwide, including Indian researchers, contributed data for this assessment.
- IUCN Red List: The findings will be published on the IUCN Red List of Threatened Species to raise awareness about amphibian extinction risks.



## CANALS IN GANGA-GHAGRA BASIN ENDANGER DOLPHINS: STUDY

**CONTEXT:** Scientists rescue 19 Gangetic river dolphins from Ganga-Ghagra basin irrigation canals in Uttar Pradesh, 2013-2020.

**BACKGROUND:** A publication titled "Rescuing Ganges river dolphins in Uttar Pradesh, North India, 2013-2020" discusses the capture, relocation methods, and details of rescued dolphins. Over seven years, 24 rescue operations were conducted, resulting in 19 successful rescues. The study notes the gender and size of rescued dolphins and highlights that five dolphins died during these operations, with three being larger in size

### Report Highlights

- **Dolphins in Peril:** Dams and barrages are posing a severe threat to Gangetic river dolphins in India, pushing them into irrigation canals where they face multiple dangers.
- **Straying Incidents:** The dolphins are straying into canals due to factors like rapidly receding waters, heatstroke, and human interference, putting their lives at risk.
- **Preference for Pods:** Researchers observed adult male and female dolphins together on multiple occasions, suggesting they may prefer living and hunting in pods.
- **Seasonal Patterns:** Over 70% of dolphin entrapments occur post-monsoon or during peak winter, linked to water releases into canals. Females are often trapped during peak winter, while males are recorded post-monsoon and during summer.
- **Rescue Challenges:** Rescuing dolphins requires expertise, and their survival after rescue remains a challenge, making monitoring and conservation efforts crucial.

### GANGETIC DOLPHINS

- **Location:** Ganges river dolphins inhabit the Ganges-Brahmaputra-Meghna and Karnaphuli-Sangu river systems in Nepal, India, and Bangladesh.
- **Habitat:** They are freshwater species and primarily dwell in these river systems.
- **Sensory Adaptation:** Ganges river dolphins are essentially blind and rely on emitting ultrasonic sounds to navigate and locate prey.
- **Population:** The population of Gangetic river dolphins is estimated to be 1200-1800.
- **Ecological Significance:** They serve as reliable indicators of the overall health of river ecosystems where they reside.
- **National Aquatic Animal:** Recognized as the National Aquatic Animal of India in 2009.

#### Conservation Status:

- **Indian Wildlife (Protection) Act 1972:** Listed under Schedule I.
- **International Union for the Conservation of Nature (IUCN):** Classified as Endangered.
- **Convention on International Trade in Endangered Species (CITES):** Listed in Appendix I (most endangered).
- **Convention on Migratory Species (CMS):** Included in Appendix II, signifying the need for conservation and international cooperation.

## HABITAT AND PREY SHAPE ASIATIC WILD DOG-TIGER COEXISTENCE: STUDY

**CONTEXT:** Study reveals possible positive link between dholes and tigers due to shared prey and habitat.

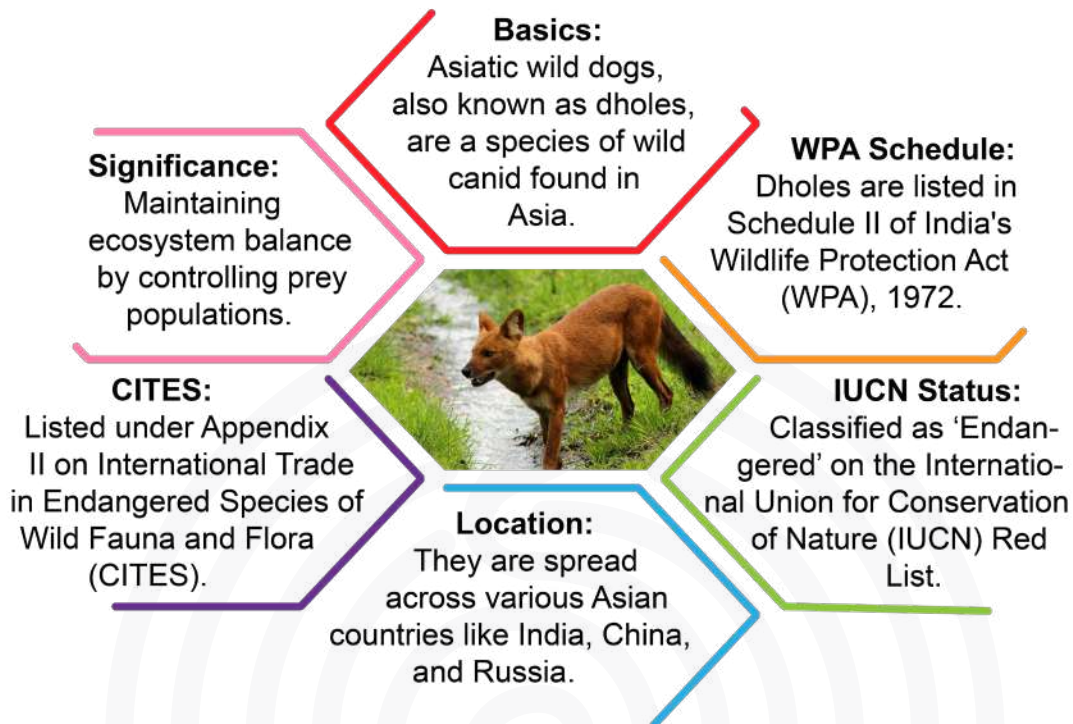
**BACKGROUND:** A study conducted by Urjit Bhatt and Salvador Lyngdoh at Assam's Manas National Park utilized camera traps to examine the behavior of dholes (wild dogs). They found that dholes had the highest activity overlap with leopards and the lowest with clouded leopards. The research, published in *Mammalian Biology*, explores carnivore coexistence in the park from 2017 to 2019.

### Study Highlights

- **Dhole Decline:** Dholes, or Asiatic wild dogs, once widespread in Asia, face endangerment due to factors like habitat loss, prey decline, and human conflict.
- **Population Estimate:** The global adult dhole population is between 949 and 2,215, making them an endangered species.
- **Surprising Discovery:** Contrary to expectations, the study found a positive relationship between dholes and tigers, challenging the assumption of antagonistic interactions.
- **Possible Explanations:** Overlapping prey availability or habitat suitability may explain the positive association between dholes and tigers, suggesting further research is needed.
- **Complex Ecological Dynamics:** The findings highlight the need to unravel the mechanisms driving this unexpected relationship between dholes and tigers.



## DHOLES/ ASIATIC WILD DOGS



## GREY WHALE

**CONTEXT:** Eastern North Pacific grey whale population fluctuations linked to Arctic prey and ice cover changes.

**BACKGROUND:** A recent study reveals that the population fluctuations among eastern North Pacific grey whales are influenced by shifting prey availability and changing Arctic ice cover. The Arctic's rapid warming is altering ecosystems, particularly in the Pacific Arctic, vital for migratory marine species, affecting even large, long-lived creatures like grey whales and causing mass mortality events.

### GREY WHALES

- Gray Whale Range: Once widespread, now mainly in North Pacific with eastern and western populations.
- Endangered Status: Western gray whales are critically endangered (IUCN) and listed in CITES Appendix I.
- Physical Characteristics: Large, mottled gray whales with broad, paddle-shaped flippers and small eyes.
- Feeding Habits: Primarily bottom feeders, consuming benthic and epibenthic invertebrates like amphipods.
- Entanglement Risk: Gray whales are highly vulnerable to getting caught in fishing gear.

## THE HIGH COST OF CHEAP WATER REPORT

**CONTEXT:** WWF report warns: Water crisis jeopardizes \$58 trillion in economic value, food security, and sustainability.

### HIGHLIGHTS:

- Water's Economic Value: Water and freshwater ecosystems hold an annual economic value of \$58 trillion, equivalent to 60% of global GDP.
- Undervalued Resource: Water, often undervalued, is central to a growing global crisis affecting food security and human and planetary health.
- Threatened Benefits: Declining freshwater ecosystems, with losses in wetlands and wildlife, jeopardize the unseen benefits worth around \$50 trillion.
- Agricultural Impact: Unsustainable farming practices, including water overuse and fertilizers, pose a significant threat to rivers and floodplains.
- Danube Basin Example: The loss of floodplains in the Danube basin harms water filtration, flood mitigation, and river health.





# SCIENCE AND TECHNOLOGY





ASTEROID BENNU

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ASTRA BVR MISSILE TO JOIN IAF SOON

ISRO PREPS GAGANYAAN TESTS, FOCUSES ON SAFETY

MULTIMODAL ARTIFICIAL INTELLIGENCE

IMMUNOACT CAR-T CELL THERAPY

TRIDENT





## ASTEROID BENNU

**CONTEXT:** NASA's Osiris-Rex spacecraft safely returns asteroid samples to Utah desert after seven-year mission.

**HIGHLIGHTS:** NASA's OSIRIS-REx spacecraft successfully landed on Earth with a capsule containing at least a cup of rubble from the asteroid Bennu, gathered during a mission three years ago. This represents the largest sample return from beyond the moon and will provide valuable insights into the formation of Earth and life in our solar system.



### WHAT IS AN ASTEROID AND ITS STUDY SIGNIFICANCE?

An asteroid is a small, rocky object orbiting the Sun within the asteroid belt between Mars and Jupiter, often remnants from the early solar system.

Jupiter, often remnants from the early solar system.

- **Highlights:** Asteroids provide insights into the early solar system's formation and evolution, helping us understand planetary processes and the origins of celestial bodies.
- **Significance of Study:** Studying asteroids is crucial for planetary defense, as some may pose a collision threat to Earth, necessitating monitoring and mitigation strategies.
- **Size Variation:** Asteroids vary in size from a few meters to hundreds of kilometers, influencing their impact potential and suitability for future resource utilization.
- **Sample Collection:** Space missions like Osiris-Rex and Hayabusa2 have collected asteroid samples, offering a unique opportunity to analyze pristine, extraterrestrial materials.
- **Water and Life Origins:** Asteroids

may contain clues about the origin of water on Earth and the potential delivery of organic molecules, contributing to the emergence of life.

- **Resource Exploration:** Future asteroid mining endeavors could harness their resources, including metals and water, to support human exploration and colonization in space.

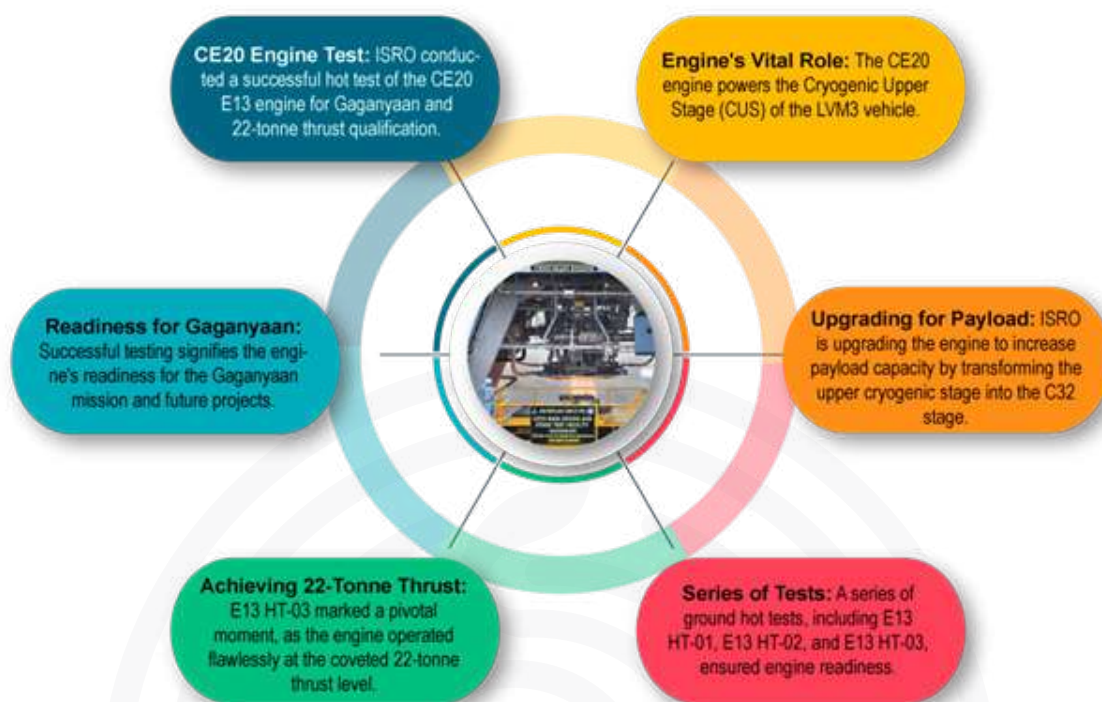
## ISRO CONDUCTS ENGINE TEST FOR GAGANYAAN

**CONTEXT:** ISRO completes successful CE20 E13 engine test for Gaganyaan mission qualification and 22-tonne thrust certification.

**HIGHLIGHTS:** ISRO successfully tested the CE20 E13 engine for Gaganyaan qualification and 22-tonne thrust. The engine is crucial for the Cryogenic Upper Stage (CUS) of LVM3, and ISRO is upgrading it for higher thrust and propellant capacity. The Gaganyaan Test Vehicle D-1/Crew Escape System mission is expected in October.

### GAGANYAAN MISSION

- **Human Spaceflight Demonstration:** Gaganyaan aims to demonstrate India's human spaceflight capability with a 3-member crew in a 3-day mission to a 400 km orbit, safely returning to Indian sea waters.
- **Collaborative Approach:** The project leverages India's in-house expertise, industry experience, academic resources, and international technology collaboration to achieve its goals.
- **Critical Technology Development:** Essential technologies include a human-rated launch vehicle, life support systems, crew safety provisions, and crew management aspects for training and recovery.
- **Precursor Missions:** Multiple precursor missions, such as the Integrated Air Drop Test (IADT), Pad Abort Test (PAT), and Test Vehicle (TV) flights, ensure technology readiness and system safety before the manned mission.
- **Safety Assurance:** The project emphasizes safety and reliability, with unmanned missions planned to validate systems and technology, ensuring the crew's safety during the historic human spaceflight mission.



## ADDRESSING CLIMATE CHANGE, CONFRONTING NEW DISEASES

**CONTEXT:** Climate change intensifies global infectious disease risks by disrupting disease patterns, vectors, and pathogen characteristics, according to the IPCC's recent report.

**BACKGROUND:** Mosquito-borne disease outbreaks defy predictable patterns due to climate variability. Dengue exhibits irregular peaks, as temperature, precipitation, and humidity shifts disrupt transmission cycles and affect pathogen behavior, making diseases more unpredictable.

### MAIN FINDINGS

- Habitat loss due to human activity forces disease-carrying animals into human territory, increasing the risk of disease transmission from wildlife to humans.
- Climate-induced shifts create new disease transmission routes, complicating predictions for outbreaks by ecologists and epidemiologists.
- India, in particular, has experienced adverse health effects, such as water scarcity, dengue epidemics, and Nipah virus outbreaks, due to climatic changes.
- India's disease detection and reporting strategies have improved, but the current system, Integrated Health Information Platform (IHIP), falls short in tracking emerging disease outbreaks.
- The One Health approach, integrating human, animal, plant, and environmental health, is crucial in preventing outbreaks, especially those originating from animals.
- India should launch One Health and infectious disease control programs, fostering collaboration between various specialized agencies, including animal husbandry, wildlife, and public health departments.
- Effective coordination, data sharing, and logical responsibility assignments are essential, requiring greater management and coordination, possibly with support from external funding sources like the World Bank.

### DISEASE X

- Concept of Unknown Threat:** "Disease X" is a term used by the World Health Organization (WHO) to describe a hypothetical, yet unknown, infectious disease with pandemic potential.
- Pandemic Preparedness:** It serves as a reminder of the need for vigilance and preparedness for emerging diseases, emphasizing the unpredictability of future health threats.
- Anticipating New Challenges:** Disease X underscores the importance of research, surveillance, and global cooperation to identify and respond to novel pathogens quickly.
- Categorization Tool:** WHO uses Disease X as a placeholder for newly emerging diseases, allowing for better planning and response strategies without specific knowledge of the pathogen.
- Cross-Species Transmission:** Disease X typically arises from zoonotic spillover, where a pathogen jumps from animals to humans, highlighting the importance of monitoring and understanding such events.



## CONSENT RULES FOR COOKIES

**CONTEXT:** India's 2023 Data Protection Act enforces strict consent rules for cookies amid growing online privacy concerns

**BACKGROUND:** Cookies, like keys to a secure club, store login info on websites, enhancing user convenience. They enable sites like Amazon to offer personalized experiences, tracking browsing history and cart items. Cookies also power ad targeting on platforms like Facebook and Google. However, privacy concerns and data misuse are significant considerations.

### WHAT ARE COOKIES IN ONLINE BROWSING?

Cookies are small pieces of data stored on your device by websites to remember your preferences, track usage, and personalize your online experience.

#### Types of Cookies

- **Session Cookies:** Temporary cookies that store data during a single browsing session but are deleted when you close the browser (e.g., online shopping carts).
- **Persistent Cookies:** These cookies remain on your device for a specified duration, even after you close the browser (e.g., login credentials or language preferences).
- **First-Party Cookies:** Set by the website you are currently visiting, these cookies are commonly used for website functionality and personalization (e.g., remembering user settings).
- **Third-Party Cookies:** Placed by domains other than the one you're visiting, often used for tracking and advertising (e.g., by ad networks to deliver targeted ads).

- **Secure Cookies:** Encrypted cookies used for secure online transactions, such as online banking, to protect sensitive user data.

#### Challenges Associated with Cookies

- **Privacy Concerns:** Cookies can be used to track user behavior without consent, raising privacy issues, as seen in online ad tracking.
- **Security Risks:** Malicious cookies can exploit vulnerabilities or steal sensitive information, like login credentials or financial data.
- **Cross-Site Tracking:** Cookies enable cross-site tracking, allowing advertisers to follow users across different websites, potentially leading to data breaches.
- **Data Overload:** Accumulated cookies can slow down websites and browsers, affecting user experience and site performance.
- **Legal Compliance:** Stricter data protection regulations, like GDPR, require websites to obtain user consent for cookie usage, posing compliance challenges.

Cookies are essential for enhancing online experiences but pose privacy and security challenges. As the digital world evolves, so will the use and regulation of cookies. Just like enjoying a delicious cookie, remember that digital cookies make online experiences more personalized, albeit with occasional privacy concerns.

## VULCAN 20-20 PROJECT

**CONTEXT:** UK to host world's most powerful laser in six years, significantly brighter than Sahara Desert's daylight.

**BACKGROUND:** The UK's Central Laser Facility (CLF) will construct a new laser in South Oxfordshire, funded by UK Research and Innovation (£85 million). The CLF, known for its plasma research lasers, including Vulcan, is upgrading to meet growing demand and maintain the UK's leadership in plasma physics research.

#### HIGHLIGHTS:

- **Vulcan 20-20 Laser:** A new laser, 100 times brighter than its predecessor, will produce a 20 petawatt main beam.

- **World's Most Powerful Laser:** Expected to become the world's most powerful laser, it surpasses the HPLS in Romania.
- **Research Opportunities:** The laser will support research in astrophysics, laser fusion for green energy, and innovative medical applications.
- **British Advancement:** The project aims to reestablish Britain as a leader in laser technology for various scientific and practical advancements.

## ADITYA-L1 SPACECRAFT EXITS EARTH'S SPHERE

**CONTEXT:** Aditya-L1 spacecraft surpasses 9.2 lakh km from Earth, progresses towards sun-earth Lagrange Point 1, gathering vital data.

**HIGHLIGHTS:** The ISRO reported that the Aditya-L1 spacecraft is en route to the sun-earth Lagrange Point 1 (L1). It has recently begun gathering data for scientific analysis of Earth's particle behavior. This data, collected around L1, will offer valuable insights into the origin, acceleration, and anisotropy of solar wind and space weather phenomena.

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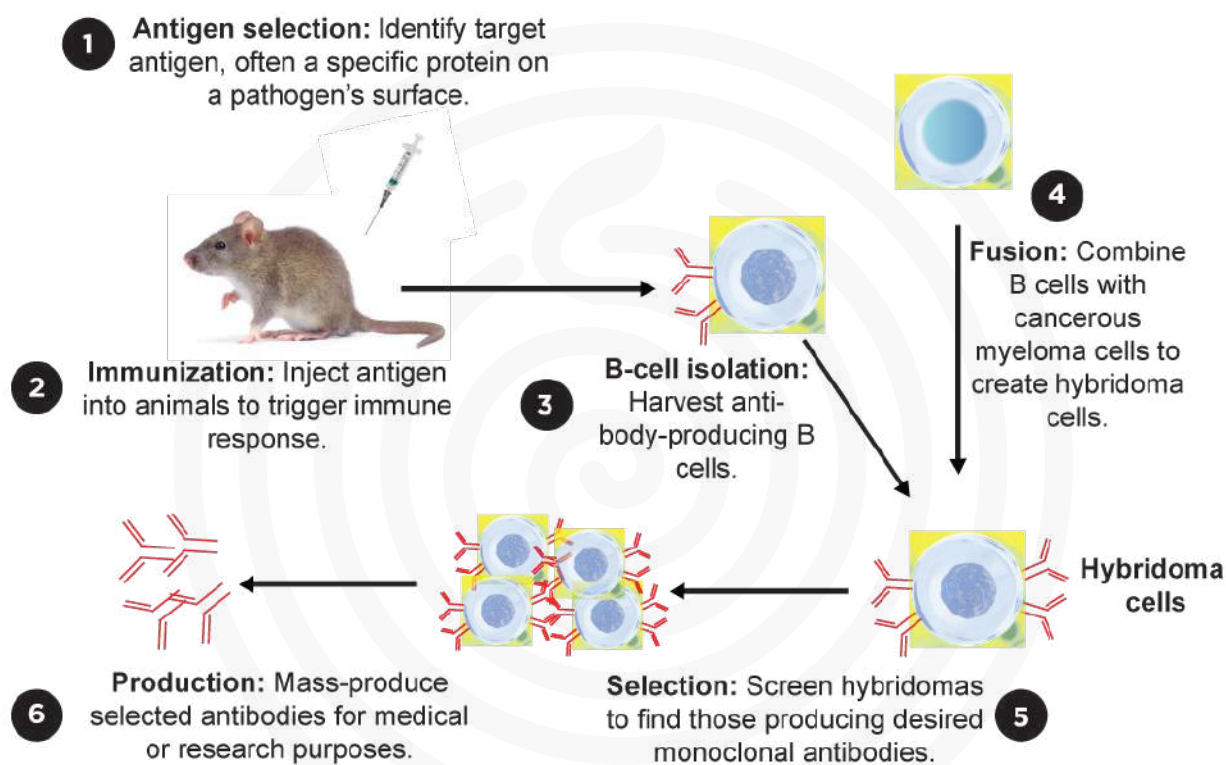


## MONOCLONAL ANTIBODIES

**CONTEXT:** India seeks Australian monoclonal antibodies to combat Nipah virus outbreak; Kerala faces recurring health crisis.

**BACKGROUND:** India sought monoclonal antibody doses from Australia to combat the Nipah virus outbreak in Kerala, where it has killed two and infected at least five. This marks Kerala's fourth Nipah outbreak since 2018. India currently has doses for ten individuals but hasn't administered any yet, as it's effective in early-stage infections.

**Monoclonal Antibody:** Monoclonal antibodies are synthetic proteins emulating natural immune system antibodies, used to combat diseases and foreign invaders. They work by binding to antigens, typically disease-related molecules, aiding the immune system in eliminating them. Monoclonal antibodies are custom-designed to target specific antigens for therapeutic purposes.



NB: Hybridoma cells are specialized cells used in biotechnology to produce monoclonal antibodies for various medical and research purposes.

## GREEN HYDROGEN BUS

**CONTEXT:** Indian Oil Corporation introduces green hydrogen-powered bus, promoting the shift from fossil fuels towards cleaner energy.

**BACKGROUND:** Indian Oil Corporation (IOC) is set to produce 75 kg of green hydrogen using renewable electricity, which will power two buses for trial runs in the national capital region. This move aligns with India's transition away from fossil fuels. IOC plans to scale up to 15 hydrogen-powered buses by the end of 2023, contributing to India's clean energy goals and potential global leadership in green hydrogen production.

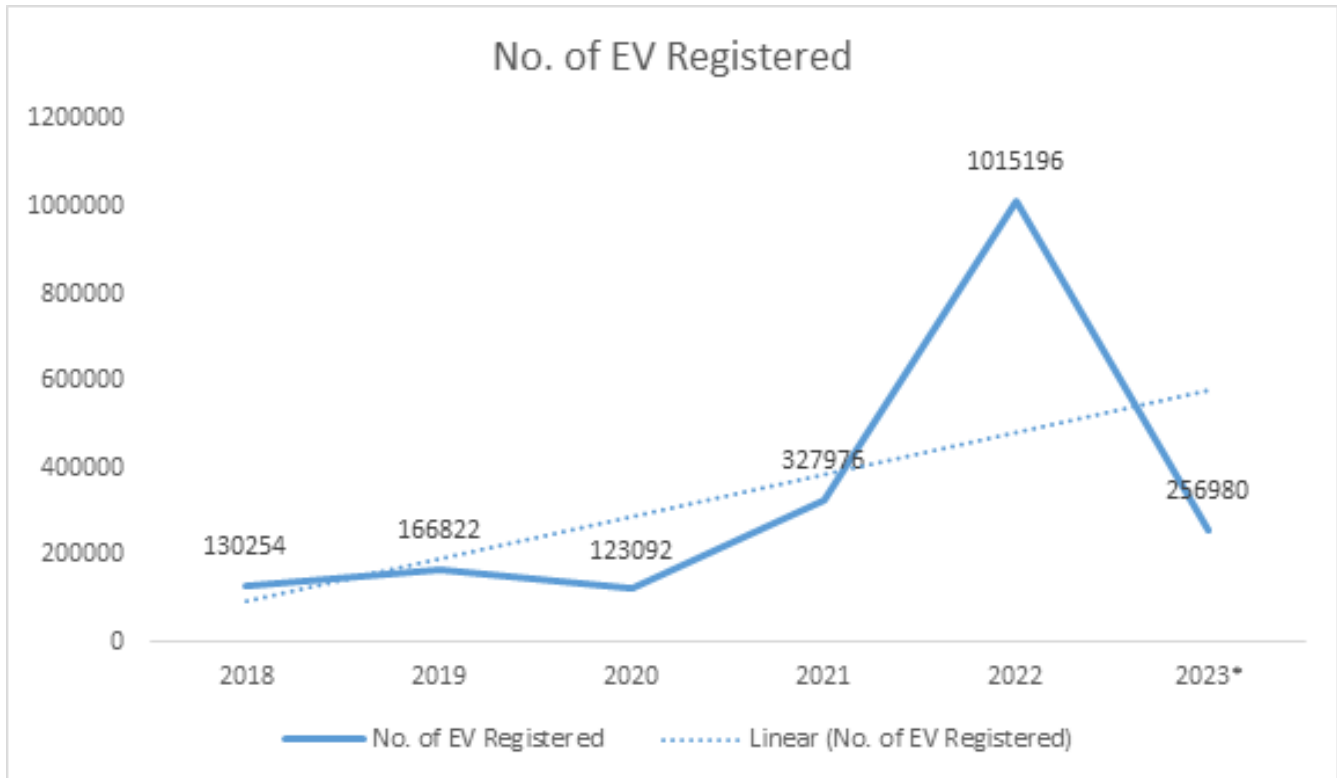


### What is Green Hydrogen?

- **Production Process:** Green hydrogen is produced through the electrolysis of water using renewable energy sources like wind or solar power.
- **Zero Emissions:** It generates no carbon emissions during production, making it an eco-friendly alternative to fossil fuels.
- **Energy Storage:** Green hydrogen can store excess renewable energy, aiding grid stability and enabling a cleaner energy mix.
- **Versatile Applications:** It can be used as a clean fuel for various sectors, including transportation, industry, and power generation.



- Sustainability: Green hydrogen plays a crucial role in decarbonizing sectors that are challenging to electrify, contributing to a more sustainable energy future.



NB: 2023\* data up to March 15th, 2023 only, Source: Ministry of Heavy Industries

## NANOPTA

**CONTEXT:** IISc scientists create sunlight-driven enzyme mimic to efficiently degrade toxic industrial wastewater chemicals.

**BACKGROUND:** Scientists at the Indian Institute of Science's Materials Research Centre have created a sunlight-activated enzyme mimetic capable of efficiently degrading hazardous industrial wastewater chemicals. This innovation overcomes limitations associated with natural enzymes, including cost and recyclability challenges.

- NanoPtA: Innovative Nanozyme: NanoPtA is a platinum-containing nanozyme developed by IISc researchers, designed to address the limitations of natural enzymes.
- Effective Wastewater Treatment: NanoPtA efficiently degrades toxic industrial wastewater pollutants under sunlight, reducing wastewater toxicity by oxidizing pollutants.
- Stability and Versatility: This nanozyme remains stable for up to 75 days at room temperature, making it a practical and cost-effective solution for various applications.
- Potential Healthcare Use: NanoPtA may find applications in healthcare, serving as a diagnostic tool for neurological and neurodegenerative diseases.
- Overcoming Natural Enzyme Limitations: NanoPtA's ability to mimic natural enzymes while offering improved stability and versatility holds promise for environmental and medical advancements.

## J&J WAIVES TB DRUG PATENT RIGHTS

**CONTEXT:** Johnson & Johnson won't enforce Sirturo (bedaquiline) patents in 134 low-middle-income countries due to global pressure.

**BACKGROUND:** Bedaquiline, a breakthrough drug for tuberculosis (TB), has gained global approval after 40 years, offering a less toxic and more effective treatment. This approval opens the door to affordable generic versions for drug-resistant TB patients in low- and middle-income countries, reflecting the advocacy efforts of TB activists and prioritizing public health over corporate interests, according to the Access Campaign, a part of Médecins Sans Frontières.

*"Be not afraid of greatness. Some are born great, some achieve greatness, and others have greatness thrust upon them."*

- WILLIAM SHAKESPEARE





### BEDAQUILINE

- Bedaquiline is an antibiotic medication used to treat multidrug-resistant tuberculosis (MDR-TB) when other treatments have failed.
- It works by targeting mycobacterial ATP synthase, disrupting the energy production of the TB bacteria.
- Bedaquiline is usually taken in combination with other TB drugs for a comprehensive treatment regimen.
- Common side effects include nausea, joint pain, and headaches.
- Due to its potential for cardiac effects, patients taking bedaquiline need close monitoring of their heart health during treatment.

### NOBEL 2023: DUO ENABLED MRNA COVID VACCINES

**CONTEXT:** 2023 Nobel Prize in Physiology awarded for groundbreaking mRNA vaccine development against COVID-19

**BACKGROUND:** Royal Swedish Academy of Science announced the Nobel Prize in Chemistry winners, Dr. Karikó and colleagues, for their work on nucleoside base modification enabling COVID-19 mRNA vaccine development, highlighting the pandemic's transformative impact on vaccine technology.



**Figure:** Dr. Karikó and Dr. Weissman

#### HIGHLIGHTS

- **Modified mRNA for Immunity:** Dr. Karikó and Dr. Weissman developed a concept using modified mRNA to trigger an immune response against specific proteins.
  - **Immune System Challenge:** Initially, the immune system recognized synthetic mRNA as foreign, hindering its effectiveness.
  - **Chemical Modifications:** Research revealed that chemically modifying synthetic mRNA allowed it to enter cells without triggering an immune response.
  - **Groundbreaking Studies:** Their studies in 2005 laid the foundation for mRNA vaccines, which played a crucial role in combating COVID-19.
- **Future Potential:** mRNA technology is now being explored for vaccines against various diseases, including influenza, dengue, cancers, and autoimmune disorders.

### TRIO AWARDED NOBEL PRIZE FOR VISUALIZING ELECTRONS

**CONTEXT:** Nobel Prize in Physics awarded for research using ultra-fast light flashes to study electrons in atoms and molecules.

**BACKGROUND:** Pierre Agostini, Ferenc Krausz, and Anne L'Huillier received the Nobel Prize in Physics for their attosecond pulse technique, enabling the study of rapid processes within atoms and molecules with applications in electronics and medical diagnostics.



**Figure:** Pierre Agostini, Ferenc Krausz, and Anne L'Huillier

#### HIGHLIGHTS

- **Nobel Prize in Physics:** Three scientists awarded for their work in attosecond physics, revealing electron

behavior with precision likened to high-speed photography.

- **Discovery in Infrared Light:** In 1987, L'Huillier found multiple light overtones using infrared laser light through noble gases.
- **Isolating Attosecond Light Pulses:** Agostini and Krausz's early 2000s experiments achieved light pulses lasting only a few hundred attoseconds.
- **International Recognition:** The Nobel laureates hail from the U.S., Germany, and Sweden, emphasizing the global impact of their research.
- **Gender Diversity:** L'Huillier, the fifth woman to win the Physics Prize since 1901, encourages young women to pursue careers in science.

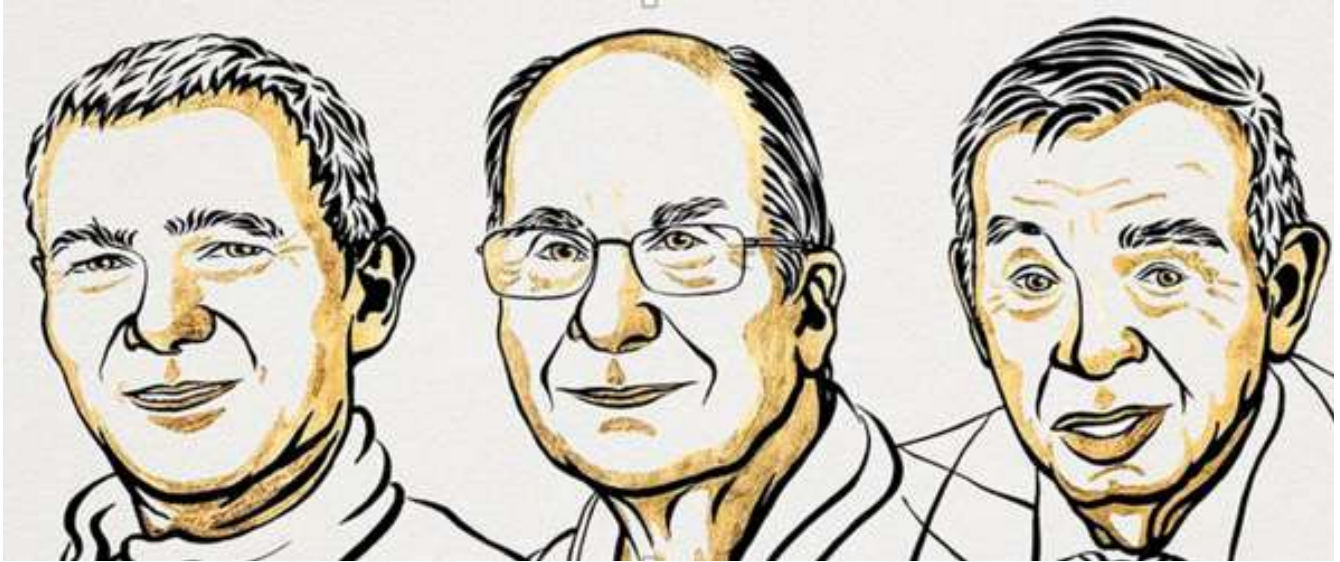




## 'QUANTUM DOTS' TRIO AWARDED NOBEL IN CHEMISTRY

**CONTEXT:** 2023 Nobel Prize in Chemistry awarded for quantum dots' applications in LED screens, quantum computers, and more.

**HIGHLIGHTS:** Quantum dots, ultra-small crystals, exhibit size-dependent color-changing properties due to electron energy level transitions. Early attempts to synthesize them in the 1980s faced quality issues. In 1993, Dr. Bawendi's team successfully created high-quality quantum dots by injecting a compound into a solvent, offering promise for various applications.



**Figure:** Mounji Bawendi, Louis Brus, and Alexei Ekimov

### QUANTUM DOTS (QDS)

- Quantum dots (QDs) are nanoscale semiconductor crystals with unique optical and electronic properties, emitting colorful light when exposed to UV light.
- Applications: QDs find use in composites, solar cells, fluorescent biological labeling, displays, lighting, and medical imaging due to their tunable emission spectra.
- Significance: QDs enable precise, versatile labeling in biological research, enhance the efficiency of solar cells, and improve the color quality of displays and lighting.
- Future: QDs hold potential for advancements in quantum computing, highly efficient LEDs, and targeted drug delivery systems due to their customizable properties.
- Safety Concerns: Despite their potential, safety and environmental impact concerns arise from the use of certain heavy metal-containing QDs, prompting research into alternative, safer materials.

## ASTRA BVR MISSILE TO JOIN IAF SOON

**CONTEXT:** IAF contracts Bharat Dynamics for Astra BVR missiles; first batch to be inducted by year-end.

**HIGHLIGHTS:** The Indian Air Force (IAF) is progressing in the development of the advanced Astra-MK2 missile, following successful static firing. The Astra-MK1 has received bulk production clearance, with plans for proof firing and induction this fiscal year. It aims to equip frontline fighters with Astra-MK1 and MK2, reducing import reliance. A contract worth ₹2,971 crore was signed for Astra MK-I missiles, with the IAF expressing satisfaction with their performance.

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## ASTRA BVR MISSILES



## ISRO PREPS GAGANYAAN TESTS, FOCUSES ON SAFETY

**CONTEXT:** ISRO gears up for Gaganyaan mission with preparations for Flight Test Vehicle Abort Mission-1.

**BACKGROUND:** ISRO is preparing for an abort mission to test the crew escape system for the Gaganyaan mission. The date hasn't been announced yet, but it's expected by October-end from the Satish Dhawan Space Centre in Sriharikota. The astronauts will be in a pressurized, earth-like atmosphere inside the crew module during the Gaganyaan mission.

- **Milestone for Gaganyaan:** This mission marks a significant milestone in the Gaganyaan program, setting the stage for subsequent qualification tests and unmanned missions, ultimately leading to India's first crewed space mission.

### GAGANYAAN TEST FLIGHT SUCCESSFUL

#### HIGHLIGHTS

- **Unpressurized Crew Module (CM):** ISRO is preparing for a Gaganyaan mission test with an unpressurized Crew Module, integrating key systems and instruments for safety and performance evaluation.
- **Extensive Instrumentation:** The CM is extensively instrumented to capture flight data for system evaluation, including navigation, telemetry, and instrumentation in a dual redundant mode configuration.
- **Abort Simulation:** The test involves a single-stage liquid rocket simulating an abort condition during ascent, corresponding to Mach 1.2, separating the Crew Escape Systems (CES) from the test vehicle.
- **Safe Recovery:** After separation, the CES deploys parachutes, ensuring the safe touchdown of the CM in the Bay of Bengal, with recovery facilitated by the Indian Navy.
- **ISRO's Crew Escape System:** ISRO conducted a successful test flight to demonstrate the crew escape system for the Gaganyaan mission, India's initiative to send humans into space.
- **Rescheduled Launch:** The launch faced delays due to bad weather and an anomaly just five seconds before the scheduled liftoff.
- **Engine Ignition Issue:** An onboard computer anomaly delayed the launch briefly, but ISRO quickly resolved the issue.
- **Successful Test Flight:** The Test Vehicle Abort Mission 1 (TV-D1) demonstrated the crew escape system's capability to carry the crew module safely in case of emergencies.
- **Gaganyaan Mission:** ISRO plans to conduct the first unmanned Gaganyaan mission in early 2024 after the successful crew escape system test.



### GAGANYAAN MISSION

- Human Spaceflight Demonstration: Gaganyaan aims to demonstrate India's human spaceflight capability with a 3-member crew, orbiting for 3 days at 400 km altitude, followed by a safe landing in the Indian sea.
- Collaborative Strategy: The project combines India's expertise, industry, academia, and international technology to achieve its goals.
- Critical Technology Development: Key aspects include a human-rated launch vehicle, life support systems, crew emergency escape provisions, and comprehensive crew management for training and recovery.
- LVM3 Rocket: ISRO's dependable LVM3 rocket, comprising solid, liquid, and cryogenic stages, is chosen as the launch vehicle.
- Advancing Space Exploration: Gaganyaan represents India's commitment to advancing its presence in space exploration, particularly in the domain of human spaceflight.

### MULTIMODAL ARTIFICIAL INTELLIGENCE

**CONTEXT:** The future of AI models lies in multimodal systems for more comprehensive human-like cognition.

**HIGHLIGHTS:** OpenAI is racing to catch up with Google in the multimodal AI field, enabling GPT-3.5 and GPT-4 models to analyze images and incorporate speech synthesis. Google's Gemini model, still unreleased, has a head start due to its vast image and video database. OpenAI is aggressively hiring experts and developing a new multimodal AI system called Gobi to compete in this evolving tech race.

**Multimodal AI:** It is an advanced artificial intelligence approach that integrates diverse data types such as text, images, audio, and more to enhance accuracy, insights, and contextual understanding in solving real-world problems.

#### How Does Multimodality Work?

Multimodal AI systems, like OpenAI's DALL.E, link text and images during training. These systems analyze patterns in visual data and image descriptions to generate images from text prompts. Similarly, for audio, GPT's voice processing uses Whisper, an open-source speech-to-text model, to recognize speech in audio and translate it into plain text.

#### Applications of Multimodal AI

- Hate Speech Detection: Meta and Google have

developed multimodal systems to automatically detect hateful memes on social media platforms like Facebook.

- Dialogue Prediction: Google researchers created a multimodal system to predict the next lines of dialogue in videos, enhancing user experiences.
- Image Bind by Meta: Meta introduced Image Bind, an open-source AI multimodal system that incorporates various sensory data, paving the way for more immersive virtual reality experiences.
- Medical Diagnosis: Multimodal AI is crucial in fields like medicine, where it helps process complex datasets from CT scans and genetic variations to provide clear, plain-language responses.
- Speech Translation: Multimodal AI plays a key role in speech translation, with models like Meta's SeamlessM4T offering text-to-speech, speech-to-text, speech-to-speech, and text-to-text translations for numerous languages.

### IMMUNOACT CAR-T CELL THERAPY

**CONTEXT:** IIT Bombay startup, ImmunoACT, gets approval for India's first humanized CAR-T cell therapy product.

**BACKGROUND:** IIT Bombay's Immunoadoptive Cell Therapy (ImmunoACT), partly backed by Laurus Labs, has obtained CDSCO approval for its CAR-T cell therapy, NexCAR19, targeting relapsed/refractory B-cell lymphomas and leukemia. The therapy results from a ten-year collaboration between IIT Bombay and Tata Memorial Centre, offering accessible and cost-effective treatment with promising clinical trial outcomes. ImmunoACT, founded in 2018 under SINE, is poised to introduce advanced cell-and-gene therapies in India.

### GAGANYAAN MISSION

- CAR T Cell Therapy: Utilizes genetically modified T cells to locate and destroy cancer cells effectively, enhancing the body's immune response.
- T Cell Recognition: T cells, part of the immune system, recognize antigens on foreign or abnormal substances, including cancer cells.
- Chimeric Antigen Receptor (CAR) T Cells: Engineered in a lab, CAR T cells have receptors enabling them to bind to specific cancer cells and eliminate them.
- Therapy Process: Involves collecting T cells, engineering them with CARs, and infusing them back into the patient after multiplication. Chemotherapy might precede infusion for increased effectiveness.
- Side Effects and Complications: Side effects include cytokine release syndrome (CRS) and nervous system complications, managed by specialized treatments, with potential complications like abnormal blood mineral levels and allergic reactions requiring medical attention.





## TRIDENT

**CONTEXT:** China's TRIDENT underwater telescope aims to find cosmic ray origins with flashes of light undersea.

**BACKGROUND:** Chinese scientists are constructing the world's largest "ghost particle" detector, the Tropical Deep-sea Neutrino Telescope (TRIDENT), submerged 11,500 feet below the Western Pacific Ocean. Scheduled for completion in 2030, it will search for rare flashes of light created by neutrinos, mysterious particles that rarely interact with matter due to their minimal mass and electrical charge.

### About TRIDENT

- TRIDENT Underwater Telescope: World's largest underwater telescope, TRIDENT, will be anchored in the Western Pacific Ocean by 2030.
- Neutrino Detection: TRIDENT will use over 24,000 optical sensors to detect neutrinos within a 7.5 cubic kilometer area.
- Outperforming IceCube: TRIDENT will surpass the IceCube, the largest existing neutrino detector, in sensitivity and detection capability.
- Penrose Tiling Pattern: The detector's organization follows Penrose tiling with a diameter of four kilometers.
- Timeline: The pilot project begins in 2026, with the full detector becoming operational in 2030.

## GHOST PARTICLE

- Neutrinos: Ghost particles, also known as neutrinos, are subatomic particles with almost no mass and no electric charge.
- Elusive Nature: Neutrinos are extremely challenging to detect due to their weak interaction with matter, earning them the nickname "ghost particles."
- High Abundance: Despite being elusive, neutrinos are incredibly abundant in the universe, originating from various sources like the sun and cosmic rays.
- Scientific Significance: Studying neutrinos is crucial for understanding fundamental particle physics and the universe's workings.
- Applications: Neutrino research has practical applications in fields like astrophysics, nuclear physics, and particle physics.

The advertisement features a smartphone on the left with a red cover, displaying the time 9:30 and the day Thursday. A white Wi-Fi signal icon is positioned above the phone. To the right of the phone is a red book with the Vedhik logo and the text "BOOK ONLINE". In the top right corner, the Vedhik IAS Academy logo and name are displayed, along with the tagline "The New Learning Mantra". The main text "MASTER THE NEW LEARNING MANTRA" is written in large, bold, red letters on a yellow background.

**CSAT**





# READING COMPREHENSION





1. A + B means A is the son of B AND A - B means A is the wife of B. On the basis of the above statement, what does the expression P + R - Q mean? (UPSC 2017)

- a. R is father of P
- b. P is the wife of R
- c. Q is the father of P
- d. Q is son of P

2. Rahul's father is the only son of Rohan's Father. How is Rohan's wife related to Rahul?

- a. Mother
- b. Aunt
- c. Grandmother
- d. Sister

3. Manoj is the brother of Deepak. Rekha is the sister of Seema. Deepak is the son of Rekha. How is Manoj related to Rekha?

- a. Nephew
- b. Son
- c. Brother
- d. None of these

4. Who is the mother of B?

1. P and Q are sisters.

2. Q's husband is the brother of B's husband.

a. Statement I alone is sufficient, but statement II alone is not sufficient

b. Statement II alone is sufficient, but statement I alone is not sufficient

c. Either I or II is sufficient

d. Data in both the statements together are not sufficient

5. P and Q are the married couple. X and Y are sisters. X is the sister of P. How is Y related to Q?

- a. Brother
- b. Sister
- c. Brother-in-law
- d. Sister-in-law

6. A is B's brother. C is B's mother. D is C's father. E is D's mother. How is A related to D? (UPSC 2020)

- a. Grandfather
- b. Granddaughter
- c. Grandmother
- d. Daughter

7. A woman introduces a man as the son of the brother of her mother. How is the man related to the woman?

- a. Nephew
- b. Son
- c. Cousin
- d. Uncle

8. There are six persons A, B, C, D, E and F. C is the sister of F. B is the brother of E's husband. D is the father of A and

grandfather of F. There are two fathers, three brothers and a mother in the group. Who is the mother?

- a. E
- b. C
- c. B
- d. A

9. Pointing out to a lady, a girl said, "She is the daughter-in-law of the grandmother of my father's only son." How is the lady related to the girl?

- a. Sister-in-law
- b. Mother
- c. Aunt
- d. Can't be determined

10. Pointing to a lady, a man said, "The son of her only brother is the brother of my wife." How is the lady related to the man?

- a. Mother's sister
- b. Grandmother
- c. Mother-in-law
- d. Sister of father-in-law

11. A family get-together consisted of grandmother, father, mother, four sons with their wives, one son and two daughters to each of the sons. How many females are there in all?

- a. 14
- b. 16
- c. 18
- d. 24

12. B is son of C while C and Q are sisters to one another. Z is the mother of Q. If P is the son of Z, which of the following statement is correct?

- a. Q is the grandfather of B
- b. P is the maternal uncle of B
- c. P is the cousin of B
- d. Z is the brother of C

13. Four persons A, B, C and D consisting of two married couples are in a group. Both the women are shorter than their respective husbands. A is the tallest among the four. C is taller than B. D is B's brother. In this context, which one of the following statements is not correct? (UPSC 2015)

- a. All four have family ties
- b. B is shortest among the four
- c. C is taller than D
- d. A is B's husband

14. A joint family consists of seven members A, B, C, D, E, F and G with three females. G is a widow and sister-in-law of D's father F. B and D are siblings and A is daughter of B. C is cousin of B. Who is E?

- 1. Wife of F
- 2. Grandmother of A
- 3. Aunt of C



Which are correct statements?

- a.1 and 2 only
- b.2 and 3 only
- c.1 and 3 only
- d.1, 2 and 3

15.Examine the following relationships among members of a family of six persons A, B, C, D, E and F (UPSC 2017)

- 1.The number of males equals that of females
- 2.A and E are sons of F
- 3.D is the mother of two, one boy and one girl
- 4.B is the son of A
- 5.There is one married couple in the family at present.

Which one of the following is true from the above information?

- a.A, B and C are all females
- b.A is the husband of D
- c.E and F are children of D
- d.D is the granddaughter of F

16.A joint family consists of seven members A, B, C, D, E, F and G with three females. G is a widow and sister-in-law of D's father F. B and D are siblings and A is daughter of B. C is cousin of B. Who is E? (UPSC 2019)

- 1.Wife of F
- 2.Grandmother of A
- 3.Aunt of C

Select the correct answer using the code given below:

- a.1 and 2 only
- b.2 and 3 only
- c.1 and 3 only
- d.1, 2 and 3

17.A family of two generations consisting of six members P, Q, R, S, T and U has three males and three females. There are two married couples and two unmarried siblings . U is

P's daughter and Q is K's mother-in-law. T is an unmarried male and S is a male. Which one of the following is correct? (UPSC 2020)

- a.R is U's husband
- b.R is S's wife
- c.S is unmarried
- d.None of the above

18.Pointing towards a person in a photograph, Anjali said, He is the only son of the father of my sister's brother." How is that person related to Arya?

- a.Mother
- b.Father
- c.Maternal uncle
- d.Cousin

19. Consider the Question and two Statements given below: Question: Is Z brother of X? (UPSC 2022)

- 1.Statement-1: X is a brother of Y and Y is a brother of Z.
- 2.Statement-2: X, Y and Z are siblings.

Which one of the following is correct in respect of the question and the Statement?

- a.Statement-1 alone is sufficient to answer the question
- b.Statement-2 alone is sufficient to answer the question
- c.Both Statement-1 and statement 2 are sufficient to answer the Question
- d.Both Statement-1 and Statement-2 are not sufficient to answer the Question

20.Pointing to a man on the stage, Rita said, "He is the brother of the daughter of the wife of my husband." How is the man on the stage related to Rita?

- a.Son
- b.Husband
- c.Cousin
- d.Nephew





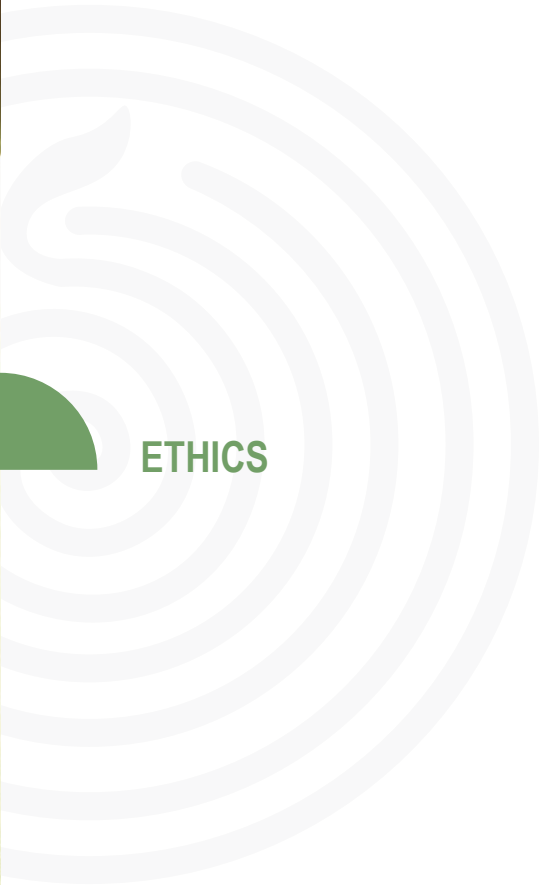
ETHICS

W  
K  
R  
A  
F  
F

R







ETHICS



## ACHIEVING HARMONY: THE BENEFITS OF BALANCED EMOTIONAL INTELLIGENCE AND INTELLECTUAL GROWTH

Balancing intellectual and emotional growth is essential for achieving a harmonious and fulfilling life. This balance offers a multitude of benefits that positively impact personal and professional success, as well as overall well-being.

### Holistic Personal Development

Balancing intellectual and emotional growth leads to holistic personal development. It empowers individuals to grow as complete human beings, addressing both the cognitive and emotional aspects of their existence. This holistic approach results in a more well-rounded, self-aware, and emotionally intelligent individual who can adapt to various life situations.

### Enhanced Problem-Solving and Decision-Making

The harmonious integration of intellectual and emotional growth enhances problem-solving and decision-making. Individuals who possess strong intellectual skills can analyze complex problems, while those with well-developed emotional intelligence can navigate interpersonal challenges. The synergy between these two dimensions results in more comprehensive and effective solutions to both personal and professional issues.

### Improved Relationships

Balanced growth fosters improved relationships. Individuals with high emotional intelligence can establish and maintain healthier connections with others, while those with strong intellectual skills can engage in meaningful conversations and contribute positively to their social circles. Harmonious personal development enables individuals to connect on a deeper level with friends, family, and colleagues, resulting in more fulfilling relationships.

### Increased Resilience and Adaptability

The combination of intellectual and emotional growth equips individuals with increased resilience and adaptability. They are better prepared to face adversity, both intellectual and emotional, and emerge from challenging situations with greater strength and determination. This resilience allows individuals to tackle life's obstacles and setbacks with a positive outlook and a sense of purpose.

### Challenges and Strategies for Achieving Harmony

While the concept of balancing intellectual and emotional growth is undoubtedly beneficial, it can be challenging to achieve in practice. There are several obstacles to consider, along with strategies to overcome them.

### Time Constraints

One of the main challenges in balancing intellectual and emotional growth is the time constraints

of a busy modern life. Many individuals struggle to find time for both formal education and self-improvement while managing work, family, and other commitments. To overcome this challenge, individuals can prioritize their personal growth by setting aside dedicated time for both intellectual and emotional development. This may involve time management, setting clear goals, and incorporating learning and self-reflection into their daily routines.

### Emotional Barriers

Emotional barriers can also impede the harmonious integration of intellectual and emotional growth. Negative emotions, such as fear, self-doubt, or past traumas, can hinder personal development. To address emotional barriers, individuals can seek support from therapists, coaches, or support groups. Self-help strategies like mindfulness, journaling, and meditation can also be helpful in managing and overcoming emotional obstacles.

### Balancing Act

Balancing intellectual and emotional growth may feel like a constant juggling act. It's essential to acknowledge that the balance may not always be perfect, and there will be times when one aspect takes precedence over the other. This is a natural part of life, and individuals should be flexible in their approach. Understanding that both dimensions are equally important in the long run can help individuals maintain a healthy balance.

### Integrating Learning

To achieve harmony between intellectual and emotional growth, it's crucial to integrate learning and self-improvement into daily life. This can be done by setting specific goals for both dimensions, tracking progress, and regularly reflecting on personal growth. Developing a growth mindset, which embraces challenges and values the process of learning, can also be beneficial in maintaining a balanced approach to growth.

The symbiotic relationship between intellectual and emotional growth is an essential component of human development. These two dimensions of personal growth intersect and reinforce each other, leading to a more holistic and fulfilling life. Achieving harmony between intellectual and emotional growth requires dedication, self-awareness, and a commitment to lifelong learning.

As individuals embark on their journey of growth, they should remember that the pursuit of knowledge and self-awareness is not a solitary endeavor. The integration of intellectual and emotional growth empowers individuals to navigate the complexities of life with resilience, adaptability, and a deeper understanding of themselves and others. In this way, the pursuit of harmony between these two dimensions of personal growth leads to a more meaningful and enriched existence.

*"Be not afraid of greatness. Some are born great, some achieve greatness, and others have greatness thrust upon them."*

- WILLIAM SHAKESPEARE





## MIND MATTERS: NAVIGATING THE ETHICS, POLICY, AND IMPACT OF BRAIN-COMPUTER INTERFACES

In a rapidly evolving technological landscape, brain-computer interfaces (BCIs) have emerged as a groundbreaking field that promises to revolutionize the way humans interact with technology and each other. BCIs enable direct communication between the human brain and external devices, opening up a realm of possibilities in healthcare, communication, and entertainment. However, this unprecedented technology comes with a host of ethical and policy challenges.

### The Promise of Brain-Computer Interfaces

Brain-computer interfaces represent a monumental leap in human-computer interaction. These interfaces allow individuals to control computers, prosthetic limbs, or even communicate with each other using only their thoughts. The potential applications are vast, ranging from restoring mobility to individuals with paralysis to enhancing cognitive abilities and providing novel forms of entertainment. BCIs have the power to improve the quality of life for many and promote human flourishing.

The advent of BCIs could transform society in numerous ways:

#### Healthcare Revolution:

BCIs have the potential to revolutionize healthcare by improving the lives of individuals with neurological conditions, offering new tools for diagnosis, and enhancing treatment options.

#### Enhanced Communication:

BCIs could enable communication for those with severe disabilities, fostering inclusivity and improving their quality of life.

#### New Frontiers in Entertainment and Education:

BCIs may create innovative forms of entertainment and educational experiences, blurring the lines between the virtual and physical worlds.

#### Ethical and Social Challenges:

The use of BCIs may introduce new ethical and social challenges, such as determining the boundaries of acceptable cognitive enhancement and addressing concerns about mind hacking.

#### Ethical Dilemmas

Despite their immense promise, BCIs raise a multitude of ethical dilemmas:

#### Privacy and Data Security:

As BCIs collect and transmit sensitive neural data, ensuring privacy and security becomes paramount. Unauthorized access to a person's neural information could lead to invasive surveillance or identity theft.

#### Informed Consent:

The nature of BCIs may necessitate altering the brain, raising questions about informed consent and the potential for coercion, especially in medical contexts.

#### Cognitive Enhancement:

BCIs could be used for cognitive enhancement, but this raises concerns about creating an "uneven playing field" where only those who can afford enhancements have access to superior cognitive abilities.

#### Identity and Autonomy:

Altering one's cognitive functions through BCIs may blur the lines between one's authentic self and external influences, raising questions about individual identity and autonomy.

#### Policy Considerations

Addressing these ethical challenges requires thoughtful policy development:

#### Regulation:

Governments must establish clear regulations to ensure the safe and ethical development of BCIs, covering aspects such as data protection, medical use, and cognitive enhancement.

#### Inclusivity:

Policymakers should promote access to BCIs for all, avoiding disparities in access to potentially life-changing technologies.

#### Ethical Guidelines:

Develop ethical guidelines to ensure that BCI research and applications adhere to principles of autonomy, non-maleficence, and beneficence.

#### International Collaboration:

Given the global nature of the technology, international collaboration is essential to harmonize BCI regulations and standards.

Brain-computer interfaces represent a remarkable technological advancement that has the potential to transform the way we interact with the world. While the promises of BCIs are enticing, we must tread carefully to navigate the ethical and policy complexities associated with this emerging field. As we embrace the future, it is crucial to prioritize individual rights, inclusivity, and responsible innovation to ensure that BCIs contribute positively to the human experience and do not exacerbate existing disparities or ethical dilemmas. Balancing innovation with ethics and policy is the key to unlocking the full potential of BCIs and shaping a more equitable and enlightened future.



**INDIA'S LARGEST ONLINE IAS  
COACHING ACADEMY**



# TOPICS OF THE MONTH





**BETTER TO WEAR OUT THAN TO RUST  
OUT**

**- DR. Alexander Jacob IPS**

**CHARACTER IS DESTINY**

**-DR. Babu Sebastian**

**DOES RIGHT TO LIVE INCLUDE RIGHT TO  
DIE?**

**-DR. G. Prasanna Kumar**

**DOES THE HUMAN RACE NEED TO SLOW  
DOWN?**

**-Mr.Solomon John**



## BETTER TO WEAR OUT THAN TO RUST OUT

"The great difference between men, between the feeble and the powerful, the great and the insignificant is the energy the put into everything. A purpose once fixed and then victory or death. This quality will do anything because it puts into notion powers that cannot be conquered"-Napoleon Hill

"Let us rather run the race of wearing out than rusting out"-Theodore Roosevelt.

The quote is very relevant in situations of decision making, getting into action, taking up a challenging project about which we have doubts on ourselves, the projects which make us question our abilities or the challenges which make us think if we are capable enough. More often than not, such thought eventually lead us to a place where there is less action and more thought and finally nothing is done about it, not even as much as addressing and acknowledging it to be something which we would be willing to take up. But there are many who are not willing to sit idle and rust. These are the one who change the world by taking control over it.

One of the reasons might be that we all hate to fail; sometimes we are so afraid of the negative result that we don't even act so that we need not be in a position to accept defeat. We find it easier to tell ourselves that it was not possible because of a set of justifiable reasons which are very valid. Ideally speaking, rarely do get a perfect situation where things will fall into order. Most times we have to make things work no matter how hard they seem. Sometimes some of them don't, that doesn't mean we are going to sit silent, it just means that we are going to try a different approach. There is no point in not trying and being happy, it rarely does solve the problem. A much saner way could be in the spirit of a fight!

To achieve the success, one has to make sure that he/she is pursuing his/her goods relentlessly. Thomas Alva Edison, the great inventor with over 1000 patents to his name, when asked what he thought of his numerous failures replied calmly, "I have not failed. I've just found 10,000 ways that won't work". What an empowering way to look at failures His positive attitude allowed him to persist, until he finally found the way that did work. Similar things happened with the Alfred Nobel when he had to lose his laboratory, his family also in the course of doing experiments for the invention of Dynamite. Likewise, Time can come where resources, time or monetary assets are exhausted but still the ideal would remain supreme: One has to keep his morale high. It is rightly said 'some goals are so worthy that it is glorious even to fail'. Such goals, targets in life would indeed remain worth the effort. Remember, we all get only one shot at life. To perform or perish at that time, it is in our hands at that time. We are the great masters of our destiny.

M.C. Marycom, the three times world champion in Boxing - Women event, is a living testimony of a personality which believes in wearing out, rather than Rusting out. Her inspirational life story is a story of valiant battle which she fought bravely against all the odds and emerged victorious. What motivates common man is his undying spirit and willpower to take on challenges, and her stupendous efforts to stage a comeback as a winner in physically draining boxing competition. She literally wore herself out,

in an effort to be best, not literally once but again and again, sometimes in world championships & once in Olympics. She proved it is mind over matter which is important and not vice-versa.

It takes courage and efforts to stand tall amid the pulls and pressures of life, of society. It requires dare in the face of immense danger and character in time of crisis, to be a Hero. Mahatma Gandhi swam against the current of powerful British Empire which was not only ruthless but also resourceful. He very well knew his ability to slog for long hours and even days, his undying spirit and his strong conviction and belief in his cause of independent India would yield results and would lead to downfall of mighty British Empire -an empire where the sun never set. Gandhi ji never seemed worried for his health or his frail body. He truly wore himself out rather than rust out without work and making excuses. A true epitome of hard work he truly was an inspirational leader, he used to write replies of the letters written to him, in his own-handwriting, never entrusting his personal work to his subordinates

A famous personality once said "When we get up in morning, we have two choices; either to go back to sleep and dream or to get up and chase those dreams. It is simply a choice between 'Resting and Rusting' or 'Rising and Racing' the choices is ours and the stakes are really very high. People forget the great power they hold within the power to shape their life. Our life is shaped by the choices we make. You are the one who choose how to live your life or create your life's path. Our future will not be determined by chance, but rather by the choices we make today. Life is a series of choices. The choices we make now affect the options available for the next round of choices. Learning what to choose, and how to choose, may be the most important education you will ever receive. There are moments in our lives when we find ourselves at a crossroads. The choices we make in those moments can define the rest of our days. And, of course when faced with the unknown, most of us prefer to turn around and go back.

There may be times we make choices that cause our path to become tough, confusing and uncertain. Our path seems like a series of hills and valleys, there is never any balance. When this happens, we should stop and examine the choices we made that have taken us down this path. We should evaluate those choices and identify alternatives or new choices that will bring us back to our true path-the one we originally created.

Rationally speaking on the other hand, no one can teach other to become sincere and hardworking. No magical potion can turn us into work-Machines. An attitude with extreme focus, sincerity and hard work can literally do wonders to even greatest of Human weakling. Time and again in history of Humans, many people have taken up the challenges head on they had shown tremendous courage to meet the challenges, overcome the difficulties. And they have done it quite magnificently. It was their indomitable spirit which ensured that they emerge victorious. They had made it possible because they had shown the courage, they had taken the decision, they had made the choice that they are willing to wear themselves out rather than silently Rusting out.





## CHARACTER IS DESTINY

The dictum 'Character is destiny' was given by ancient Greek Philosopher Heraclites during period 533-475 B.C and it remains as true today as it was then. The progress of time has not done much for changing the truth behind it. The dictum means that destiny is not dependent on luck or fate, but it depends on the choices that we make. This statement gains great significance in the country like India in which the caste system and the concept of karma rules. The caste system says that the destiny of the person is decided at birth and that the actions of the individual cannot change his or her destiny. His destiny in this life is decided by the karma in the previous life and the karma or actions in this life will decide the destiny in his next life. So a person born in low castes have no hope of improving their lot by their actions.

This thought pattern which links destiny with the accident of birth is strongly contrasted with the modern western understanding of destiny in which the emphasis is on the choices. In the western system the destiny is determined by the actions of the individual and the actions of the individual depend on the character which in turn is based on the beliefs system of the individual in question. For understanding this better we have to see the role of fate and our choices.

Fate is outside our control. What happens will happen. We cannot change it. We are going on the road a drunk driver hits us and we end up in the hospital. A girl walking home from school gets raped and her future gets destroyed without her fault. A child is born blind. A child is born in mansion who has all the advantages available to him. Because of these advantages he succeeds in life. A child born in slum has no advantages, he struggles throughout the life and never achieve anything. We cannot control these things. We cannot change the family we are born into or the accidents that happen. What will be will be. In none of these cases could we change the fate by our actions.

But is this true? Can we really change nothing in life? This requires more consideration. In each of the examples above we have choices which will influence and affect our destiny. We cannot control the fate, we cannot control the actions outside our sphere of influence, but we can control our reaction to this fate. For example, a child born in the slum can take a decision of studying, he can work hard and change his destiny. We have examples of dalit children struggling for their livelihood studying day and night and clearing Civil Services exams. A child born in the mansion can choose to waste his or her life and money. At the end of his life he can bring himself to ruins by the choices made.

No matter what position we are in, we always have a choice and that choice influences our destiny. A person keeping a gun on our head cannot take away the choice and force us to do something, we can still chose death. A school girl who is raped can chose to enter into depression and destroy her life, or she can chose to fight. The battle will not be easy, but her choice will determine the destiny that she makes. These choices will depend on the character of the individual.

Consider the case of two individual born in a dalit family living in the slum. Both of them are struggling for

food. One is unable to bear the struggle, his belief gives him no hope, his character is weak. He chooses suicide. The other individual has hope. He knows that no matter what happen his actions make a difference. He refuses to give up. He continues to struggle and he continues to work hard. In the end the choices made by them influence the destiny that they achieve. One gives up, the other achieves. These choices made by them were determined by the character which they had.

The world is full of people who have refused to bow down to the fate and they have carved their own destiny. Whose character did not allow them to bow to the fate. We can look at the example of Mohan Das Karamchand Gandhi. One day in South Africa he was kicked out of the coach in the train because the colour of his skin was not white. He was not the only one who was kicked out. There were thousands of people who were kicked out of their compartments over the years. But Gandhi's character did not allow him to bow down. It did not allow him to stay silent. He took a stand against the government, the satyagrah was born. This choice not only changed the destiny of Mohan Das Karamchand Gandhi by transforming him into Mahatma Gandhi but also changed the destiny of India from slavehood to the free country.

In the same manner we have example of Martin Luther King Jr. He was a black preacher in United States of America. At that time in America black people were treated as inferiors. They were not allowed the rights of equality. Thousands of them suffered and stayed silent. Some of them suffered and took up violent actions. Martin Luther King's character did not allow him to stay silent and his beliefs did not allow him to take up arms. He stood up for the rights of black people and took the mantle of non-violence. The whites continued with their mistreatment and actions. Martin Luther King and his followers took up the protest of non-violence. In the end whites lost and the blacks achieved their rights.

We can look at the example of Shaaed Bhagat Singh. He saw the injustice done by the British Empire. He saw the different treatment given to Indians and British. His character did not allow him to stay silent. His character did not allow him to bear this injustice. He decided to punish the persons committing the injustice. His choices were determined by his actions. His destiny was determined by his choices. He was willing to die for them. He chose violence over peace. Both Mahatma Gandhi and Martin Luther King chose non-violence over violence. The choices of these persons influenced the destiny that they created

Each of us has been given freedom to choose. Nobody can take away this freedom. We can choose the fate that we receive. We cannot choose things which are outside our control. Mahatma Gandhi could not change the fact that British Empire had conquered India. Martin Luther King could not change the fact that blacks were bought to America as slaves. Shaaed Bhagat Singh could not change the evil done by the British Government. But each of them could choose their own actions. They could choose their actions. Their character made the difference and their belief influenced this character. In the end each of these persons not only influenced their destiny but they influenced the destiny of the nation to which they belonged. Character is destiny, fate cannot take that away from us.



## DOES RIGHT TO LIVE INCLUDE RIGHT TO DIE?

The development in the medical field and has led to eradication of many diseases once considered incurable and helped in improving both the quality and quantity of human life. These developments along with the development in the concept of human rights have introduced the concept of euthanasia, Euthanasia or mercy killing as it commonly known is perhaps one of the most hotly debated topic in the world. Euthanasia is raising many fundamental ethical, social and legal concerns related to the medical field. We will look at and consider the one of the most basic part i.e. legal framework.

The most important point in the Indian argument for euthanasia is the Indian Constitution guarantee for its people fundamental rights and liberty where the positive right also includes the negative right. To understand this better let's, take an example where the right to speech includes the right not to speak. Right to speech is a positive right and the right not to speak is a negative right. In the same way right to live (positive right) a dignified life has been guaranteed in the Indian constitution and right to die a dignified death (negative right) should also be acceptable.

Euthanasia is illegal in India and Passive Euthanasia as the apex court in 2011 held is legal only in "exceptional circumstances". The debate on Euthanasia brings into its purview spiritual, social, cultural, economic, health and human rights aspects of the society. Over the recent years there have been advocates who have been highly vocal by demanding autonomy for patients on how and when they want to die, famous cases like that of Aruna Shanbaugh have brought the debate on Euthanasia in the forefront.

The Indian Constitution in Article 21 declares that, "No person shall be deprived of his life or personal liberty except according to procedure established by law." But the question that arose was whether this Right to Life granted by the Supreme Court could include the Right to Die. Can we bring Right to Die in the purview of Right to Life? Euthanasia is the act of exercising the Right to die and is legally prohibited in India. Some countries have allowed euthanasia which has led to numerous debates but the fact remains that we can only come to a conclusion if we take in mind and understand the Socio- Legal perspectives of a country and its people.

Though the phraseology of Article 21 starts with a negative word the word 'No', in Article 21 it has been used instead of the word deprived. Article 21 prevents the encroachment upon personal liberty and deprivation of life except by the procedure established by law. The apex court has made a creative interpretation of Article 21 by obligating the state to make efforts to provide its people better quality of life and dignity. It's the responsibility of the State to make sure that its people lead a meaningful, complete and dignified life.

But does this right to dignified existence also mean a right to dignified death. Death means that life has gone extinct. This may happen when an individual dies a natural death or when death occurs by the action or inaction of someone. But a suicide is when a person decides to take their life themselves. Its morally and ethically wrong to

cause an unnatural death of oneself or another person and this should be strictly prohibited. However, if an individual want to die voluntary and with his full consent it can be allowed only in exceptional circumstances.

Devisingh P Rathinam v Union of India was overruled by Gian Kaur Case as observed by Sourav Madhur Dey the apex court held that the "right to life" is inherently inconsistent with the "right to die" as is "death" with "life". In furtherance, the right to life, which includes right to live with human dignity, would mean the existence of such a right up to the natural end of life. It may further include "death with dignity" but such existence should not be confused with unnatural extinction of life curtailing natural span of life."

In progression of the above, the constitutionality of Section 309 of the I. P. C, which makes "attempt to suicide" an offence, was upheld, overruling the judgment in P. Rathinam's case. The factor of immense significance to be noted here is that suicide, euthanasia, mercy killing and the like amount to unnatural ebbing of life. This decision thereby overruling P.Rathinam's case establishes that the "Right to life" not only precludes the "right to die" but also the right to kill." The question of deleting Section 309 (attempt to commit suicide) of the Criminal Procedure Code was recommended in the Treatment to Terminally Ill Patients (Protection of Patients and Medical Practitioners) Report 196th of the Law Commission. This report also mentioned that if a person refuses medical treatment it would not amount to committing suicide and if a medical practitioner withdrew or withheld medical treatment it would not be considered as abetment of suicide.

In India Aruna Ramachandra Shanbaugh Vs Union of India the apex court made a landmark judgment legalizing Passive Euthanasia in "exceptional circumstances" the court observed that "the general legal position all over the world seems to be that while active euthanasia is illegal unless there is legislation permitting it, passive euthanasia is legal even without legislation provided certain conditions and safeguards are maintained". Basic Guidelines issued by the Hon'ble Court for Passive Euthanasia. Whenever there is a need for passive euthanasia for some patient, permission has to be obtained by the concerned High Court before life prolonging measures can be withheld. Here the court will act a 'parens patriae', a doctrine that grants the inherent power and authority of the state protect persons who are legally unable to act on their own behalf. This is important in a country like India where the ethical and moral standards of the vast culturally diverse country have dipped lower with crimes like female infanticide, gang rapes and honour killing etc.

On 11th August 2011 a report Passive Euthanasia-A Relook was submitted to the Government of India by the Law Commission and the 10 Law Commission proposed the bill in which the procedures given in the Aruna Shanbaugh case have been kept in mind. The Bill will go through various stages before it is made an act but till that time the decision of the apex court in the Aruna Shanbaugh case will be held as law pertaining to Passive Euthanasia.



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## DOES THE HUMAN RACE NEED TO SLOW DOWN?

"The roar of the traffic, the passage of undifferentiated faces, his way and that way, drugs me into dreams; rubs the features from faces. People might walk through me. In addition, what is this moment of time, this particular day in which I have found myself caught? The growl of traffic might be any uproar-forest trees or the roar of wild beasts. Time has whizzed back an inch or two on its reel; our short progress has been cancelled. I think also that our bodies are in truth naked. We are only lightly covered with buttoned cloth; and beneath these pavements are shells, bones and silence."- Virginia Woolf

These beautiful words truly depict the plight of the human race in today's date. The statistics and power of numbers has taken away from us humans the quintessential characteristic of our race- love, compassion and care. The overemphasis on material growth and power of numbers has made us all part of a race. This race is unending and has no conclusion but death. Our obsession with ranks and money has made us blind to small moments of happiness, which one would have found in watching a squirrel hunt for nuts or a rose blooming. This is damaging the moral values and reducing the quality of life. Ironically in the race for improving the quality of life the quality of life is decreasing.

Let us just stop, think and act for a while. Religion, caste and creed have become basis for discrimination among our own species, our own brothers and sisters. Spiritual consciousness does not lie in using a religion to humiliate another but to love and care for all species alike. The time of the early man was simpler and equal and perhaps happy than the times we live in today. Hearing all this question arises

-Does then the human race need to slow down?

Most serious social issue is that of family bonding with is fast becoming a thing of the past. The age old tradition of joint family system almost got extinct and is seen rarely. Moral values, ethics, social fabric, unity, are the distinct features of Indian heritage, culture and tradition. The Vedas, Upanishads, Gita are all traits of great works of our saints. An insight in to them may help us relieve from mental, physical and others problems. In this fast era the words of Swami Dayanand Saraswati -"go back to Vedas" are worth praising and should be followed to know what we have lost in the name of development.

There exists cut throat competition everywhere and man is behind money and greed, keeping love and compassion at bay. Money is required to some extent in our day to day life. The making of money is an extended business and man needs to strive a lot. However, no one is ready for the lengthy process and all they want is instant money and fame. The tolerance level among the people is totally reduced. Increasing number of road accidents and alarming suicidal rates shows us that human race has forgotten the school days phrase 'slow and steady wins the race',

As suggested by the famous philosopher Karl Marx, one of the most strange and peculiar features of the human civilization are alienation. Dualistic bonds between fellow men characterize today's human race and society and relationships have boiled down to exist as per need. Man's alienated from his own self in this fast pace world.

Peace of mind and solace is something for which he pays and goes on a vacation to the hills to experience. Land and nature's beauty is also something, which can be, utilized a source of income. Crime is on a rise. Killing animals for money at an unprecedented rate is accompanied by killing fellow men in a fit of anger and anguish. A recent attempt made by one of the relatively smaller countries of this world in relation with this topic, Bhutan, to measure happiness among its people has forced the world to think in the right direction of how well have we performed so far on social indicators than just achieving mere numbers for the measurement of prosperity of a nation.

It is a general tendency of the developed countries to suppress the developing countries for power. Every country should realize that war is not a solution and every conflict can be put to an end by friendly agreement. Universal unity and love for humanity should spread among the countries in order to make this world a better place to live in for all humankind. The usage of nuclear power should always be in a constructive manner. Amid the hustle and bustle of life, we need to slow down to think twice before acting prudently. Thus, in a nut shell there is a pressing need for tolerance, compassion among the people, safe guarding the nature and good balanced life style. We need to slow down a bit to brace our self to achieve dizzy success in all walks of life and realize what living really means to us, so that we can cherish to the fullest.

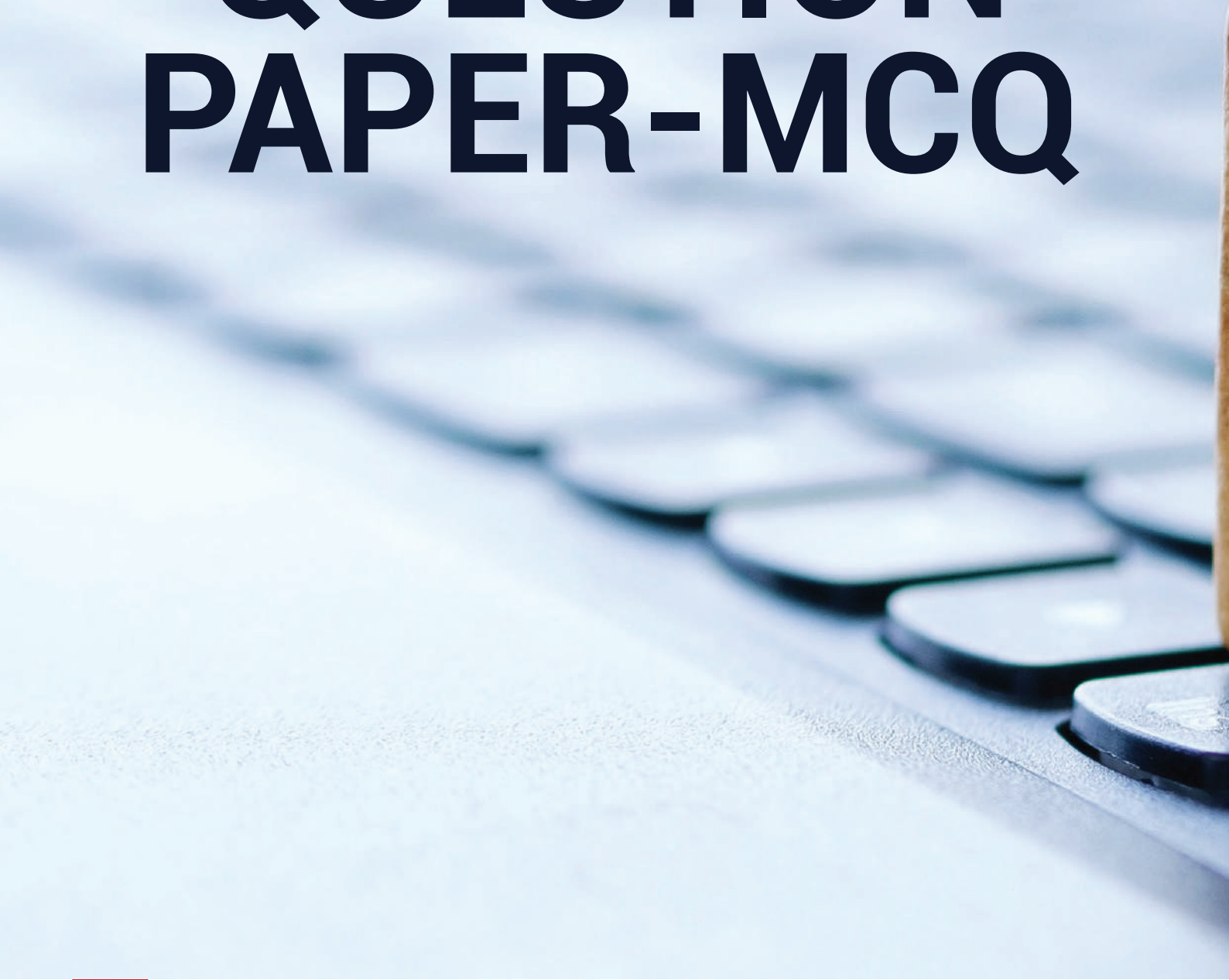
Modern world has given us astonishing gadgets and gizmos but has taken away our health and happiness. Present society counts the success of an individual in terms of his possession and wealth instead of his character and philanthropy. Men take jobs on terms of mercenary benefits rather than his real interest. The trend of nuclear family setup could not able to give fruitful results. Human life is full of struggles and disputes. In a bid to survive this cut throat battle a man has to fight and overcome many hurdles, which is depriving him of many joys of life. Really speaking the life of man is a struggle right from his birth to his death, which we must undertake. When a child is born, he finds himself in a world where every moment is full of struggle.

When he grows up into a man, the struggle becomes more acute leaving him with no choice but to fight. Right up to death, he must keep fighting against different circumstances. Or else he will be crushed by this bustling cruel world. The children starve for love and affection from their working parents. It is noteworthy to mention that most of the parents hardly find time to spend with their loved ones who are deprived of the affection of their family. There should be a balance between the professional and personal, else life is not enjoyable. It is time to slow down the pace of rush hour towards money.

We have to seriously think if human race needs to slow down? Has the time come to think about what we have gained from all this fighting over these centuries amongst ourselves? Has it brought us any good or was it mere wastage of time and resources? The greed for more colonies and spread of spheres of influence had led to the two major world wars in modern history, the impact of which is still being borne out by the completely human race. Time has come for the human race to slow down and take a break.



# **MODEL QUESTION PAPER-MCQ**









1. Consider the following statements:

Financial instruments like stocks of Multi National Corporates (MNCs) and Sovereign Bonds are transacted among secondary investors in secondary Equity markets.

Financial instruments like Treasury bills are issued by Union and State Government to raise short-term capital.

Which among the above statement(s) is / are true?

1 only

2 only

Both 1 and 2

Neither 1 nor 2

2. Consider the following statements regarding Government Security (G-Sec) and Treasury Bills (T-bills).

In India, the Central Government issues both, Treasury-Bills and Bonds or dated securities while the State Governments issue only Bonds or dated securities, called as State Development Loans (SDLs).

The G-Sec and Treasury Bills (T-bills) are not available for small and retail investors.

Which of the above statements is/are INCORRECT?

1 only

2 only

Both 1 and 2

Neither 1 nor 2

3. Consider the following statements:

Provide long-term capital to entrepreneurs / business houses for financing a project.

Tenor of long-term financial instruments is more than 100 days.

Which among the above statement(s) regarding the Capital Markets is / are true?

1 only

2 only

Both 1 and 2

Neither 1 nor 2

4. Consider the following:

Union Government

State Government.

Municipal Corporations.

Govt. bodies.

Banking Financial Institutions.

Non-Banking Financial Institutions.

Public Sector Units

Which among the above can issue Money Market instruments?

1, 2, 3 and 4 only

1, 3, 4, 5 and 6 only

2, 3, 4, 5 and 6 only

All of the above

5. Consider the following statements:

Initial Public Offer.

Follow on Public Offer.

Stock buy-backs.

Which among the above operations take place in Primary Markets?

1 and 2 only

1 and 3 only

2 and 3 only

1, 2 and 3

6. Following is a description: Issue of shares to raise equity capital from the primary investors few selected investors. The above description refers to

Initial Public Offer (IPO)

Follow on Public Offer (FPO)

Private Placement

None of the above

7. Consider the following statements:

Direct or indirect participation in decision making

Preferential claim during liquidation.

Constant return on investments.

Which among the above is / are privileges enjoyed by a creditor?

1 and 2 only

1 and 3 only

2 and 3 only

1, 2 and 3

8. With reference to Sovereign Bonds, consider the following statements:

The Central Banks would engage in a Bond buying programme.

The Central Banks would purchase even bonds that have not matured.

Which of the statements given above are correct during a period of recession?

1 only

2 only

Both 1 and 2

Neither 1 nor 2

9. With reference to the India economy, what are the advantages of "Inflation-Indexed Bonds (IIBs)"?

Government can reduce the coupon rates on its borrowing by way of IIBs.

IIBs provide protection to the investors from uncertainty regarding inflation.

The interest received as well as capital gains on IIBs are not taxable.

Which of the statements given above are correct?

1 and 2 only

2 and 3 only





1 and 3 only

1, 2 and 3

10. With reference to yields of Sovereign and Corporate Bonds, consider the following statements:

Upward revision in Sovereign credit ratings.

Increase in Interest rates.

Higher Inflation expectations

Depreciation of domestic currency.

Which among the above is likely to lead to an increase in current yields?

1, 2 and 3 only

1, 3 and 4 only

2, 3 and 4 only

All of the above

11. In the context of Indian economy, Open Market Operations refers to

borrowing by scheduled banks from the RBI

lending by commercial banks to industry and trade

purchase and sale of government securities by the RBI

None of the above

12. Consider the following statements:

Initial Public Offer (IPO) involve selling shares in the Primary Markets, while Follow On Public Offer (FPO) involve selling shares in the Secondary Markets.

Shares are offered to retail investors during the Initial Public Offer (IPO) as well as during the Follow-on Public Offer (FPO).

Which among the above statement(s) is / are true?

1 only

2 only

Both 1 and 2

Neither 1 nor 2

13. Consider the following statements:

Sale of Equity Financial Instruments like shares / stocks change the ownership pattern of the respective organisation.

The ownership pattern of the respective organisation remains the same after the sale of Debt Financial Instruments like Bonds.

Which among the above statement(s) is /are true?

1 only

2 only

Both 1 and 2

Neither 1 nor 2

14. Consider the following statements:

Investments in Equity Financial Instruments yield dividends as income, while investments in Debt Financial Instruments yield interest as income.

Investments in both Equity and Debt Financial Instruments yield constant returns.

Which among the above statement(s) is /are true?

1 only

2 only

Both 1 and 2

Neither 1 nor 2

15. Consider the following:

Sovereign Bonds.

Corporate Bonds.

Treasury Bills.

Shares.

Which among the above Financial Instrument(s) is / are traded in Debt Markets?

1 and 2 only

1, 2 and 3 only

2, 3 and 4 only

All of the above

16. Which among the following best explains the crucial consideration in managing radioactive waste water to prevent environmental pollution?

Rapid discharge to minimize impact

Long-term consequences for marine life

Dilution effect for immediate safety

Lack of monitoring and regulation

17. What is a critical consideration when dealing with radioactive wastewater to prevent environmental pollution?

The vastness of the ocean ensures safe disposal without monitoring.

Stringent monitoring and regulation are unnecessary for radioactive wastewater.

Short-term impacts on local ecosystems are negligible.

Delicate ecosystems near discharge sites need careful location selection.

18. Consider the following statements regarding National Tiger Conservation Authority.

NTCA is a statutory body under the Ministry of Environment, Forest and Climate Change.

It works to conserve tigers and their habitats in India.

NTCA oversees the implementation of the Project Tiger program.

Which of the above statement/s is/ are correct?

Only One

Only Two

All the Three

None of the above

19. Consider the following statements regarding State of the Rhino, 2023 often seen in news.

The rhino population has increased by about 20% in the last decade, thanks to strict government protection.



Greater one-horned rhinos are primarily found in India and Bangladesh only.

Despite growth, the species remains "Vulnerable" due to ongoing threats, including poaching.

Which of the above statement/s is/ are correct?

Only One

Only Two

All the Three

None of the above

20. Which among the following best explains the central emphasis of the concept of Climate Polycrisis?

Isolated climate solutions which focusing on specific climate issues for targeted solutions.

Comprehensive approach which acknowledging the complex interconnections in the climate crisis and advocating a holistic perspective.

Immediate transformation prioritizing rapid transformation without considering stakeholder viewpoints.

Sector-specific solutions like addressing climate problems individually without considering their interrelated nature.

21. With reference to the concept of Carbon Accounting sometimes seen in news, consider the following statements.

Carbon accounting quantifies an organization's greenhouse gas emissions.

It helps in assessing carbon footprints and identifying emission sources.

Which of the above statement/s is/ are correct?

1 only

2 only

Both 1 and 2

Neither 1 nor 2

22. Consider the following statements.

A global assessment involving 8,000 amphibian species found that 2 out of 5 are threatened with extinction.

Climate change is a major threat, affecting 39% of species, as amphibians are highly sensitive to environmental changes.

Habitat destruction and degradation pose a significant threat to 93% of threatened amphibians.

Which of the above statement/s is/ are correct?

Only One

Only Two

All the Three

None of the above

23. NASA's OSIRIS-Rex Mission often seen in news is associated with which among the following?

Exo-planet exploration

Sample collection of asteroid

Study of Jupiter

None of the above

24. Consider the following statements regarding Gaganyaan - India's Human Spaceflight Program sometimes seen in news.

Gaganyaan aims to demonstrate India's human spaceflight capability with a 3-member crew in a 3-day mission to a 400 km orbit.

Gaganyaan is intended for permanent colonization of the Moon.

Which of the above statement/s is/ are correct?

1 only

2 only

Both 1 and 2

Neither 1 nor 2

25. What is "Disease X" often seen in news?

A well-known infectious disease.

An emerging pathogen with predictable characteristics.

A hypothetical disease representing an unknown pathogen.

A category of chronic diseases.

26. With reference to cookies in online browsing often seen in news, consider the following statements.

They are small text files stored on your device by websites you visit.

First-party cookies are used for advertising, while third-party cookies are for website functionality.

They help websites remember your preferences and login information.

Which of the above statement/s is/ are correct?

Only One

Only Two

All the Three

None of the above

27. Consider the following statements regarding Monoclonal antibodies often seen in news.

They are naturally occurring proteins.

They mimic natural immune system antibodies.

They target specific antigens for therapeutic use.

Which of the above statement/s is/ are correct?

Only One

Only Two

All the Three

None of the above

28. With reference to Green Hydrogen often seen in news, consider the following statements.

Green hydrogen is produced through water electrolysis using renewable energy sources.

It has no carbon emissions during production, making it eco-friendly.

Identify the correct statement/s.

1 only

2 only



Both 1 and 2

Neither 1 nor 2

29. "VULCAN 20-20 PROJECT" often mentioned in news is related with

Development of Nuclear Fusion Reactor

Development of Powerful Laser Technology

Development of Launch Vehicle

Establishment of Solar Telescope

30. With reference to Quantum Dots often seen in news, consider the following statements.

They have applications in solar cells, biological labelling, displays, and medical imaging.

Safety and environmental concerns do not exist regarding heavy metal-containing QDs.

They enable precise labelling in biological research and improve display colour quality.

Which of the above statement/s is/ are correct?

Only One

Only Two

All the Three

None of the above

31. Which sacred text is Ramlila based on?

a) Ramcharitmanas

b) Mahabharata

c) Bhagavad Gita

d) Upanishads

32. Which tribal group in Chhattisgarh recently received habitat rights under the Forest Rights Act?

a) Bheria PVTG

b) Kamar PVTG

c) Baiga PVTG

d) Gond PVTG

33. Which Nobel Prize category did Jon Fosse receive for his contributions?

a) Nobel Prize in Physics

b) Nobel Prize in Literature

c) Nobel Peace Prize

d) Nobel Prize in Economic Sciences

34. Which ruler is credited with the expansion and significant construction of the Jagannath Temple in the 16th century?

a) King Anantavarman

b) Raja Ramachandra Deva I

c) General Kalapahad

d) King Indrayumna

35. Which institution is responsible for awarding the Nobel Prize in Physics?

a) The Nobel Assembly at the Karolinska Institute

b) The Royal Swedish Academy of Sciences

c) The Norwegian Nobel Committee

d) The Swedish Academy

36) Consider the following statements

1) The Sustainable Development Goals (SDGs), also known as the Global Goals, were adopted by all United Nations Member States in 2015.

2) The SDGs are also universal, meaning that they apply to all countries, regardless of their level of development

3) The SDGs are integrated and indivisible, meaning that progress on one goal depends on progress on others.

Which of the following is / are true regarding the above statements

a) Only 1 and 2 are true

b) Only 2 and 3

c) Only 2

d) All three are true

37) Which of the following is NOT a benefit of integrating traditional wisdom with modern science in healthcare?

(A) It can lead to the development of new and effective medical treatments.

(B) It can help to improve the safety and efficacy of existing treatments.

(C) It can help to reduce the number of people who rely on traditional medicine altogether

(D) It can help to make healthcare more accessible and affordable for everyone.

38) Consider the following statements regarding Artemisinin

a) It is an artificial sweetener with no known side effects

b) Artemisinin, a Nobel Prize-winning anti-malarial drug that was synthesized from a 1,600-year-old Traditional Chinese Medicine text

c) It is a compound added during the extraction of petrol from Crude oil

d) It is a drug used in the treatment of patients suffering from Alzheimer's disease

39) Consider the following statements regarding UNCITRAL.

1. UNCITRAL is the principal legal entity within the United Nations system dedicated to international trade law.

2. UNCITRAL is a legal body that has been working for over 50 years with universal membership that specializes in commercial law reform worldwide.

3. It aims at creating legal frameworks that promote fairness, transparency, and efficiency in cross-border commercial transactions.

4. UNCITRAL's work is based on the principle that the modernization and harmonization of international trade law contribute to the expansion of international trade and investment, and to sustainable economic development.





40. UNCTRAL's work is supported by a Secretariat, which is located in the United Nations Office of Legal Affairs in Vienna.

How many of the above statements is/are correct?

- (a) Only one
- (b) Only two
- (c) All Five
- (d) None

41) Consider the following statements regarding the Deputy Speaker

1. Deputy Speaker has the same power as the Speaker when he presides over a sitting of the House.
2. The Constitution provides for appeal to the Speaker against a ruling given by the Deputy Speaker.
3. When the office of the Speaker is vacant, the Deputy Speaker can also determine the petitions relating to disqualification under the 10th Schedule of the Constitution.
4. The Deputy Speaker also enjoys the same privileges as the Speaker, including immunity from arrest and freedom of speech.

Which of the following is are true regarding the above statement

- a) Only 1
- b) Only 2 and 3
- c) 2,3 and 4
- d) 1,2,3, and 4

41) Consider the following statements regarding India-Middle East-Europe Economic Corridor (IMEE-EC).

1. It is an infrastructure development project that aims to create connectivity through rail and shipping networks.
2. The Canada and Japan are also participating countries
3. It is part of the Partnership for Rail and Shipping Corridors Global Infrastructure Investment (PGII).
4. The India-Middle East-Europe Economic Corridor (IMEE-EC) is a proposed trade and transit corridor that would connect India, the Middle East, and Europe through a network of roads, railways, ports, and airports.

How many of the above statements is/are correct?

- a) Only 2
- b) Only 3
- c) All four
- d) None of the above

42) Consider the following statements regarding privilege motion

1. Parliamentary privileges are certain rights and immunities enjoyed by members of Parliament, individually and collectively, so that they can effectively discharge their functions.

2. Only a minister can move a privilege motion.

3. Once a privilege motion is moved, the Speaker or Chairperson decides whether to admit it.

4. A privilege motion is moved by giving written notice to the Speaker or Chairperson of the House and the notice must state the nature of the breach of privilege and the evidence to support it.

5. The Committee of Privileges investigates the matter and submits a report to the House.

6. The House debates the Committee of Privileges' report and decides on the action to be taken, if any.

7. The House can take a variety of actions, including censuring the person who breached the privilege, suspending them from the House, or expelling them from the House.

Which of the following is/ are true

- a) Only three statements are true
- b) Only four statements are true
- c) Only one statement is false
- d) All the statements are true

43) Consider the following statements about Performance Grading Index (PGI):

1. The Union Human Resource Development (HRD) ministry is compiling this schooling index.
2. The Index will assess states on a 1000 point grading system

Which of the above is / are correct statements?

- a) 1 only
- b) 1 and 2 only
- c) 2 only
- d) None of the above

44) What is one of the main challenges to implementing the recommendations of the Supreme Court Committee on Prison Reforms?

- a) Lack of political will
- b) Lack of funding
- c) Lack of public awareness
- d) All of the above

45) Which of the following is NOT a valid criticism of the anti-defection law?

- a) It reduces the independence of legislators.
- b) It makes it difficult for legislators to hold their parties accountable.
- c) It subverts electoral mandates.
- d) It undermines the principles of representative and parliamentary democracy.

46) Consider the following statements:

1. Gaza is called an open-air prison because of the severe restrictions on movement and access to goods and services that have been imposed on the Strip by Israel and



Egypt for many years.

2. The blockade has led to widespread poverty and unemployment in Gaza.

3) Gaza is bordered by Egypt on the southwest and Israel on the east and north.

Which of the above statements is are true?

- a) Only 1
- b) Only 2
- c) Both 2 and 3
- d) All the statements are true

470 Consider the following statements, with reference to 'A to Zero ASEAN Summit':

1. The summit is associated with Net Zero Targets of the ASEAN countries.

2. This year the summit was hosted by India.

3. Indian Renewable Energy Development Agency (IREDA) was representative from India that participated in the summit.

4. The Ministry of New and Renewable Energy is in charge of achieving Net Zero Targets in India.

How many of the statements given above are correct?

- (a) Only one
- (b) Only three
- (c) All four
- (d) None

48) Which of the following set of countries share a border with Serbia?

- (a) Romania, Greece, and Bulgaria
- (b) Croatia, Hungary, and North Macedonia
- (c) Montenegro, Bosnia and Herzegovina, and Albania
- (d) Albania, Kosovo, and Bulgaria

49) Libya is bordered by

- 1. Egypt
- 2. Mediterranean Sea
- 3. Chad
- 4. Niger
- 5. Red Sea
- 6. Sudan

Which of the following is most appropriate?

- a) Egypt, red sea and Mediterranean Sea
- b) Sudan Red sea and chad
- c) Niger Read sea and Egypt
- d) Egypt, Mediterranean Sea and Sudan

50) Consider the following statements

























- 1. Libiya was formerly known as Tripoitalia
- 2. Canaan and Judah was the former names of Israel
- 3. Hazat was the former name of Gaza
- 4. Kingdom of Jordan is named after the River Jordan which flows between modern day Jordan and Israel

How many of the above statements are true?

- Only 1
- Only 2
- Only three
- All four



**OMR ANSWER SHEET**

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