

# 04 Aug 2019: Comprehensive News Analysis

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## A. GS 1 Related

### Category: HISTORY

1. [Odisha delta site Bharati Huda is 3,600 years old](#)

**Context:**

Archaeological Survey of India which excavated **Bharati Huda** in Jallarpur village in Odisha last year, said a rural settlement had thrived at the site about 3600 years ago.

**Details:**

- Remains reveal rural settlement with proto sun worship and domesticated cattle.
- The excavated remains indicate existence of Chalcolithic culture in the valley as attested by the presence of mud structural remains, large quantity of potsherds, ground and polished stone tools, bone tools, beads of semi-precious stones, terracotta objects, huge quantity of faunal remains and carbonized grains. The age of the settlement was arrived at after radiocarbon dating of charcoal samples found at the site by the Inter University Accelerator Centre (IUAC) in New Delhi using Accelerator Mass Spectrometry (AMS).
- This excavation confirmed that a separate ethnic group that was using non-black-and-red ware might have existed during the early chalcolithic cultural horizon and a new class of ethnic group might have come into contact with the rural settlers at Bharati Huda during mature phase of chalcolithic culture.
- The charcoal samples found in Layer three of the excavation dated backed to 1072 BCE, Layer 4 to 1099 BCE, Layer 5 to 1269 BCE and Layer 7 to 1404 BCE.
- A new religious belief emerged in the form of nature worship as evident from a single specimen of the Sun motif found arrayed in chocolate-slipped pottery.
- On the basis of this evidence, the antiquity of Sun worship can be dated back to 1099 BCE in the Prachi valley.
- Devotees from different parts of Odisha as well as the neighbouring States congregated at Chandrabhaga on the shore of the Bay of Bengal on the occasion of Magha Saptami to pay homage to Sun God.
- The material culture of the site gradually developed without major changes having continuation of earlier cultural features till it was abandoned.
- The world famous Sun temple of Konark, located some 30 kilometres from the excavation, was built in the 13th century CE.
- There is a visible flow of culture from incipient agro based settlement to full-fledged agricultural society.
- The site has cultural similarity with Golabai Sasan, Suabarei and other excavated and explored sites in the Mahanadi delta.

## B. GS 2 Related

**Category:POLITY****1. National Population Register (NPR) data to be collected in a year****Context:**

The government has decided to prepare a National Population Register (NPR) by September 2020 to lay the foundation for rolling out a citizens' register across the country.

**Details:**

- NPR is different from both the decennial census and the NRC.
- It will be in pursuance of the Citizenship (Registration of Citizens and Issue of National Identity Cards) Rules, 2003.
- The objective of the NPR is to create a comprehensive identity database of every usual resident in the country.
- It is mandatory for every usual resident of India to register in the NPR.
- The decision exempts the state of Assam from NPR-2020.
- For the purpose of the NPR, a usual resident is defined as a person who has resided in a local area for six months or more or a person who intends to reside in that area for the next six months or more.
- The database would contain demographic as well as biometric particulars.
- It will be the next round of recording biometric and family tree details of Indian citizens.
- The exercise was conducted earlier in two phases in 2010 and 2015.
- Earlier, the roll out of NPR had slowed down due to overlapping with that of Aadhaar.

## **Category:INTERNATIONAL RELATIONS**

### **1. Adeeb returns Maldives, arrested with India's help**

#### **Context:**

Former Maldivian Vice President Ahmed Adeeb was taken back to Male by the Maldivian police after his arrest in international waters.

#### **Background:**

- The former Maldivian Vice President had left his country in a tugboat to seek asylum in India.
- He was freed by courts in Male last month after his conviction on charges of terrorism and corruption was overturned.
- But he was under a travel ban after the state prosecutor appealed the order in a corruption and money laundering case.

#### **India's Position:**

- New Delhi sought to assist the Ibu Solih government, which it has strengthened ties with, while not taking a stand in the internal politics of the country.
- The government also wants to avoid being accused of violating the principle of “non refoulement” or returning a person seeking asylum back to their country where they face any threat to life or freedom.
- Indian officials made it clear that Mr. Adeeb had not been deported by India.
- They said he was merely refused entry to the country since he tried to enter at a non-sanctioned port in Thoothukudi on Thursday.
- He did not possess valid documents to enter India.
- Adeeb was interrogated by immigration officers but kept on the boat itself.
- Maldivian authorities held parallel negotiations with the Indian officials.
- Indian Coast Guard escorted Mr. Adeeb's tugboat to the International Maritime Boundary Line (IMBL).

#### **Conclusion:**

India reaffirms that it will continue to maintain the long standing position over non-intervention in the internal affairs of other countries.

## 2. U.S. bans ground handling by Air India

### Context:

The United States has banned Air India from carrying out ground handling operations on its own at all five airports in the country connected by the airline.

### Background:

- India amended its ground handling regulation in 2017 barring all foreign airlines from conducting self-handling at defence airports.
- The amendment also barred them from carrying out such functions beyond the security hold (frisking) areas at airports.
- The U.S. Department of Transportation (DoT) had on April 19 issued a show-cause notice warning that it may impose a ban on self-handling by Indian carriers because of India's failure to allow U.S. carriers to exercise their bilateral right to perform their own ground handling at Indian airports.
- Though India did not inform the U.S. on how it would address these concerns, the Civil Aviation Ministry sought discussions on the matter.
- On July 30, the DoT served an order amending Air India's foreign air carrier permit.
- Ground handling includes boarding, baggage handling, refuelling, and catering.
- All U.S. carriers flying into India have outsourced their ground handling as well.
- Air India responded that it will not affect them because we outsource ground handling services at most international stations through a transparent bidding process.

### 2005 agreement:

- These regulations however, disregarded the Air Service Agreement signed between the two countries in 2005.
- As per the agreement, "each designated airline shall have the right to perform its own ground-handling in the territory of the other Party (self-handling), or, at its option, select among competing agents for such services in whole or in part."
- The right shall be subject only to physical constraints resulting from considerations of airport safety, the agreement added.

### Conclusion:

- The move by DoT puts a further strain on Indo-U.S. trade ties that have reached an impasse in the past few months.
- Officials have been working on resolving a series of issues, including tariffs and counter-measures, Washington's concerns over India's data protection laws, and other issues that led to trade talks collapsing last November.

## 3. RCEP must fix trade deficit, India demands

### Context:

At the 8<sup>th</sup> Ministerial meet, India listed out demands for reducing trade deficit with other members of the proposed mega free trade agreement.

**Details:**

- A joint statement, issued after the ministerial meeting, said that the Ministers noted that over two thirds of market access negotiations have reached mutually satisfactory outcomes.
- It added that work on the remaining areas were being intensified.

**What are the concerns raised by India?**

- India registered a trade deficit in 2018-19 with 11 RCEP member countries.
- In 2018-19, India's trade deficit with China stood at \$50 Billion.
- India's concerns regarding market access and other issues leading to imbalanced trade between some of the partner countries was specifically flagged.
- India also raised bilateral trade issues with the Chinese Minister.
- India has sought greater market access from China for its products like sugar, rice and pharmaceuticals to narrow the high trade deficit.
- India also demanded for easing of the business visa regime by China for Indians.

**RCEP:**

- The RCEP bloc comprises 10 ASEAN group members (Brunei, Cambodia, Indonesia, Malaysia, Myanmar, Singapore, Thailand, the Philippines, Laos and Vietnam), and their trade partners India, China, Japan, South Korea, Australia and New Zealand.
- It will cover 47.4% of the global population, 32.2% of the global economy, 29.1% of global trade, and 32.5% of global investment flow.
- RCEP is the most important trade agenda in the region, supportive of an open, inclusive, and rules based trading system, and an enabling trade and investment environment.

**What needs to be done?**

- The demands must be considered for establishing the FTA within a year.

**4. U.S. wants to deploy missiles in Asia****Context:**

U.S. Secretary for Defence Mark Esper said on Saturday that he was in favour of placing ground-launched, intermediate-range missiles in Asia relatively soon.

**Background:**

- On Friday, the United States had formally withdrawn from Intermediate Nuclear Forces (INF) treaty with Russia after determining Moscow was violating the treaty.
- The Secretary preferred to complete the placing within months but added that it will take longer.
- There could be a timeline for when the missiles could be deployed.
- Esper did not say the exact locations being considered for placing missiles

**Concerns to the Asia-Pacific Region:**

- The United States has so far relied on other capabilities as a counterbalance to China, like missiles fired from U.S. ships or aircraft.
- But advocates for a U.S. land-based missile response say that is the best way to deter Chinese use of its muscular land-based missile forces.
- S. officials have been warning for years that the United States was being put at a disadvantage by China's development of increasingly sophisticated land-based missile forces.
- The Secretary's comment will raise concern about an arms race and could add to an already tense relationship with China.
- While no decisions have been made, the U.S. could theoretically put easier-to-hide, road-mobile conventional missiles in places like Guam.
- The U.S. is expected to test a ground-launched cruise missile and an intermediate-range ballistic missile very soon.
- Both would be tests of conventional weapons and not nuclear.

#### **Intermediate Nuclear Forces (INF) treaty, 1987:**

- The 1987 Intermediate-Range Nuclear Forces (INF) treaty limited the use of medium-range missiles, both conventional and nuclear.
- It was signed in 1987 by US and Soviet Union leaders Ronald Reagan and Mikhail Gorbachev.
- The INF treaty was meant to eliminate the presence of land-based nuclear missiles and medium-range arsenals between 500km to 5,500km from Europe.

## **C. GS 3 Related**

### **Category: INTERNAL SECURITY**

#### **1. Uncertainty grips Kashmir Valley**

##### **Context:**

The recent troop deployment is purely based on security grounds, says Governor.

##### **Details:**

- The State has no knowledge of any changes to constitutional provisions, The Governor added.
- He allayed the concerns that there were plans to remove Article 35A, start delimitation or trifurcate Jammu and Kashmir.
- Evacuation of Amarnath pilgrims and tourists was carried out because they were vulnerable in case of any terrorist or fidayeen attack.
- However, Kashmir is still in a grip of panic caused by the immediate measures.
- Consequently, the U.K Government issued an alert message to its citizens travelling to Jammu and Kashmir.
- Watch the video below to know more about Article 35A and Article 370:

#### **2. Martyrs week**



**Context:**

In Chhattisgarh Maoists organised a ‘martyrs week’, an annual drive to entice tribal youths into joining their ranks.

**Details:**

- The week went off peacefully, according to the Anti-Naxal operations chief of the state.
- They highlight ‘wrongdoings’ against tribal people to entice youth to join them.
- Despite the monsoon, the security forces continued striking at their hideouts and deploying personnel along highways in Bastar, Dantewada, Bijapur, Sukma, Kondagaon, Narayanpur, Kanker and Rajnandgaon districts.
- Around 15 Maoists were killed during the week.
- However, there is no correlation between the killings and the week, the security official added.
- In the past few years, no recruitments happened in Balaghat.

**Category:ENVIRONMENT****1. Tigers in India face lurking threat from virus****Context:**

There is heightened risk of Canine Distemper Virus (CDV) transfer from dogs to tigers, leopards in Ranthambhore National Park.

**Background:**

- The announcement that tiger numbers have increased in the country may be good news.
- But the loss of habitat, a decline of prey and poaching continues to be a threat to tigers’ survival.
- Along with these, a potential virus — Canine Distemper Virus (CDV) — that can be transmitted from CDV-infected dogs living in and around wildlife sanctuaries.
- Last year, over 20 lions from the Gir forest succumbed to the viral infection.

**Risk of disease transfer:**

- A recent study published in Threatened Taxa notes that 86% of the tested dogs around Ranthambhore National Park in Rajasthan carried CDV antibodies in their bloodstream.
- This means that the dogs are either currently infected or have been infected sometime in their life and have overcome the disease.
- This finding points out that there is an increased risk of disease transfer from the dogs to tigers and leopards that live in the park.
- Studies from Russia and Africa have shown that small, isolated wildlife populations are more susceptible and when the virus transmits from one species to another the disease manifestation is worse.

**NTCA Guidelines:**

- A guideline has been prepared by the National Tiger Conservation Authority to prevent the spill over of the disease to wild animals.

- The main aim should be to vaccinate the free-ranging and domestic dogs in the area around national parks.

#### **Challenges:**

- The disease needs to be recognised and more targeted studies need to be initiated to collect baseline data on CDV from wherever they are reported from in wild carnivores.
- Managing any disease in a wildlife population is extremely difficult. Most dogs are free ranging and not owned by any particular person in the village.
- A lot of NGOs have started animal birth control programmes. They need more support from the government.
- Understanding the role of domestic animals as contributors to a local CDV reservoir is imperative precursor in considering control measures.

#### **Conclusion:**

- The easy way out is prevention. The government should take the initiative to vaccinate the dogs around wildlife sanctuaries in the country.
- This would be a good time to vaccinate against rabies as well.

## **D. GS 4 Related**

### **Category: FOUNDATIONAL VALUES FOR CIVIL SERVICE**

#### **1. IAS officer arrested in Kerala**

##### **Context:**

A Kerala cadre IAS officer was arrested for alcohol impaired, reckless driving resulting in death of a journalist.

##### **Details:**

- The officer was charged under Section 279 (rash driving) and 304 (culpable homicide not amounting to murder) of the IPC.
- There were outcries against the Police for not investigating the driver of the car immediately after the accident.
- At the General Hospital, doctors declined to do a blood alcohol concentration test on the ground that the police had no document on the legal circumstances under which they had brought the driver to the hospital.
- However the blood samples were collected eventually.

##### **Ethical issues involved:**

- There are allegations that the Police had given the IAS officer leeway to dodge prosecution.
- Integrity: This particular officer have been a vocal campaigner against unsafe driving practices. If the allegations of him being under influence while driving turns out to be true, he will become an example for lack of integrity.



## Category:PROBITY IN GOVERNANCE

### 1. Related party Transactions and Corporate Governance

#### Context:

The Securities and Exchange Board of India (SEBI) on Saturday expressed concern over related party transactions.

#### Details:

- Related party transactions is a method frequently employed by corporates for diversion of funds.
- Another instance is extension of loans of companies to related parties.
- Fraudulent related party transactions were being used for "siphoning of funds".
- Regarding corporate governance, there had been a decline of trust for which SEBI had already initiated steps.
- Serious corporate governance issues witnessed a linear rise causing a number of company failures.
- Corporate governance is aimed at keeping the trust of various stakeholders.
- Learning from the global financial crisis, this was far from satisfactory
- There had also been instances of non-disclosure of valuation reports
- SEBI had prescribed standard operating procedures (SOP) for dealing with non-compliances, which can lead to freezing of shareholding of promoters and suspension of trading in stocks.

#### Ethical issues:

#### Conflict of Interest:

- It is a situation in which a person, such as a public official, an employee, or a professional, has a private or personal interest sufficient to appear to influence the objective exercise of his or her official duties.

#### Ethics in Corporate Governance:

- Identifying the ethics of a specific corporate governance regime entails making explicit the moral responsibilities and obligations of corporations in society as well as the ethical values associated with these responsibilities and obligations.

## Category:ETHICAL VALUES

### 1. Urkund Software to Determine Plagiarism

#### Context:

University Grants Commission (UGC) notified that all the 900 public and private universities in India have been given trial access to Urkund, an anti-plagiarism software free of cost.

#### Background:

- Indian academics have contributed 35% of all articles published in about 11,000 fake journals between 2010 and 2014.
- Most of these articles were in fake engineering journals, followed by articles in fake journals of biomedicine and social sciences.
- There have been several high-profile cases of plagiarism in the last few years, including the case of Chandra Krishnamurthy, who was removed as Vice-Chancellor of Pondicherry University in 2016 after a UGC panel found her guilty of serious academic fraud and plagiarism.
- Plagiarism and data manipulation are issues of great concern, which damage the credibility of research emanating from our institutions.
- Institutions must take the responsibility for ensuring academic standards and for emphasising, to both students and faculty, the importance of maintaining the highest standards of integrity in academic research.

#### Details:

- Urkund August 2 is an anti-plagiarism software developed by Sweden.
- It will be available to teachers, students, researchers, etc.
- The Urkund software was chosen through a global tender process.
- Another software, **Turnitin**, is more commonly used by global academics.
- But it was found to be 10 times more expensive without a proportionate increase in features or reliability.
- In addition, Centre notified the University Grants Commission (Promotion of Academic Integrity and Prevention of Plagiarism in Higher Educational Institutions) Regulations, 2018 which called for departmental and institutional level panels be set up to deal with plagiarism complaints.
- It also set up four severity levels of offences with appropriate penalties for students of Masters Level and above as well as faculty.

#### Offences and Penalties:

- There will not be any penalties for minor similarities up to 10% of the document.
  - **Level 1 offence:** If a thesis or dissertation has similarities up to 40%. In that case, students will be asked to submit a revised version within six months.
  - Plagiarism in academic and research publications will result in being asked to withdraw the manuscript.
  - **Level 2 offence:** If the similarities are between 40% and 60%. Here, the student will be debarred from submitting a revised script for one year.
  - The offender will also be denied the right to one annual increment, and will not be allowed to supervise any Masters, M.Phil or Ph.D student for a two year period.
  - **Level 3 offence:** If the similarities above 60%. It will lead to expulsion and student registration for that programme being cancelled.
- It will also result in denial of two annual increments and debarment from research supervision for three years.
- **Repeated offences:** It will result in suspension and termination. If plagiarism is detected after a degree or credit has been awarded, that will be suspended for a set period.

#### Challenges:

- A UGC panel on improving research culture, headed by former Indian Institute of Science director P. Balaram, warned that such central regulations could not replace the need for institutional vigilance.

- Centralised rules and regulations, imposed across a large and diverse higher education system, cannot serve as a substitute for strict and vigilant internal academic processes at our institutions.

## E. Editorials

### Category: INTERNATIONAL RELATIONS

#### 1. What are the guidelines on migrant camps?

##### Context:

The Union Government's persuades that States should set up detention centres for illegal immigrants.

##### Background:

- Last month, Minister of State for Home informed the Lok Sabha that State governments have been instructed from time to time to set up detention centres.
- The Ministry of Home Affairs (MHA) has also drawn up a manual for States and Union Territories.

##### Detention Centres:

- Detention centres will accommodate illegal immigrants or foreign convicts in criminal cases who have completed their jail terms and await deportation.
- These camps will also restrict the movement of foreigners staying back illegally and thereby ensure that they are physically available at all times for expeditious repatriation or deportation.

##### Home Ministry manual:

- The MHA framed a '**Model Detention Centre/Holding Centre/Camp Manual**', which was circulated to all States and Union Territories in January 2019.
- Since 2009, State governments have been instructed from time to time to set up detention centres.
- The intention is to standardise the camps.

##### Related Legislations:

- Under Section 3(2) (c) of **The Foreigners Act, 1946**, the Central Government has the powers to deport foreign nationals staying illegally in the country.
- These powers have also been entrusted to State governments under **Article 258(1)** of the **Constitution** and under **Article 239(1)** for administrators of Union Territories.

##### Harsh Mander's Petition:

- Activist Harsh Mander filed a petition in the **Supreme Court** to highlight the plight of families languishing in **six detention centres in Assam**.
- **Members of the families** who were declared foreigners were put in camps **separated** from each other.
- Mander compared the situation of these families with the family separation policy imposed on illegal immigrants in the U.S. by the Trump administration.

- The petition was based on a report submitted by Mr. Mander when he, as **Minorities Monitor** for the **National Human Rights Commission**, had visited detention centres in Assam.
- The top court sent a notice to the Centre and Assam government seeking their response.

### Issues related to Human Rights:

- The major finding of the mission was that the “**State does not make any distinction**, for all practical purposes, between **detention centres and jails**; and thus between **detainees and ordinary inmates**”.
- Men, women and boys above six years lodged in detention centres in Assam were separated from members of their families.
- The jail authorities appear to apply the **Assam Jail Manual** to them, but deny them even the benefits, like parole, waged work etc.

### What triggered the move by MHA?

- In the context of Mr. Mander’s petition the Centre informed the Supreme Court that it was framing new guidelines for keeping foreign nationals in detention centres across the country.
- There is **no clear legal regime governing the rights and entitlements of detainees**.
- It was in this context that the Home Ministry framed the guidelines for detention centres across the country; a manual for jail inmates was drafted in 2016.
- Recently, the Delhi Police told the Supreme Court that nearly 500 illegal Bangladeshi migrants have been deported from the capital in the past 28 months.

### Some guidelines issued by MHA

- **States require “no specific approval”** from the Home Ministry to set up “detention centres /holding centres/ camps”.
- Centres should be set up **outside the jail premises** and their **numbers and size should be decided by the States**.
- On completion of the sentence of the foreigner, the jail authorities concerned may hand over the foreign national to the authority in charge of the detention centre.
- There should also be a provision to **facilitate the stay** of such foreigners in “**metro**” cities during the waiting period between their interview with the embassy concerned and issuance of travel documents.
- The centres should be designed for inmates to maintain standards of living in consonance with “**human dignity**”.
- **Well-lit, airy rooms and open spaces** adhering to basic hygiene standards and equipped with **electricity, water and communication facilities** are to be provided at the centre.
- Other than **CCTVs and round-the-clock security personnel**, the manual adds, the centre’s **boundary wall should be at least 10 feet high** and ringed with **barbed wires**.
- There should also be a **periodic security audit** by the appropriate authorities.
- **Segregated accommodation for men and women**.
- Members of the **same family** are **not separated** and all family members are housed in same detention centre.
- **No restrictions** shall be imposed **to meet family members**.
- States to pay **special attention** to the needs of **women, nursing mothers, trans genders** and open a **crèche** in the camp.
- Children lodged in a detention centre may be provided **educational facilities** by admitting them in **local schools**.

### Detention centres in Assam:

- Assam has **six detention centres**, the highest among the States.



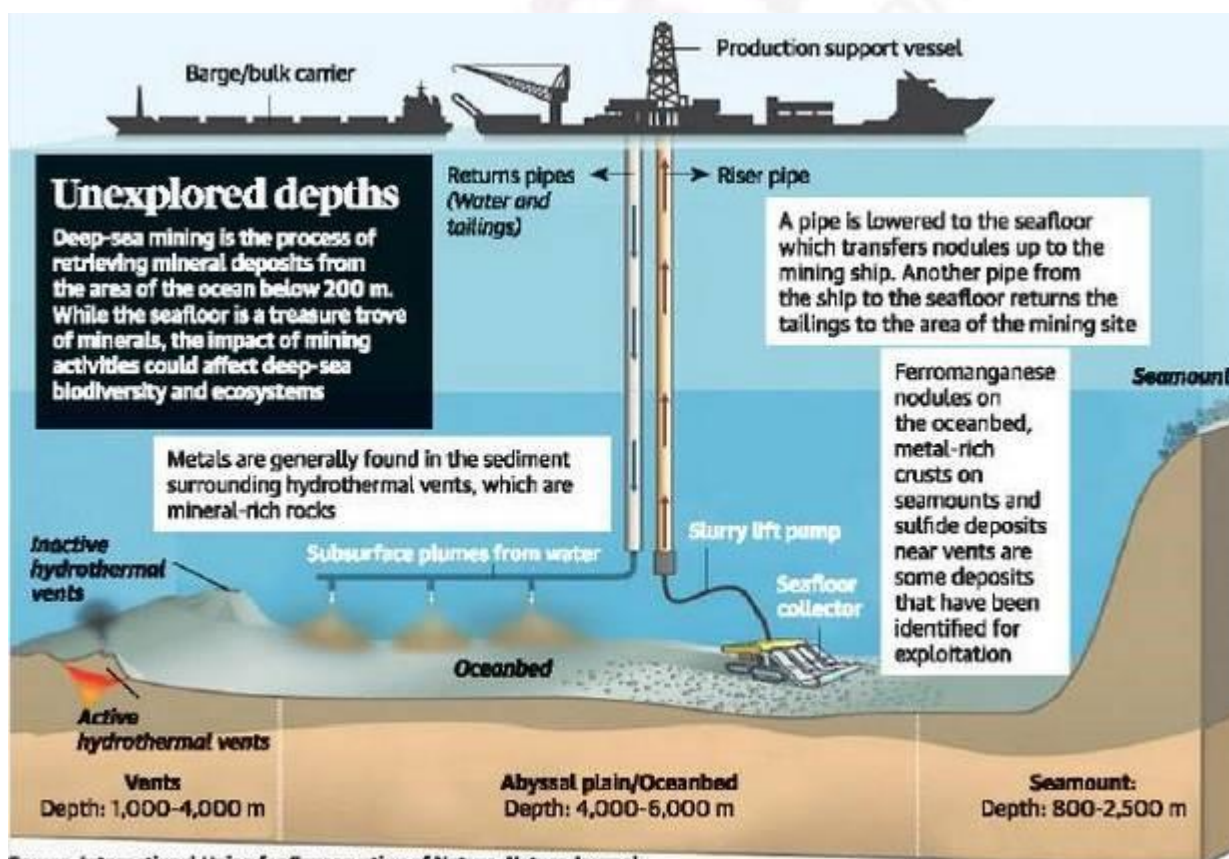
- At least 10 more are to come up in the wake of **the final publication of the NRC by August 31.**
- The **NRC** is being updated as per **directions of the Supreme Court** to segregate Indian citizens living in Assam from those who had illegally entered the State after **March 25, 1971.**
- Nearly **41 lakh people were excluded from the final draft.**
- 36 lakh have filed claims against the exclusion.
- Since 1985, when **Foreigners Tribunals (FTs)** were first set up in Assam as many as 63,959 persons were declared foreigners through **ex-parte proceedings.**
- The Assam government informed the State Assembly last week that 1,145 people declared foreigners by 100 FTs across the State were lodged in detention centres this year.
- Of them, 335 people who have **spent more than three years** in these centres were **to be released following a Supreme Court order.**
- The Central government had informed the Supreme Court that of thousands of persons declared foreigners by the FTs in Assam, **only 162 could be deported to Bangladesh.**
- In 2016 and 2017, 39 Bangladeshi nationals were deported from detention camps in Assam.

## Category: SCIENCE AND TECHNOLOGY

### 1. Why is India pulled to deep-sea mining?

#### Context:

Union Ministry of Earth Sciences announced on July 27 that the **₹8,000-crore** plan to explore **Deep Ocean minerals** will start from October.



Source: International Union for Conservation of Nature. Nature Journal

#### Background:

- There is an 'in-principle' approval to go ahead with the mission.
- Expenditure plans will be drawn up and circulated to various institutions affiliated to the Ministry for executing programmes.

### Mineral Resources in the Deep Ocean:

- Exploration and extraction of **polymetallic nodules** will be one of the main aims of the mission.
- **Polymetallic nodules** are small potato-like rounded accretions composed of minerals such as **manganese, nickel, cobalt, copper and iron hydroxide**.
- They lie **scattered on the Indian Ocean floor at depths of about 6,000 m** and the **size** can vary from **a few millimetres to centimetres**.
- Uses: In **electronic devices, smartphones, batteries, solar panels**, etc.

### Location for Mining:

- The 'area' for deep-sea mining is allotted by The **International Seabed Authority (ISA)**.
- It is an **autonomous** international organisation established under the **1982 United Nations Convention on the Law of the Sea**.
- **India was the first country** to receive the status of a '**Pioneer Investor**' in 1987 and was given an area of about 1.5 lakh km<sup>2</sup> in the **Central Indian Ocean Basin (CIOB)** for nodule exploration.
- In 2002, India signed a contract with the ISA.
- India surrendered 50% of the area and retained an area of 75,000 km<sup>2</sup>, after the resource analysis of the seabed was completed.
- The estimated polymetallic nodule resource potential in this area is 380 million tonnes.
- Further studies have helped narrow the mining area to 18,000 km<sup>2</sup> which will be the '**First Generation Mine-site**'.

### Other Countries that are in the Race to Mine the Deep Sea:

- Polymetallic nodules have been identified from the **Clarion-Clipperton Zone** in the **central Pacific Ocean**.
- ISA has entered into contracts (till 2022) for exploration for **polymetallic nodules, polymetallic sulphides and cobalt-rich ferromanganese crusts** in the deep seabed.
- **China, France, Germany, Japan, South Korea, Russia** and also some small islands such as the **Cook Islands, Kiribati** have joined the race for deep sea mining.
- Most of the countries have tested their technologies in **shallow waters** and are yet to start deep-sea extraction.

### When will India start mining?

- India's mining site is at about a **depth of 5,500 metres**, where there is a **high pressure and extremely low temperature**.
- We have developed and demonstrated the mining technology with **artificial nodules** at **500 metres depth**.
- We have also deployed **Remotely Operated Vehicle** and **In-situ Soil Tester** in the depth of **6,000 metres** and have a thorough understanding of the mining area at the Central Indian Ocean Basin.
- The **mining machine** newly developed for 6000 metres depth was able to move about 900 metres and will be deployed soon at 5,500 metres.
- It will be tested in **October this year** depending on the weather conditions and availability of ships.
- **More tests** are being conducted to understand **how to bring the nodules up to the surface**.
- A **riser system** comprising an **umbilical cable** or **electromechanical cable** and a hose is being developed.



### Environmental impact:

- Deep remote locations can be home to **unique species** that have **adapted themselves to** conditions such as **poor oxygen and sunlight, high pressure and extremely low temperatures**.
- Mining expeditions **can lead them to extinction** even before they are known to science.
- The **deep sea's biodiversity and ecology** remain poorly understood, making it difficult to assess the environmental impact and frame adequate guidelines.
- The **sediment plumes** that will be generated as the suspended particles can rise to the surface harming the filter feeders in the upper ocean layers also causes concern.
- The **noise and light pollution** from the mining vehicles and **oil spills** from the operating vessels.

### Economic Viability:

- Deep sea mining will be commercially viable only if about **three million tonnes are mined per year**.
- More studies are being carried out to understand how the technology can be scaled up and used efficiently.

### Way Ahead:

- A new set of **exploitation guidelines** are being worked out and discussions are on with the ISA.

## Category:INDIAN ECONOMY

### 1. Will Lower Rates Spur Economic Growth?

#### Context:

The **Reserve Bank of India (RBI)** lowered the **repo rate** to **5.75%** in the **Monetary Policy Review** in June.

#### Repo and Reverse Repo Rates:

- The RBI uses the repo rate to influence the interest rate structure in the economy and **to manage inflation**.
- The **repo rate** is the rate at which **commercial banks would borrow from the RBI**.
- The **reverse repo** is the rate of interest **commercial banks would earn when they deposit funds with the central bank**.

#### Background:

- Such low level was last seen **nine years ago**.
- **Economic growth has failed to pick up** in spite of three rate cuts aggregating to 75 basis points in this cycle beginning February.
- Economic growth has in fact been **slowing down**.
- There is **demand for another big cut** from the RBI in the upcoming monetary policy announcement this week.

#### Transmission of Cuts to the Borrowers:

- The **transmission** of the earlier cuts **by banks to borrowers has been poor**.
- Only **21 basis points** have been passed on to borrowers by banks in this cycle.
- Deposits from the public form a chunk of funds that commercial banks use to lend to borrowers. Deposit rates have remained high.
- State Bank of India took so long to lower its rates citing improved liquidity.
- If deposit rates remain high, then the cost of funds for a bank remains high no matter where the RBI pegs its repo rate.
- **Deposit rates have remained high due to competing interest rates** in the government's small savings schemes (even after a cut in late June, the Public Provident Fund and the National Savings Certificate yield 7.9%) and the **liquidity crunch** triggered by the sudden fall of the non-banking finance company IL&FS.
- The RBI intervened to infuse liquidity soon after but these interventions were not enough.
- However, the liquidity position has improved in the last two months following consistent market operations.
- This is reflected in the falling yields on government securities.
- The environment has thus become conducive for banks to pass on the benefit of lower interest rates to borrowers.

### Challenges:

- On this **tug-of-war** over the rates is that the **government of the day** typically has a **relatively short-term view** when it comes to growth.
- However, a **central bank** should have the **long-term view** where low inflation would eventually lead to high growth scenarios.
- To experience **sustained high growth**, a low-inflation scenario is a pre-requisite.
- A **high fiscal deficit** usually makes it difficult for the central bank to rein in inflation and tend to raise interest rates.

### Global Norms on Rate Cutting:

- The **lower the interest rate**, the **better for businesses** as it brings down the cost of capital.
- The country would then draw **higher investments** leading to **higher growth** and **more job creation**.
- Higher interest rates push up project costs and keep investors away.
- : U.S. President George H.W. Bush's election loss in 1992 is allegedly caused by an absence of lowering the rates.
- Economists have observed that **nominal interest rates** are consistently **positively correlated with growth**.

### Will lower rates spur economic growth?

- **The three main factors of production** are **Capital, land and labour**.
- But **capital is only a necessary, not sufficient, condition**.
- **Land is too costly** for investors, unless allocated by the local government.
- The **skill quotient** is still low, in terms of labour, even if adequate hands are available for a job.
- **Training** graduates to be job-ready is an extra expenditure for the companies.
- The market environment and demand also will be impacted if there is lower money supply.
- In an environment where the other factors of production are not favourable for an investor, low interest rates by themselves may not prove attractive enough.

### Way Ahead:

- The government of the day need to keep the deficit under control.

- Any revival of economic activity will depend on **joint efforts** by the **government** on the fiscal front to stimulate demand, and **the RBI**, to keep interest rates low.

## F. Tidbits

*Nothing here for today!!!*

## G. Prelims Facts

### 1. Rice bowl of Karnataka

- Koppal, Ballari and Raichur districts and popularly known as the “rice bowl of Karnataka”.
- These places belong to the Tungabhadra command area.
- Due to deficient rain fall, farmers are struggling to grow crops.

### 2. Mithi river

- The runway of the Mumbai airport is situated close to the river.
- It flooded after heavy spells of rain, threatening the functioning of the airport.
- The river which passes through the heart of Mumbai to discharge the water into Mahim creek is in the "highly polluted" category.

### 3. Annual Report of the Secretary-General on Children and Armed Conflict

- The Report was released by the U.N.
- India was mentioned under a section of the report titled “Situations not on the agenda of the Security Council or other situations”.
- The report stated that situations in India that are prone to armed conflicts and a threat to international security.
- The report noted that the U.N. had received reports of child recruitment and use in Jammu and Kashmir.
- Five children, some as young as 14, were reportedly recruited by militant groups, including the Hizbul Mujahideen and Ansar Ghazwat-ul-Hind the report said.
- Two other children joined the Lashkar-e-Taiba and were reportedly killed in an encounter with the government forces on December 9.
- The report also cited the rape and murder of an 8-year-old girl in Kathua district.
- India has strongly expressed its disappointment over the report.

### 4. Walvis Bay

- Namibia inaugurates China built port terminal at a site reclaimed from the Walvis Bay.

- The port situated near Windhoek is to become a strategic gateway to emerging markets of southern and west Africa.

## 5. TESS

- The Transiting Exo planet Survey Satellite (TESS) is a space telescope for NASA's Explorers program, designed to search for exo planets using the transit method in an area 400 times larger than that covered by the Kepler mission.
- It was launched on April 18, 2018 atop a Falcon 9 rocket.
- TESS may have found the first potentially habitable world.
- The super-Earth exo planet is named GJ 357 d, which is only 31 light years away.
- The exo planet orbits a diminutive dwarf star and is 22% larger than the Earth.
- There are two other exo planets in the system.
- The super earth has a thick atmosphere and may possess water.

## 5. Drug against Kala azar

- IIT Hyderabad achieved controlled, sustained drug release for 10 days.
- They had encapsulating an antifungal drug (Amphotericin B) in polymer nano fibres.
- The antifungal activity was observed when the encapsulated drug was compressed to form oral tablets.
- Read more about Kala azar disease: <https://byjus.com/biology/kala-azar/>

## 7. Autovault

- Godrej Security Solutions (GSS) has introduced a robotic locker 'Autovault.'
- The robotic locker is easy to install and requires less space.
- Currently, the technology is being imported from Japan.
- It does away with the need for an aisle as lockers are stacked one above the other like the storage system.
- Instead of a user going in search of the locker, the latter will surface in front of him.
- The user will have to swipe the card once at the entrance and punch the PIN at the desk.

## H. UPSC Prelims Practice Questions

**Q1. In the context of international trade, consider the statements about INSTEX mechanism.**

1. It is a payment channel with Iran to circumvent US sanctions.
2. It is an initiative formulated by the ASEAN countries.
3. India is also a signatory to the mechanism.

Which of the statements given above is/are correct?

a) 1 only

- b) 1 and 2 only
- c) 1 and 3 only
- d) 2 only

**Answer: a**

**Explanation:**

Germany, France and the UK have set up a payment channel with Iran called INSTEX, to help continue trade and circumvent US sanctions. India is not a signatory to the mechanism. [/su\_spoiler]

**Q2. With reference to the The Right Of Children To Free And Compulsory Education (Amendment) Act, 2019, Consider the following statements**

1. There will not be any regular examination till eighth standard.
2. Holding back of students in the same class will not be permitted till eighth standard.
3. No child shall be expelled from a school till the completion of elementary education.

Which of the given statement is/are correct?

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

**Answer: c**

**Explanation:**

**Provisions of the act states that:**

- There shall be a regular examination in the fifth class and in the eighth class at the end of every academic year.
- The appropriate Government may allow schools to hold back a child in the fifth class or in the eighth class or in both classes, in such manner and subject to such conditions as may be prescribed, if he fails in the re-examination.
- No child shall be expelled from a school till the completion of elementary education.

**Q3. What are the expected benefits of the Recapitalization scheme announced for Public Sector Banks?**

1. Increasing lending to MSMEs through time-bound automated processing and transparent status-tracking.
2. Meet the production credit requirements of the farmers
3. Increasing access to banking services from home and mobile through digital banking and enhanced customer ease.

Which of the given statement is/are correct?

- a) 1 only
- b) 1 and 2 only
- c) 1 and 3 only
- d) All statements are correct

**Answer: d**

**Explanation:**

According to an article released by the Ministry of Finance in the PIB, all of the given statements are correct.

**Q4. With reference to the Madras Mahajana Sabha formed in 1884, who were the founding members?**

1. Ramaswami Mudhaliyar
2. Gazulu Lakshminarasu Chetty
3. Anandacharlu

Choose the correct option?

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

**Answer: b**

**Explanation:**

Gazulu Lakshminarasu Chetty is associated with the Madras Native Association formed in 1849. In May 1884, S.Ramaswami mudhaliyar, P. Rangaiah Naidu and P. Anandacharlu established the Madras Mahajana Sabha.

## I. UPSC Mains Practice Questions

1. Rural Tourism is an under explored sector in India, despite the vast and diverse opportunities. Discuss. (15 Marks, 250 Words).
2. Organic Farming in India is an ancient practice. But its ability to redress the grievances of farmers is limited. Critically analyze. (15 Marks, 250 Words).

Read previous [CNA](#).