

THE AIIMS CYBER-ATTACK IS A WAKE-UP CALL FOR NATIONAL SECURITY

Context

- Recently India's top public health institute, All India Institute of Medical Sciences (AIIMS), Delhi came under heavy ransomware attack, crippling routine health service affecting thousands of patients.
- The cyber-attack comes within a month after AIIMS announced that it would go paperless from January 1, 2023, and be fully digitised by April 2023.

Cyberattack

- **About:** A cyber-attack is any attempt to gain unauthorised access to a computer, computing system or computer network with the intent to cause damage.
- **Motive:** It aims to disable, disrupt, destroy or control computer systems or to alter, block, delete, manipulate or steal the data held within these systems.
- **Ransomware attack:** It is a type of malicious software that encrypts the victim's files, block access to a computer system and requires users to pay a ransom to decrypt the files. **Examples,** WannaCry, Petya, etc.
 - It is often designed to spread across a network and target database and file servers, and can thus quickly paralyze an entire organization.
 - Unlike other cyber-attacks, in this form of attack, the **user is notified of the attack.**

More about AIIMS cyber attack

- **Halting access:** The organisation's critical data is encrypted so that they cannot access files, databases, or applications stored on the main and backup servers of the hospital.
- **Ransom demand:** The attackers have made an undisclosed demand to be sought in cryptocurrency in exchange for a key that would decrypt the data.
- **Multi-agency investigation:** The extent and threat of the attack is so much that multiple agencies like Delhi Police, the Centre's Computer Emergency Response Team (CERT-In), the Ministry of Home Affairs, and even the National Investigation Agency have joined the probe.

- **Contingency plan:** Meanwhile, AIIMS Delhi has decided to get four new servers from the Defence Research and Development Organisation (DRDO) to be used on an immediate basis to provide e-hospital facility for patients.
- The Cyber threat watchdog CloudSEK has reported that the Indian healthcare sector was the **second most targeted** by cybercriminals worldwide.

Safeguards available in India against Cyber Threats

- **Information Technology Act, 2000** (Amended in 2008): It is the main law for dealing with cybercrime and digital commerce in India.
- **National Critical Information Infrastructure Protection Centre (NCIIPC):** It was created under Section 70A of IT Act 2000 to protect the nation's critical information infrastructure.
- **CERT-In (Cyber Emergency Response Team):** It is National Nodal Agency for Cyber Security and is operational since 2004.
- **National Cyber Security Policy, 2013:** The policy provides the vision and strategic direction to protect the national cyberspace.
- **Cyber Swachhta Kendra:** It helps users to analyse and keep their systems free of various viruses, bots/ malware, Trojans etc.
- **Cyber Surakshit Bharat:** It was launched in 2018 to spread awareness about cybercrime and building capacity for safety measures for Chief Information Security Officers and frontline IT staff across all government departments.

Way forward to minimize cyber threats

- **Make threat analysis a norm:** Vulnerability report should be generated followed by an audit which will highlight the loopholes in the cyber-attack preparedness of the organisation.
- **Timely safety audit:** An annual review of the software should also be conducted, as and when the software is changed/updated, whichever is earlier.
- **Capacity building:** The capacity enhancement for the NCIIPC and CERT-In needs to be undertaken in areas like AI/ML, Blockchain, IoT, Cloud, Automation to address the emerging sophisticated nature of threats and attacks.

- **Follow '3-2-1 backup' approach:** Healthcare entities must save 3 copies of each type of data in 2 different formats, including 1 offline. This is an industry best practice to make healthcare institutes cyber secure.
- **National cyber security strategy:** The strategy will be a guiding document to monitor the cyber readiness of institutes and also enhance capacity on many fronts including forensics, accurate attribution and cooperation etc.
- **Enhanced budgetary allocation:** A minimum allocation of 0.25% of the annual budget, which can be raised up to 1% to be set aside for cyber security as recommended by National Cyber Security Strategy.
- **Crisis Management:** For adequate preparation to handle a crisis, cybersecurity drills can be undertaken which include real-life scenarios with their ramifications.
- **Safety protocols:** A National Gold Standard should be created, which ensures that Indian hardware and software companies adhere to the highest safety protocols.
- **Awareness generation:** The general public needs to be made aware of what value their personal data holds or what vulnerabilities it could generate if accessed illegally.

[SC MOOTS IDEA OF 'PROJECT GREAT INDIAN BUSTARD' TO SAVE ENDANGERED BIRDS](#)

In News:

- Coming to the rescue of the critically endangered Great Indian Bustard (GIB), the Supreme Court has mooted the idea of launching 'Project GIB' on the lines of 'Project Tiger'.
 - Project Tiger was started in 1973 to save the big cats.
- The apex court has sought the government's view on the proposal.

Great Indian Bustard (GIB)

- GIBs are the largest among the four-bustard species found in India.
 - The other three being **MacQueen's bustard, lesser florican and the Bengal florican.**

- Being terrestrial birds, they spend most of their time on the ground with occasional flights to go from one part of their habitat to the other.
- They feed on insects, lizards, grass seeds etc. GIBs are considered the flagship bird species of grassland and hence barometers of the health of grassland ecosystems.

Habitat and Status

- This bird, **found mainly in Rajasthan and Gujarat**, has been categorized as **critically endangered** by the International Union for Conservation of Nature (IUCN).
 - As per the 2021 report of the IUCN, they are on the verge of extinction with hardly 50 to 249 of them alive.
- GIBs' historic range included much of the Indian sub-continent but it has now shrunken to just 10 per cent of it.
- Among the heaviest birds with flight, GIBs prefer grasslands as their habitats.

Threats

- Scientists of Wildlife Institute of India (WII) have been pointing out overhead power transmission lines as the biggest threat to the GIBs.
 - WII research has concluded that in Rajasthan, 18 GIBs die every year after colliding with overhead powerlines.
 - These birds, due to their poor frontal vision, can't detect powerlines in time and their weight make in-flight quick manoeuvres difficult.
- Kutch and Thar desert are the places which have witnessed creation of huge renewable energy infrastructure over the past two decades.
- This led to installation of windmills and construction of power lines even in core GIB areas.

Conservation measures

- In 2015, the Central government launched the **GIB species recovery programme**.

- Under the programme, the WII and Rajasthan forest department have jointly set up conservation breeding centres where GIB eggs harvested from the wild are incubated artificially and hatchlings raised in controlled environment.
- The plan is to create a population which can act as insurance against the threat of extinction and release the third generation of these captive-bred birds into the wild.

Supreme Court's intervention

- The SC in April 2021 ordered that all overhead power transmission lines in core and potential GIB habitats in Rajasthan and Gujarat be made underground.
- The SC also formed a three-member committee, including Devesh Gadhvi, the member of the bustard specialist group of IUCN, to help power companies comply with the order.
- Again, in November 2022, the court sought reports from chief secretaries of the two states in six weeks on installation of bird diverters in priority areas.
- It also asked them to assess the length of transmission lines that need to go underground.

Project Tiger

- The Govt. of India had launched “Project Tiger” on 1st April 1973 to promote conservation of the tiger.
- The Project Tiger Directorate of the Ministry of Environment and Forests was mandated with the task of providing technical guidance and funding support.
- **National Tiger Conservation Authority (NTCA)**
 - Project Tiger has been converted into a statutory authority (NTCA) by providing enabling provisions in the **Wild Life (Protection) Act, 1972** through an amendment, viz. **Wild Life (Protection) Amendment Act, 2006**.
 - The NTCA addresses the ecological as well as administrative concerns for conserving tigers.
 - It provides a statutory basis for protection of tiger reserves, apart from providing strengthened institutional mechanisms for the protection of ecologically sensitive areas and endangered species.

BORDER SECURITY FORCE (BSF) RAISING DAY

The Prime Minister, Shri Narendra Modi has greeted the BSF personnel and their families on the occasion of BSF's Raising Day.



About:

- Border Security Force (BSF) celebrates its **Raising Day** on **1 December** every year.
- It was on **December 1, 1965** that the first sector of the Punjab Frontier of the BSF was raised with its headquarters in Jalandhar.
- Currently, BSF comprises 2.65 lakh personnel, deployed across the international border in 193 battalions.
- BSF plays a crucial role in containing unauthorized entry into or exit from the territory of India and it prevents transborder crimes.
- It also works towards stopping illegal activities such as smuggling.
- After the Indian Army, the **BSF is the only Central Armed Police Force in the nation that has an independent air wing, effective artillery regiment**, dedicated marine division and a special intelligence branch.
- The BSF is also the sole paramilitary organisation globally to use an **active camel cavalry to patrol the sands of the Thar Desert**, which comprise of the common border between India and Pakistan.
- The **‘Creek Crocodile - a Quick Reaction Team made of BSF commandos** - was also raised to counter threats like that of 26/11.
 - They guard the brackish waters of the Kutch region in Sir Creek to prevent cross-border infiltration.
- Despite being a border force, more than 7,000 women of all ranks are serving in the force on the eastern and western theatre.
- This year, BSF will be celebrating its raising day for the first time in Punjab and second time outside Delhi.

[MAHARASHTRA-KARNATAKA BORDER DISPUTE](#)

The Supreme Court hearing started on the long pending issue of Belagavi between Maharashtra and Karnataka.



About:

- The dispute between Maharashtra and Karnataka over Belgaum and other border areas is a longstanding issue between the two states.

Origin of the dispute:

- The erstwhile Bombay Presidency, a multilingual province, included the present-day Karnataka districts of Bijapur, Belgaum, Dharwar and Uttara-Kannada (previously North Kanara).
- The Belagavi/Belgaum region at the border of Maharashtra and Karnataka comprises both Kannada and Marathi speakers.
- In 1948, the Belgaum municipality requested that the district, having a predominantly Marathi-speaking population, be incorporated into the proposed Maharashtra state.
- However, the **States Reorganisation Act of 1956**, which divided states on linguistic and administrative lines, made Belgaum a part of the then Mysore State (which was renamed Karnataka in 1973).
- The area has been under dispute since then.
- The **Maharashtra Ekikaran Samiti**, formed in 1948, has been fighting for a merger of 800-odd villages in Karnataka with Maharashtra.
- From 2006, Karnataka started holding the **winter session of the Legislature in Belagavi, building a massive Secretariat building in the district headquarters** on the lines of the Vidhana Soudha in Bengaluru to reassert its claim.

Mahajan Commission:

- In 1966, at Maharashtra's insistence, then **Prime Minister Indira Gandhi established a one-man commission led by Mehr Chand Mahajan**, third Chief Justice of India.
- The Commission, which submitted its report in 1967, recommended that 264 villages be transferred to Maharashtra and that Belgaum and 247 villages remain with Karnataka.

- The Commission also additionally stated that Sholapur in Maharashtra and Kasaragode, which is in Kerala, be given to Karnataka.

Four-member committee:

- In 1960, a four-member committee was formed by both States, but it couldn't arrive at a consensus and representatives submitted reports to their respective governments.

HORNBILL FESTIVAL

In Nagaland, the 10-day long Hornbill Festival 2022 will begin on December 1, at Naga heritage village Kisama.



About:

- The first festival was held in 2000.
- **Venue:** It is held at Naga Heritage Village, Kisama which is about 12 km from Kohima in Nagaland.
- **Organizers:** It is organized by the **State Tourism and Art & Culture Departments of the Government of Nagaland.**
- **Objective:** To encourage inter-tribal interaction and to promote cultural heritage of Nagaland.

Key highlights of festival:

- Festival highlights include the traditional Naga Morungs exhibition and the sale of arts and crafts, food stalls, song and dance shows, indigenous games etc.
- One of the major highlights of this festival is the Hornbill International Rock Festival where local and international rock bands perform.

Nomenclature:

- The festival is named after the bird "**Indian hornbill**", which is displayed in the folklore of most of the state's tribes.
- There are **9 hornbill species in India** of which **Great Hornbill** is the most famous.
- It is also called the '**Festival of Festivals**'.

Great Hornbill:

- **Scientific name:** Buceros bicornis.
- **Common name:** Great Indian hornbill or great pied hornbill.

Range:

- It is found in the Indian subcontinent and Southeast Asia.
- The bulk of the population is found in India, where it is restricted to the Himalayan foothills, hill forests in northeast India and, disjunctly, the wet evergreen forests of west India.

Conservation:

- **IUCN Status:** Near Threatened.
- It is listed in **Appendix I of CITES**.

Importance:

- Its impressive size and colour have made it important in many tribal cultures and rituals.
- The great hornbill is the **state bird of Kerala and Arunachal in India**.
- It is not a state bird of Nagaland, although the hornbill festival is celebrated in Nagaland. **Nagaland's state bird is: Blyth's tragopan.**

G20 SHERPA MEETING

The G-20 Sherpa meeting will be held at Udaipur in Rajasthan from December 5 to 7.



About:

- This will be the **first G20 Sherpa Meeting in India**.
- The meeting is aimed at fostering growth and building bonds amongst the twenty nations.
- The Sherpa Meeting of the G20 Summit is a preliminary meeting of the government representatives before the main G20 Summit.
- Here the representatives of the member nations hold discussions to firm up possible agreements.
- The final decisions are taken at the G20 summit by the Heads of States.
- Ahead of the main G20 Summit, the Sherpas meeting ensures that the time and resources required at the time of negotiations of the larger heads of state at the final summit are minimized.
- The former CEO of NITI Aayog, **Amitabh Kant** is the G20 Sherpa from India.

ALH MK-III HELICOPTERS

In a major boost to further strengthening the Coast Guard Region East, 840 Sqn (CG), an Indian Coast Guard Advanced Light Helicopter (ALH) Mk-III squadron, was commissioned at ICG Air Station, Chennai on November 30, 2022.



About:

- The ALH MK III helicopters have been indigenously manufactured by Hindustan Aeronautics Limited (HAL).
- They feature state-of-the-art equipment including advanced RADAR as well as Electro optical sensors, Shakti engines, full glass cockpit, high-intensity searchlight, advanced communication systems, automatic identification system as well as search-and-rescue homer.
- The features enable them to undertake maritime reconnaissance as well as carry out SAR at extended ranges even while operating from ships during both day and night.
- The aircraft has the ability to switch roles from an offensive platform with a heavy machine gun to that of a benign one carrying a Medical Intensive Care Unit to facilitate the transfer of critically ill patients.
- A total of 16 ALH Mk-III aircraft have been inducted into the Indian Coast Guard in a phased manner and four of these aircraft are positioned in Chennai.