VAJIRAM & RAVI
Institute for IAS Examination

The Analyst

CURRENT AFFAIRS Handout

28th March 2025

The Analyst Handout
28th March 2025

"The Caged Parrot Debate": CBI

CONTEXT: Framework for direct recruitment in CBI, law to probe national security cases without general consent from states: House Panel

About CBI

- Premier Investigating Agency
- Assists - CVC & Lokpal
- Under - DoPT
- For Corruption (PCA, 1988) - CVC
- NCB - INTERPOL
- High Conviction Rate - 65%-75%

Historical Background

- During WWII - Supplies & Procurements
- Inv. - Corruption & Bribery - 1941 - SPE under DIG - DoW
- 1942 - Railways inc.
- Need - Central Investigation Agency - DSPE, 1946
- By 1961 - SPE : 91 - IPC, 16 Central Acts, PCA, 1947
- 1963 - Exe. Resolution - CBI
- DIVISIONS -

- Anti Corruption Division
- Economic Offences Division
- Special Crimes Division
- Directorate of Prosecution

- Administration Division
- Policy & Coordination Division
- Central Forensic Science Laboratory

THE DELHI SPECIAL POLICE ESTABLISHMENT ACT, 1946

ARRANGEMENT OF SECTIONS

SECTIONS

1. Short title and extent
1A. Interpretation section
2. Constitution and powers of special police establishment
3. Offences to be investigated by special police establishment.—
4. Superintendence and administration of Special Police Establishment
4A. Committee for appointment of Director.
4B. Terms and conditions of service of Director
4BA. Director of Prosecution
4C. Appointment for posts of Superintendent of Police and above, extension and curtailment of their tenure, etc.
5. Extension of powers and jurisdiction of special police establishment to other areas.
6. Consent of State Government to exercise of powers and jurisdiction.
6A. Approval of Central Government to conduct, inquiry or investigation.
7. [*Repealed.*]

Types of Cases

- **Anti-Corruption:** Public officials - PCA, 1988
- **Economic Crimes:** Financial scams, bank frauds, FICN, etc.
- **Special Crimes:** OC, terrorism, kidnapping, mafia cases, etc.
- **Suo Moto Cases:**
  - CBI can act independently - **only in UTs**
  - Needs **State Government's consent** - investigations in a state
  - **SC & HCs -** can order CBI investigations.

Consent of State

- Entry 1 & 2 - State List
- CBI - Cannot 'automatically' operate
- *'Consent'* - required
- Types:
  - **General Consent**
  - **Special Consent**
- Withdrawal of General Consent - 'Political Misuse'
- Kazi Lendhup Dorji v. CBI, 1994
- Advance Insurance Co. Ltd Case (1970)

Appointment of CBI Director

- **Till 2014**: Under **DSPE Act, 1946**
- **Post 2003 (Vineet Narain case)**: Appointment by committee including **CVC, Home Secretary, & DoPT Secretary**.

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"The Caged Parrot Debate": CBI

CONTEXT: Framework for direct recruitment in CBI, law to probe national security cases without general consent from states: House Panel

- **Post 2014 (Lokpal Act)**:
  - Committee includes **PM (Chair), LoP, CJI**.
  - **Tenure: 2 years (CVC Act, 2003)**, can be extended **up to 5 years** (2021 ordinance).

Challenges Faced by CBI

- **Political Interference** – **"caged parrot"** - SC - government influence.
- **Delays in Investigations** – Example: Jain Hawala case.
- **Credibility Issues** – Criticized for mismanaging cases - Aarushi Talwar case, Bhopal Gas Tragedy, etc.
- **Lack of Accountability** – Exempt from **RTI Act**.
- **Manpower Shortage** – Inefficient recruitment policies.
- **Limited Powers** – State consent required for investigation.

Challenges - House Panel

- **Struggles to receive nominations** from state police - **Manpower shortages**, **Delays in processing documents**, **Unsuitable skill sets** & **Lack of incentives** for lending departments.
- Lack of Domain Expertise - **Cybercrime, Forensics, Finance & Legal**
- **Dependence - State consent - restricting its ability**

SC Judgements - CBI

- **Vineet Narain v Union of India, 1997** - 1969 "Single Directive" - Prior Sanction
- **Subramanian Swamy vs Union of India, 2014** - Section 6A
- **Common Cause vs. Union of India, 2018**
- **Dr Jaya Thakur v Union of India, 2023**

Recommendations for Improvement

- **Delink -** government control
- **Independence** - **CAG**
- **Parliamentary Standing Committee (24th Report) Recommendations**:
  - Increase **HRs & finance**
  - Strengthen **infrastructure & accountability**.
  - Enact **separate legislation (Central Bureau of Intelligence & Investigation Act)**.
- **L.P. Singh Committee (1978)** & **2nd ARC (2007)** - comprehensive central legislation for CBI.

Recommendations - House Panel

- **Permanent cadre** with **structured career progression**; **In-house expertise team; Limited deputation**
- **Lateral entry - Cybercrime, Forensics, etc.**
- **New law -** national security and integrity cases; timely and unbiased investigations

Mains Practise Question

"The Central Bureau of Investigation (CBI) has often been criticized as a "caged parrot" due to political interference and limitations in its functioning. Discuss the major challenges faced by the CBI in maintaining its autonomy and efficiency. Suggest structural and legal reforms to enhance its credibility and effectiveness."
(15 Marks, 250 words)

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Rising Tide of Youth Suicides in India

CONTEXT: The Supreme Court's decision this week to set up a task force to address the alarmingly high rate of student suicides in the country is an acknowledgement of a crisis.

Suicide

- Tragic and untimely loss - human life
- Highest number of suicides - World - NCRB
- Suicide Rate - Increased
- Figures - Underestimated
- Grave Concern - 41% of all suicides
- Suicide - leading cause of mortality - young women in India.
- Huge & Irreparable loss to family, society, the economy and future of the country.

Numerous Factors

- Suicide - Complex Human Behaviour
- Suicide in young people - Multidetermined
- The most commonly reported risk factors - mental health problems (54%), traumatic family issues (36%), academic stress (23%), social and lifestyle factors (20%), violence (22%), economic distress (9.1%) and relationship factors (9%)
- Physical and sexual abuse
- Specific sociocultural factors - young girls and women
- Failure in examinations - flaws in education system
- Enormous competition - months of pent-up pressures and emotions
- Alcohol and substance use
- Overconsumption of Internet - Cyber Bullied
- Sensational reporting - Media

Solutions

- Notion - Suicides cannot be prevented
- Young people - taught problem solving, impulse control
- Early identification - mental distress and provision of care
- Adopting a healthy lifestyle - improves mental health
- Improving family environment - providing economic assistance
- Educational reforms
- Societal changes - reduce stigma
- Political will, intersectoral collaboration
- **National Suicide Prevention Strategy for India**
  - recognised - collaboration between the Ministries of Health, Education, Information and Broadcasting, and Social Welfare as essential
  - Focuses on - need to leverage educational institutions & youth organisations

Mains Practise Question

"Youth suicides in India are a growing concern, reflecting deep-rooted socio-economic, psychological, and systemic challenges. Discuss the major causes behind the rising trend of youth suicides in India. How can policy interventions and societal efforts help in addressing this issue?"

(15 Marks, 250 words)

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Flawed Push for Third Language

SYLLABUS: GS Paper 2: Education
Newspaper : The Hindu, **Page No : 12**

What do surveys say?

Any discussion on teaching a third language must begin with an honest evaluation of India's school system and its capacity to teach subjects effectively. The Programme for International Student Assessment (PISA), a global test which evaluates reading, math, and science skills of 15-year-olds, conducted every three years by the Organisation for Economic Co-operation and Development, highlights India's struggle. In 2009, India ranked 73 out of the 74 participating countries, ahead of only Kyrgyzstan. Since then, India has withdrawn from PISA. In contrast, countries like Singapore, China, South Korea, Estonia and Finland have consistently ranked near the top, reflecting the strength of their school education systems.

Domestic surveys paint an equally dismal picture. The National Achievement Survey (NAS), conducted every three years since 2001, assesses learning outcomes in Classes 3, 5, 8, and 10. NAS 2017 found that only 48% of Class 8 students could read a simple paragraph in their regional language or Hindi; only 47% could write an essay or letter; and just 42% had a good grasp of grammar. NAS 2021 showed slight improvements of 56%, 49%, and 44%, respectively. NAS 2018 found that English proficiency, tested only at the Class 10 level, was equally poor. Notably, NAS does not assess third-language proficiency, raising concerns about policymakers' reluctance to scrutinise its effectiveness.

The Annual State of Education Report (ASER), conducted by the NGO Pratham, assesses school enrolment and learning outcomes in rural India. ASER 2018 found that 27% of Class 8 students couldn't read even a Class 2-level text properly in their regional language or Hindi. This worsened to 30.4% in 2022. In 2016, the percentage of Class 8 students who could not read even simple sentences in English was 73.8%; in 2022, it was still a staggering 53.3%. Like NAS, ASER does not evaluate third-language proficiency.

Many of India's school students are struggling with even their mother tongue and barely managing English, which raises the question: isn't it better to teach two languages well rather than three poorly? The absence of credible data on third-language proficiency shields the policy from scrutiny. Even NEP 2020 fails to address this data gap.

Therefore, wouldn't it be wiser to allocate scarce resources toward strengthening core subjects like math and science, and emerging technologies such as Artificial Intelligence (AI)? China is already piloting AI in 184 schools, including for six-year-olds. Estonia, Canada, South Korea, and the U.K. are integrating AI into secondary education.

What does research say?

NEP 2020's trilingual policy oversimplifies a complex issue, offering a single-sentence endorsement without references to global best practices.

The Cambridge Handbook of Third Language Acquisition highlights that cognitive benefits occur when learners are challenged but not overwhelmed. Learning a third language (L3) increases cognitive load. If students are still struggling with their first (L1) and second (L2) languages, learning L3 may exceed their cognitive capacity, causing mental fatigue and diminished learning efficiency. It also reduces practice time for L1 and L2, risking their attrition, with L2 being more vulnerable. Cross-linguistic interference can cause pronunciation, grammar, and vocabulary mix-ups. Achieving equal fluency in three languages is rare; one typically dominates while the others weaken. Research also shows that language similarity impacts learning ease. Speakers of Marathi, Punjabi, and Odia (Indo-Aryan languages family) experience facilitative transfer when learning Hindi as L3 due to shared grammar, vocabulary, and phonetics. In contrast, Tamil (Dravidian), Santali (Austro-Asiatic), and Mizo (Sino-Tibetan) speakers face non-facilitative transfer, making L3 acquisition much harder and creating an asymmetric learning burden.

NEP 2020's rigid trilingual mandate overlooks these complexities.

Implementation challenges

While students can study multiple languages privately, it's not cost-effective to fund the teaching of more than two languages in public schools. Adding a third language requires significant investments in teacher recruitment, training, textbooks, and technology – a major challenge for rural schools and budget-constrained States.

NEP 2020 claims that no language will be forced on States, and students are free to choose any three languages, provided that at least two are native to India. However, this "choice" is illusory. Imagine a school in Tamil Nadu where 30% of students want to learn Telugu, 20% Malayalam, 20% Kannada, 10% Hindi, and 10% Sanskrit as their third language. Such varied preferences make it impractical to hire enough qualified teachers for each language. There is a hidden push here for Hindi or Sanskrit in non-Hindi-speaking States because cost and supply constraints will compel schools to offer one or both as the third language.

NEP 2020's three-language policy ignores these real-world challenges.

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Flawed Push for Third Language

SYLLABUS: GS Paper 2: Education
Newspaper : The Hindu, **Page No : 12**

A policy stuck in the past

NEP 2020 vaguely mentions using technology for language learning but overlooks the game-changing potential of AI-powered translation tools. They can instantly translate text, images, and audio across languages, and also convert text in any language to audio in another language and vice versa, reducing the necessity for multilingual education in its current form.

While learning one's mother tongue or regional language and English are essential for foundational literacy and should be taught using traditional classroom methods enhanced by modern digital tools, the third language doesn't require the same proficiency or classroom instruction. Instead, why not leverage AI to let students learn additional languages independently, based on their needs and at their own pace? This approach would be cost-effective and flexible.

The NEP 2020's approach to language learning clashes with the aspirations of parents and students. It treats languages as cultural pursuits, ignoring their practical value in the job market. Additionally, the policy reveals its ideological bias by dedicating more discussion to Sanskrit – a language with little practical use and limited career opportunities – than English. At a time when nations across Europe, Asia and Latin America, including Russia, China, South Korea, Japan and Brazil, are actively promoting English education, the NEP 2020 fails to acknowledge its crucial role in higher education, science and technology, and global job markets.

Lessons from Singapore

In *From Third World to First*, Lee Kuan Yew, himself of Chinese origin, recounts how he resisted intense pressure from Singapore's Chinese majority (74.3% of population) to declare Mandarin as the sole national language. Recognising that this would alienate Malays (13.5%), Tamils (9%) and other minorities, and to ensure fairness, Lee chose English – a colonial legacy but a neutral language – as Singapore's lingua franca.

Singapore adopted a bilingual education system, with students learning English as their first language and their mother tongue (Mandarin, Malay, or Tamil) as the second. Parents supported English-medium education for better career prospects, while the mother tongue reinforced cultural identity. This policy fostered social cohesion, prevented

Why Hindi won't work as a unifier

The 2011 Census states that 43.63% of Indians speak Hindi. However, noted scholar G.N. Devy, in *India: A Linguistic Civilization*, reveals this figure is inflated by including 53 other languages as "dialects" of Hindi. Several of these languages like Awadhi, Bhojpuri, Brajbhasha, Magadhi, Chattisgarhi, and Rajasthani, are completely independent languages, much older than Hindi. Excluding these, true Hindi speakers account for just 25% of the population.

Moreover, the 2011 Census highlights that 63.46% of Indians have never left their birthplace, 85.27% remain within their native district, and 95.28% never migrated out of their home State. With job opportunities concentrated in non-Hindi speaking States in the south and west and New Delhi, inter-State migrations are mostly away from the Hindi heartland. When only 25% of Indians speak Hindi and 95% of Indians remain within their home States and use only their languages, the push for Hindi as a national lingua franca, whether direct or indirect, is completely misguided.

The idea that a single language is essential for national unity is a European import. In the 19th and 20th centuries, Germany, Italy, Poland, Hungary, Romania and several other European countries embraced linguistic nationalism. But applying this model to India – one of the world's most linguistically diverse civilisations – is deeply flawed. It is like replacing a vibrant, biodiverse forest with a sterile monoculture. Historian John Keay, in *Midnight's Descendants*, credits India's linguistic flexibility for its unity, unlike Pakistan, which tried imposing Urdu as the sole national language, alienating Bengalis and leading to Bangladesh's creation. India recognised 22 languages in the Constitution's Eighth Schedule, reorganised States linguistically, and retained English as an official language – defusing tensions, preserving unity, and strengthening federalism.

Evidence over ideology

The NEP 2020's mandatory three-language policy is a textbook example of ideology trumping evidence. When India's schools struggle with basic proficiency in two languages, enforcing a third without any clear benefits or consideration for cognitive strain, funding and implementation is deeply flawed.

One reason non-Hindi speaking southern States, particularly Tamil Nadu, outperform the Hindi heartland economically is because of their greater embrace of English. Tamil Nadu's successful two-language policy, in place since 1968, proves that linguistic pragmatism fuels progress. Yet, NEP 2020 disregards both internal successes and global best practices, pushing a rigid trilingual mandate.

India should learn from Singapore and adopt a pragmatic two-language policy, emphasising English for global competitiveness and regional languages for cultural preservation. Linguistic nationalism must give way to policies that empower students.

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India's Deep Sea Challenge

SYLLABUS: GS Paper 3: S&T
Newspaper : The Indian Express, **Page No : 18**

LAST MONTH, India completed wet testing of its Matsya-6000 submersible, capable of diving up to 6 km below the surface to look for underwater minerals off the coast. The launch of the first deep-sea manned vehicle is planned for later this year — it will put India in a select group of nations with the capability to send humans to these depths.

Last week, China unveiled a compact deep sea cable-cutting device that can be mounted on certain submersibles — and which is capable of severing the world's most fortified underwater communication or power lines. China reportedly operates the largest fleet of submersibles in the world.

Deep sea challenge

The intense oceanic activity around the world over the past two decades has focused on the Deep both for its economic resources and as the theatre of possible future conflicts.

According to the United Nations Convention on the Law of the Seas (UNCLOS), the Exclusive Economic Zone (EEZ) of a country extends from the baseline of its coast to 200 nautical miles (about 370 km) into the sea. A nation has exclusive rights to living and non-living resources in the waters and on the seabed within its EEZ.

Average depth in the Indian EEZ is 3,741 metres — this is more than four-and-a-half times the height of Burj Khalifa, the world's tallest building. But it is shallow compared to the deepest ocean — the bottom of the Challenger Deep in the Mariana Trench in the western Pacific lies more than 10 km under the surface, more than the cruising altitude of most aircraft.

Operating in the deep sea requires a distinct technology and extremely specific capabilities that are challenging and expensive to develop. Consider:

- While sound can travel long distances underwater, its propagation is seriously affected by hydrological conditions such as temperature, pressure, and salinity. Generally speaking, the lower the frequency of the sound wave, the better the propagation of sound underwater.

Very low frequency (VLF) and extremely low frequency (ELF) sound technologies represent the cutting edge of science, and require deep research and enormous funding to develop.

- Pressure underwater increases by approximately one atmosphere (atm) for every 10 metres of ocean depth. One atm is roughly equivalent to the mean sea-level atmospheric pressure on Earth, or 101,325 Pascals. The pressure at the ocean bed in the Indian EEZ is upwards of 380 atm, or 380 times that on the surface of the Earth.

Vessels that descend to such depths need to be constructed using particular material and processes in order for them to operate safely. (Remember the OceanGate Titan submersible disaster of June 2023?)

Need for such technology

It is, however, imperative that India overcomes the challenge posed by the deep sea. To be able to ride on the blue economy in the future, India must have the technologies to harness the resources of the ocean and the seabed.

The ocean is a storehouse of resources, from fish, minerals, gas hydrates, oil and gas, and nutraceuticals to oceanographic data that may help in combating climate change and contribute to meteorological research. It is essential to harness these resources to maximise India's economic potential.

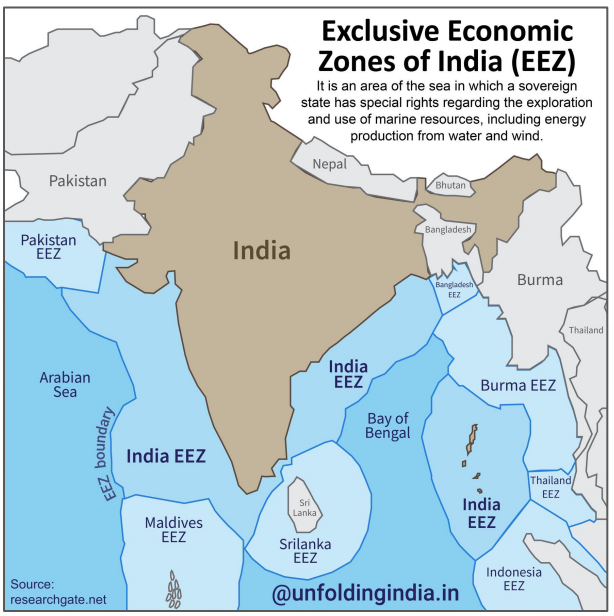
This will require the development of technologies for hydrographic research and exploration activity, as well as supporting capabilities such as diving, salvage, and submarine rescue.

Then there is the development of underwater infrastructure. Undersea cables criss-crossing the oceans are the backbone of modern communications technology. They are responsible for transmitting more than 95% of the intercontinental Internet traffic, seamlessly enabling activities from digital communication and transmission of video to banking transactions worth billions of dollars.

Developing the capability to lay and maintain these cables is critical to provide millions of Indians with digital connectivity, and to sustain an economy that increasingly relies on the same.

Apart from undersea cables, other deep sea infrastructure can include oil pipelines, equipment for mining, and scientific research.

Beyond exploiting the oceans' resources, mapping of the deep sea and maintaining a high degree of underwater domain awareness is critical for safeguarding maritime and security interests.



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SYLLABUS: GS Paper 3: S&T
Newspaper : The Indian Express, **Page No : 18**

Take for instance the deep sea cable-cutter that China has announced. The development of complex underwater sensors and response mechanisms to act against any such disruption will be crucial to tackling any threats from hostile actors.

What India must do

As for every niche technology, the essential prerequisites for developing deep sea tech are financial strength, academic and research capabilities, and highly qualified and skilled human capital.

It is not surprising, therefore, that China, France, Japan, Norway, Russia, South Korea, and the US are far ahead of the rest of the world in this area. Chinese investments in deep sea science and engineering centres are paying rich dividends today.

In 2018, the Indian government launched the Deep Ocean Mission under the Ministry of Earth Sciences. The development of the Matsya-6000 submersible is a part of this mission. While this is welcome, the fact is India currently does not have even decent deep sea fishing capability — and needs to do much more.

The establishment of institutes of excellence in deep sea research will nurture academic excellence, expertise, and skill in the area. India also needs to incentivise every aspect of deep ocean science and engineering through generous funding and a strong, empowered body to drive this multi-dimensional mission forward at a faster-than-usual pace.

It is time to upgrade the Department of Ocean Development to a full-fledged ministry, led by a cabinet-rank minister, and make all departments and agencies responsible for ocean development accountable to this minister.

Well-funded, time-bound and result-oriented projects must be executed in "mission-mode", with quick approvals, ease of doing business, and high accountability of stakeholders. A "ten year plan" will be helpful in this regard.

Lastly, India must remember that all these deep sea technologies are inherently "dual use" — the very vessels and equipment developed for ocean research and exploitation could also have disruptive uses in conflict. This too needs active consideration in its deep ocean strategy.

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ESA – GAIA

SYLLABUS: GS Paper 3: S&T
Newspaper : The Indian Express, **Page No : 18**

THE EUROPEAN Space Agency (ESA) shut down its space observatory mission, Gaia, on Thursday. Launched in December 2013, Gaia aimed to create the most precise three-dimensional map of the galaxy.

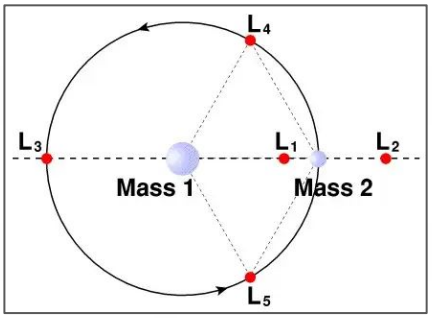
From July 2014 to January 2025, Gaia recorded 3 trillion observations of 2 billion stars and objects, and helped inform at least 13,000 scientific publications.

The Gaia mission

Gaia, formerly the Global Astrometric Interferometer for Astrophysics (GAIA), was designed to map the universe by accurately measuring the positions and motions of stars and various celestial objects.

It was positioned at Lagrange point 2 (L2), around 1.5 million kilometres 'behind' the Earth, as viewed from the Sun. This location effectively allowed the spacecraft to view the larger cosmos unhindered by the Earth, the Sun and the Moon.

Twin telescopes placed in different directions directed light to a single digital camera with nearly a billion pixels, making it the largest in space. The spacecraft is fitted with three instruments — an astrometer, a photometer and a spectrometer — that help interpret the location and motion of stars and other objects.

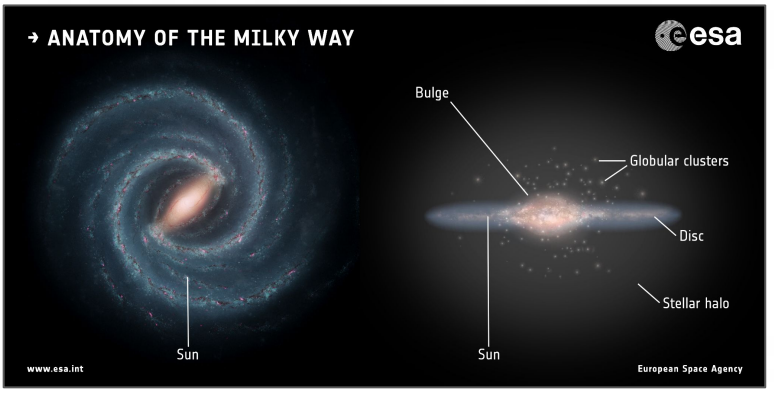


Through Gaia's eyes

Gaia's observations have shown scientists the shape of the Milky Way: a central bar and spiral arms. Viewed from its edge, the galaxy is seen as a disc with a bulge at the centre. However, Gaia showed that this disc is warped and wobbles slowly from left to right, likely due to collisions with a smaller satellite galaxy.

Chris Lintott, a British astrophysicist and professor at the University of Oxford, believes the ripples produced by these collisions still exist and may have resulted in the formation of stars, including the Sun. "This shows how Gaia is revealing that the Milky Way's history is both more dynamic and more complex than we thought," he said in a lecture last month.

Last April, Gaia discovered a "sleeping giant" black hole, 33 times the mass of the Sun, located less than 2,000 light years from Earth. This marked the first time such a massive black hole was found in the Milky Way. While black holes had previously been detected by the light emitted from materials falling into them, those identified by Gaia are "truly black and can only be detected by their gravitational effects", according to the ESA.



Gaia has also detected over 1,50,000 asteroids and projected their orbits, including those that may pose a threat to Earth in the future.

Despite its scope and magnitude, Gaia has likely mapped only about 2% of the 100 billion stars in the Milky Way. The bulk of Gaia's data remain to be processed. Scientists at the ESA are downlinking all the data collected by the spacecraft over the years. Their release over the coming years could lead to more discoveries.

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Vacancies in Nuclear Domain

SYLLABUS: GS Paper 3: S&T
Newspaper : The Hindu, **Page No : 16**

Jacob Koshy
NEW DELHI

Nearly three in five posts of scientific personnel sanctioned at one of India's top institutes for basic science research, the Tata Institute of Fundamental Research (TIFR), are lying vacant.

Moreover, a quarter of the sanctioned posts at India's key atomic energy research institutions and nuclear power plants are vacant. This is significant given that India has committed ₹20,000 crore this year for building small modular reactors.

This data emerge from a report of the Parliamentary Standing Committee on Science, Technology and Environment tabled in both Houses of Parliament on Tuesday. The bipartisan committee expressed "serious concerns about workforce planning, recruitment efficiency, and the overall sustainability of nuclear and research projects in India".

Big gap: Three in five posts sanctioned for scientific personnel at the Tata Institute of Fundamental Research lie vacant. FILE PHOTO

At the TIFR, there are 839 vacant posts, a whopping 58% of the total 1,448 sanctioned posts. At the Bhabha Atomic Research Centre (BARC), 3,841. or 26%. of the 14,445 sanctioned posts are vacant. At the Indira Gandhi Centre for Atomic Research (IGCAR), the 596 unfilled posts account for 22% of the total 2,730 posts. At the Nuclear Power Corporation of India (NPCIL), there are 4,343 posts to be filled, amounting to 28% of the 15,088 posts. In summary, of the 46,307 sanctioned posts across organisations under the Department of Atomic Energy, 13,449 posts – or 30% – were vacant.

"This 58% vacancy rate reflects a significant shortfall in scientific manpower. Such a high vacancy rate suggests that TIFR is heavily reliant on contractual and research-based staff rather than regular employees. Given the institute's crucial role in fundamental research, this issue requires immediate attention to ensure stability in long-term scientific projects," said the report of the committee, chaired by BJP MP Bhubaneshwar Kalita.

TIFR Director Jayaram Chengalur had not responded to an email query on the reasons for the vacancies at the time of publication.

A senior scientist affiliated to one of the TIFR institutions and involved with hiring scientists declined to be identified but said that the numbers were "surprising" to him. Department heads of TIFR institutes seeking to recruit more scientists were usually told by the parent DAE that the sanctioned posts were already full, he said. The Parliament committee report does not specify if the "sanctioned posts" only refers to scientists, faculty, and technical personnel or employees in non-technical roles as well.

On the shortfall in other atomic energy institutions, the committee said it was "concerned over these vacancies, especially in key operational areas such as nuclear power generation, research, and mineral exploration". The shortage of skilled personnel could delay research and development, cause inefficiencies in plant operations, and constraints in nuclear fuel production and "ultimately affect the country's nuclear energy programme," it said.

In a written response to the Committee, the DAE said it had started a recruitment drive to mitigate workforce shortages.

टामूअसं tifr

TIFR is a National Centre of the Government of India, under the umbrella of the Department of Atomic Energy , as well as a deemed University awarding degrees for master's and doctoral programs. The Institute was founded in 1945 with support from the Sir Dorabji Tata Trust under the vision of Dr. Homi Bhabha. At TIFR, we carry out basic research in physics, chemistry, biology, mathematics, computer science and science education. Our main campus is located in Mumbai, with centres at Pune, Bengaluru and Hyderabad.

राष्ट्र की सेवा में परमाणु
भा प अ कें
BARC
ATOMS IN THE SERVICE OF THE NATION

The BARC is India's premier nuclear research facility, headquartered in Trombay, Mumbai, Maharashtra, India. It was founded by Homi Jehangir Bhabha as the Atomic Energy Establishment, Trombay (AEET) in January 1954 as a multidisciplinary research program essential for India's nuclear program. It operates under the DAE, which is directly overseen by the PM.

BARC is a multi-disciplinary research centre with extensive infrastructure for advanced research and development covering the entire spectrum of nuclear science, chemical engineering, material sciences and metallurgy, electronic instrumentation, biology and medicine, supercomputing, high-energy physics and plasma physics and associated research for Indian nuclear programme and related areas.

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Military Exercises

SYLLABUS: Prelims: Events of National Importance
Newspaper : The Hindu, **Page No : 14**

The Army conducted a tri-service integrated multi-domain warfare exercise, 'Prachand Prahaar', in the high-altitude terrain of Arunachal Pradesh from March 25 to 27, according to an official statement on Thursday. The exercise, aimed at "validating a fully integrated approach to surveillance, command and control, and precision firepower across the three services", brought together the operational teams in a synergised combat drill designed to simulate future warfare.

"Cutting-edge platforms such as long-range maritime reconnaissance aircraft, armed helicopters, UAVs, loitering munitions, and space-based assets were employed to achieve total situational awareness and rapid target engagement," the Defence Spokesperson for Manipur, Nagaland and Southern Arunachal Pradesh said in a statement.

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Daily Quiz

Q1. Regarding the Central Bureau of Investigation (CBI), consider the following statements:

1. It was established in 1963 through an executive resolution.
2. It assists the Central Vigilance Commission (CVC) and Lokpal and functions under the Department of Personnel and Training (DoPT).
3. It does not require permission from state governments to investigate cases within any Indian state.

Which of the statements given above are correct?

a) 1 and 2 only
b) 1 and 3 only
c) 2 and 3 only
d) 1, 2, and 3

Answer: a

Q2. Regarding the Deep Ocean Mission, consider the following statements:

1. It was launched by the Ministry of Earth Sciences.
2. Matsya-6000, a manned submersible, is being developed as part of this mission.

Which of the statements given above is/are NOT correct?

a) 1 Only
b) 2 Only
c) Both 1 and 2
d) Neither 1 nor 2

Answer: d

Q3. Regarding the Bhabha Atomic Research Centre (BARC), consider the following statements:

1. It was initially founded as the Atomic Energy Establishment, Trombay in 1954.
2. It operates under the Department of Atomic Energy, which functions under the Ministry of Science and Technology.
3. Homi Jehangir Bhabha was the key figure behind the establishment of BARC.

How many of the statements given above is/are correct?

a) Only One
b) Only Two
c) All Three
d) None

Answer: b

Q4. Which one of the following Space Agencies launched the space observatory mission "Gaia"?

a) JAXA
b) NASA
c) ESA
d) CSA

Answer: c

Q5. Match the following Indian military exercises with their respective partner countries:

Military Exercises	Partner Countries
A. Vajra Prahar	1. USA
B. Nomadic Elephant	2. Mongolia
C. Maitree	3. Thailand
D. Shakti	4. France

Select the correct answer using the codes given below.

a) A-1, B-2, C-3, D-4
b) A-3, B-1, C-2, D-4
c) A-4, B-3, C-1, D-2
d) A-2, B-4, C-3, D-1

Answer: a

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