theIASHub

the IAS hub
Be Your Dream.

MARCH
29

CRUX 10

10 News. 10 Sources. One Place

THE HINDU
ET
BS
TOI
The Indian EXPRESS
livemint
pib
DownToEarth
FORTNIGHTLY ON POLITICS OF DEVELOPMENT, ENVIRONMENT AND HEALTH
Science Reporter
विज्ञान एवं प्रौद्योगिकी मंत्रालय
MINISTRY OF SCIENCE AND TECHNOLOGY
सत्यमेव जयते



MK Yadav Sir

Table of Contents

1. Depository Participants
2. Captive Employer Initiative
3. Insemination Programme
4. PAN Linking to Aadhar
5. Aapda Mitra Scheme
6. Heat Action Plans
7. Quantum Communication
8. Renal Failure
9. I4c
10. Lithium Reserve

LIVE MINT

Page 4

DEPOSITORY PARTICIPANTS

(Syllabus: GS Paper 3 - Economy)

Sebi eases norms for onboarding of FPIs

PTI
feedback@livemint.com



Sebi has simplified the rules for ease of doing business. MINT

Markets regulator Sebi has simplified the procedural requirements for onboarding of Foreign Portfolio Investors (FPIs) in a bid to facilitate ease of doing business and to reduce the time taken for their registration.

The regulator allowed designated depository participants (DDPs) to grant FPI registration on the basis of scanned copies of application forms and supporting documents, according to a circular issued on Monday.

Granting of registration on the basis of scanned copies has been allowed but trading can only be activated following the verification of the physical documents, it said.

At present, applicants are required to send both scanned copies as well as physical documents of application forms and supporting documents to the DDPs for obtaining the FPI registration.

In addition, the Securities and Exchange Board of India (SEBI) has allowed DDPs to accept the use of digital signatures by FPIs for the execution of registration-related documents.

Besides, the regulator has permitted verification of PAN by DDPs through the Common Application Form (CAF) module available on the websites of the depositories. Currently, DDPs can verify the PAN only after receiving a hard copy of the PAN from the applicant.

In a bid to reduce the physical movement of documents and the time taken for registration, Sebi has allowed authorized bank officials to use the SWIFT mechanism for certification of copies of original documents submitted by FPIs, it said.

These moves are aimed at easing the onboarding process of FPIs and reducing the time taken for granting registration as well as opening of demat, trading and bank accounts of FPIs, Sebi said.

For operational convenience, Sebi said in case an FPI applicant belongs to an existing FPI investor group, it may submit its unique FPI investor group ID in the CAF, in lieu of providing complete details of all group constituents.

In case the applicant wants to club additional FPIs (apart from itself) in such a unique investor group ID, the FPI only needs to provide details of such additional FPIs, along with the investor group ID, it said.

Context: Markets regulator SEBI has simplified the procedural requirements for onboarding of **Foreign Portfolio Investors (FPIs)** in a bid to facilitate ease of doing business and to reduce the time taken for their registration.

- The regulator allowed **designated depository participants (DDPs)** to grant FPI registration on the basis of scanned copies of application forms and supporting documents.

Depository Participant (DP)

- **About**: In India, a Depository Participant (DP) is described as an A**gent of the depository.**
  - They are the **intermediaries** between the depository and the investors.
  - The relationship between the DPs and the depository is **governed by an agreement** made between the two under the Depositories Act.
- **Legal Aspects:** A DP is an entity who is registered as such with SEBI under the sub **section 1A of Section 12 of the SEBI Act.**
  - As per the provisions of this Act, a DP can offer depository-related services only after obtaining a **certificate of registration from SEBI.**
  - **SEBI (D&P) Regulations, 1996** prescribe a minimum net worth of Rs. 50 lakh for stockbrokers, R&T agents and non-banking finance companies (NBFC), for granting them a certificate of registration to act as DPs.
  - If a stockbroker seeks to act as a DP in more than one depository, he should **comply with the specified net worth criterion** separately for each such depository.
  - **No minimum net worth criterion** has been prescribed for other categories of DPs; however, depositories can fix a higher net worth criterion for their DPs.
- **Services provided by Depository:**
  - **Dematerialisation** (usually known as demat) is converting physical certificates of Securities to electronic form
  - **Rematerialisation**, known as remat, is reverse of demat, i.e. getting physical certificates from the electronic securities
  - **Transfer of securities**, change of beneficial ownership
  - **Settlement of trades** done on exchange connected to the Depository
  - **Pledging and Un-pledging** of Securities for loan against shares
  - **Corporate action** benefits directly transfer to the Demat and Bank account of customer
- **No. of Depository in the country:** Currently there are two depositories operational in India:
  - National Securities Depository Ltd.
  - Central Depository Services Ltd.

PIB MARCH 29

CAPTIVE EMPLOYER INITIATIVE

(Syllabus: GS Paper 3 - Economy & Employment)

Union Minister Shri Giriraj Singh initiates 'Captive Employment' initiative under Deen Dayal Upadhyaya Kaushalya Yojana (DDU-GKY), paving the way for greater industry participation in skilling rural poor youth

Context: Union Minister for Rural Development onboarded 19 **Captive Employers**, a unique initiative under the **Deen Dayal Upadhyaya Grameen Kaushalya Yojana (DDU-GKY).**

- **Captive employers** will train Rural Poor Youth and provide employment to trained youth in their company or subsidiary.

Captive Employer Initiative

- **About**: 'Captive Employer', is a first of its kind initiative that is aimed at a**ddressing the vision of a demand-based and dynamic skilling ecosystem** that caters to the requirements of the industry while ensuring sustainable placements for the rural poor youth of the country.
  - Under this initiative, **post-training placement** of candidates for at least six months with a minimum CTC of Rs 10,000 has been assured.
- **Nodal Ministry**: The Capital Employer Initiative is a programme financed by the **Ministry of Rural Development (MoRD)** under the Deen Dayal Upadhyaya Grameen Kaushalya Yojana (DDU-GKY), which is a nationwide placement-linked skill training program.
- **Creative Employer**: Any industry or employer that **employs candidates within its own organisation** or one of its subsidiaries and has adequate in-house training facilities is referred to as a captive employer.
  - **Captive placements** are those that are offered by captive employers.
- **Significance**: The initiative will **enable the industry to seek trainees as needed,** with active cooperation from States and UTs, and train them to meet their own organizational or industrial needs, as well as provide candidates with guaranteed placement.
  - Employers will also be able to choose **rural youth and skills** and put them in one of their establishments or subsidiaries.
- **Implementation**: According to the DDU-GKY Capital Employment guidelines, the **training courses can be implemented by the Employer or Industry** as per their requirement to train the candidates with a minimum of 576 hours and a maximum of 2304 hours of skilling.
  - For this, the funding of the DDU-GKY will be made available.
  - **State Skill Development Mission or State Rural Livelihood Mission** which is in charge of DDU-GKY implementation in states is responsible for providing the necessary implementation support and overseeing the captive employment initiatives' implementation.

PIB

MARCH 29

ARTIFICIAL INSEMINATION PROGRAMME

(Syllabus: GS Paper 3 -Agriculture)

Department of Animal Husbandry and Dairying implements Artificial Insemination method under Nationwide Artificial Insemination Programme (NAIP) of Rashtriya Gokul Mission scheme for genetic upgradation of Bovines in the country

Context: Due to implementation of Artificial Insemination under **Nationwide Artificial Insemination Programme (NAIP)** of Rashtriya Gokul Mission scheme and other measures taken by Government of India milk production in the country has increased from 146.31 Million Tonnes in 2014-15 to 220.78 Million in 2021-22 that is by 6.3% per annum during the last 8 years.

- **Artificial insemination** is the technique in which semen with living sperms is collected from the male and introduced into female reproductive tract at proper time with the help of instruments.

Nationwide Artificial Insemination Programme

- **About**: The NAIP is a **campaign mode genetic upgradation program** covering all breeds of bovines to enhance the milk production using low cost breeding technology for improving genetic merit of milch animals with high quality seed.
  - The Nationwide Artificial Insemination Programme (N.A.I.P) which was launched in 2019 covering 600 chosen districts including **aspirational districts as identified by NITI Aayog** has picked up pace.
  - The **gestation period** for getting the benefits from the AI bovine is approximately 3 years.
- **Objectives**: The aim of the program to **inseminate over 1 crore bovines in 6 months** & ear-tag them with **'PashuAadhaar'** which is a unique identification provided to the animals so as to enable the Government to identify and track the animals uniquely with all details such as the breed, age, gender and owner details.
  - Every cow and buffalo under AI will be tagged and can be tracked through the **Information Network on Animal Productivity and Health (INAPH) Database.**
- **Implementing Agency**: The **Department of Animal Husbandry & Dairying** is implementing Artificial Insemination method under Nationwide Artificial Insemination Programme (NAIP) of Rashtriya Gokul Mission scheme for genetic upgradation of Bovines in the country.

INDIAN EXPRESS

Page 17

PAN LINKING TO AADHAR

(Syllabus: GS Paper 2 - Polity & Governance)

Govt extends deadline for linking PAN with Aadhaar till June 30

ENS ECONOMIC BUREAU
MUMBAI, MARCH 28

THE GOVERNMENT on Tuesday extended the last date for linking PAN (permanent account number) with Aadhaar by three months from March 31, 2023 to June 30, 2023.

From July 1, 2023, PAN of a taxpayer, who failed to link with Aadhaar by June 30, 2023, will become inoperative, according to a release issued by the Ministry of Finance.

During the period in which PAN remains inoperative, no income tax refund will be made and also interest will note be payable on such refund. It will also mean that tax deducted at source (TDS) and tax collection at source (TCS) will be deducted or collected at a higher rate, as per the Income Tax Act. A taxpayer can make PAN operative again in 30 days, upon intimation of Aadhaar to the prescribed authority after payment of a fee of Rs 1,000, the release said. At present, more than 51 crore PANs have already been linked with Aadhaar.

Over 51% PANs have already been linked with Aadhaar

Context: The government has extended the deadline to link **Permanent Account Number (PAN)** with Aadhaar to June 30, 2023.

- The **Central Board of Direct Taxes (CBDT)** has asked all taxpayers to link their permanent account number (PAN) with their Aadhaar by March 31, 2023.
- **Securities and Exchange Board of India (SEBI)** too directed investors to link their PAN with their Aadhaar by the end of this month to continue doing transactions in the securities market.

Rationale behind linking PAN with Aadhaar

- **De-duplication**: The Income-tax Department announced the linking of PAN with Aadhaar after it came across instances where **multiple permanent account numbers (PANs) were allotted** to one person, or where one PAN was allotted to more than one person.
- **Mandatory**: To have a **robust way of de-duplication of the PAN database,** it was made mandatory for a taxpayer who is eligible to obtain Aadhaar, to quote his Aadhaar in the application form for PAN and return of income.

Key FAQs

- **Who needs to link PAN with Aadhaar?:** As per a circular issued by CBDT in March 2022, the Income-tax Act makes it **mandatory for every person who has been allotted a PAN as on July 1, 2017**, to intimate his/her Aadhaar number so that Aadhaar and PAN can be linked.
- **Who is not required to link PAN with Aadhaar?:**
  - Any person of **age 80 years and above.**
  - A **non-resident** as per the Income-tax Act.
  - A person who is **not a citizen of India.**
- **Implications if PAN is not linked with Aadhaar:** In case a person **fails to link his or her PAN with Aadhaar,** the PAN will become inoperative.
  - In such a case, the person will **not be able to furnish, intimate, or quote his/ her PAN**, and shall be liable to all the consequences under the Income-tax Act for such failure.
  - Some of the major implications of non-compliance are:
    - The person shall not be able to file the income tax return using the inoperative PAN.
    - Pending returns will not be processed.
    - Pending refunds cannot be issued to inoperative PANs.
    - Pending proceedings as in the case of defective returns cannot be completed once the PAN is inoperative.
    - Tax will be required to be deducted at a higher rate if PAN becomes inoperative.
    - Besides these consequences, the person may find difficulties in doing other financial transactions such as with banks, as PAN is an important KYC criterion for these transactions.

TIMES OF INDIA

Page 4

AAPDA MITRA SCHEME

(Syllabus: GS Paper 3 - Disaster Management)

'Aapda mitras': IP Univ trains first responders

Shinjini.Ghosh
@timesgroup.com

New Delhi: Lieutenant governor V K Saxena on Tuesday launched the 'Aapda Mitra' training programme for the first batch of 100 students at Guru Gobind Singh Indraprastha University.

The participants included people from diverse backgrounds who will be trained as first responders. From homemakers to those working in parlours to others employed in e-commerce companies, the volunteers said recent episodes of earthquakes and other natural disasters had led them to sign up.

For 44-year-old Sunita Sabharwal, it was her sibling's death that pushed her to join the community service programme. "I want to be trained to be able to help others, be it someone at home or in the neighbourhood. After my sister's death, I have been taking care of her children. After the mishap, I got motivated to do something for others and society at large. We have all seen and heard of disasters, not only in Delhi, but in other parts of the country too and I want to help actively," said Sabharwal, a resident of Najafgarh.

Amit Kumar Dabri (24), who works for an e-commerce firm, said, "As a civil defence volunteer, we have been trained at a basic level in terms of rescue. Under Aapda Mitra, we will be trained for skills at a much higher level. For instance, how to respond and rescue people during an earthquake."

A VOLUNTEER SAYS

We have all seen and heard of disasters, not only in Delhi, but in other parts of the country too and I want to help actively

Kajal, a 23-year-old homemaker, said, "I want to be prepared and have the requisite knowledge for such skills, so that I can reach out and help people in need."

Training first responders was the "need of the hour", the LG said, adding that the most challenging task in the face of a disaster is to ensure prompt and proper response.

"It is important that relief and rescue measures are provided spontaneously in an emergency. We are to empower volunteers with basic knowledge, skill and understanding of relief, rescue, emergencies and medical services at the local level as first responders to the devastation caused by any emergency," he said.

Saxena added, "With the recent earthquakes across the world, it is the need of the hour to quantify the significance of adequate awareness and preparedness in the community. The role of community participation is very critical and can have a tremendous impact on the protection of human life."

The university will train 600 volunteers in batches of 100 over 12 days each. Dr Mahesh Verma, its vice-chancellor, said, "This programme will be of immense importance and help the community at large under compelling circumstances."

Around 50-60% of the buildings in Delhi have been constructed in an unplanned manner due to a flux of urbanisation as a result of which they are prone to disasters, Saxena said, stressing on the importance of the volunteers.

At the event, Saxena also inaugurated the "Atal Incubation Centre", an auditorium-cum-placement centre and an open air theatre.

Officials said the training module for the programme has been designed by the university's Centre of Excellence in Disaster Management in coordination with the DDMA.

Context: Lieutenant governor launched the **'Aapda Mitra' training programme** for the first batch of 100 students at Guru Gobind Singh Indraprastha University.

Aapda Mitra Scheme

- **About**: **NDMA** has been implementing a **central sector scheme** namely Aapda Mitra since May 2016 with a focus on training of 6000 community volunteers (200 volunteers per district) in disaster response in selected 30 most flood prone districts of 25 States of India.
  - **NDMA (National Disaster Management Authority)** is the apex statutory body for disaster management in India.
  - It is headed by the Prime Minister of India.
- **Objectives**:
  - Development and Standardization of **training modules** at National Level;
  - Development of **Information Knowledge Management System** at National level linked to States/UTs;
  - **Training institutions** to be empanelled by respective States/UTs at the State/UT level;
  - To train 6000 community volunteers in **life saving skills** of disaster response (flood relief and rescue), coordination, assistance, and provide personal protective equipment and emergency responder kits;
  - To create a **Community Emergency Stockpile/Reserve** at the district/block level containing essential light search and rescue equipment, medical first aid kits, etc;
  - To **disseminate training and education tools** developed under the project to more number of flood prone districts in subsequent phases of the scheme.

DTE

MARCH 29

HEAT ACTION PLANS

(Syllabus: GS Paper 3 - Disaster Management)



Context: An analysis of 37 **heat action plans (HAP)** from across the country at the state (15), district (13) and city levels (9) by the non-profit **Centre for Policy Research (CPR)** found that most of them were not built for local context and are poor at identifying and targeting vulnerable groups.

- **HAPs** are documents prepared at the state, district and city levels for taking short-term actions to limit the number of human deaths and other adverse impacts of heat waves and further long- term actions to prepare for future heat waves based on the data and analysis of previous heat waves.

Key Findings

- **No clarity on implementation**: The Centre For Policy Research (CPR), which conducted the "first critical review" of heat action plans at the city (nine), district (13) and state (15) levels across 18 states, said it was unclear to what extent actions prescribed in the HAPs were being implemented.
- **Poor targeting:** Nearly all HAPs are poor at identifying and targeting vulnerable groups.
- **Inadequate Vulnerability Assessments**: Only two of the 37 HAPs explicitly carry out and present **vulnerability assessments**. This leaves the implementer with little data on where to direct their scarce resources and could lead to poor targeting.
- **Not taking risk multipliers into account**: Only 10 out of the 37 HAPs reviewed seem to establish **locally-defined temperature** thresholds though it is unclear whether they take local risk multipliers (such as humidity, hot nights, duration of continuous heat among others) into account to declare a heat wave.
- **Uneven consideration of factors**: Hot nights, heat waves coming earlier, and cascading impacts are unevenly considered across HAPs.
- **Climate Projections not integrated with HAPs**: Climate projections, which could help identify future planning needs, are not integrated into current HAPs.
- **Funding Constraint**: According to the analysis, only 11 HAPs discuss funding sources. Of these, eight asked implementing departments to **self-allocate resources,** indicating a serious funding constraint.
- **No indication of legal sources of authority**: None of the HAPs reviewed indicated the legal sources of their authority. This reduces bureaucratic incentives to prioritise and comply with HAPs instructions.
- **No National Repository of HAPs**: The analysis also pointed out that there was no national repository of HAPs and very few HAPs were listed online.
- **HAPs not updated periodically**: It is also unclear whether these HAPs are being updated periodically and whether this is based on evaluation data.

Centre for Policy Research

- **About**: It is an **Indian think tank** focusing on public policy.
  - Established in 1973 and located in New Delhi, it is one of the national social science research institutes recognized by the **Indian Council of Social Science Research (ICSSR).**
- **Objectives**:
  - To **develop substantive policy** options on matters relevant to the Indian polity, economy and society.
  - To **provide advisory services** to governments, public bodies and other institutions.
  - To **disseminate information** on policy issues through various channels.
- **Governing board:** The governing board of CPR consists of various public figures from **Indian government, academia, and industry.**

BUSINESS STANDARD Page 19

QUANTUM COMMUNICATION

(Syllabus: GS Paper 3 - Sci & Tech)

How quantum communication can become the future of data encryption

ANANYANARAYAN DHANABALAN
New Delhi, 28 March

While speaking at the first International Quantum Communications Conclave in New Delhi on Monday, Union Minister for Communications, Electronics and Information Technology Ashwini Vaishnaw announced that India's first quantum computing-based telecom network link now is operational.

The secure line is between Sanchar Bhawan and the National Informatics Centre at the Central Government Offices (CGO) complex in Delhi. The minister also challenged hackers to break the network's encryption, offering a reward of ₹10 lakh per break.



What is quantum communication?
Quantum communication is an amalgamation of quantum mechanics and modern communication and IT to study data transmission and processing. Also known as quantum information science and technology, it attempts to utilise the principles and concepts of quantum Mechanics to further technologies in telecommunications and IT.

What is a quantum communication network?
This communication network securely transmits data using the laws of quantum physics. Typically, sensitive data is encrypted and sent through fibre-optic cables with a digital "key" to decrypt the information. This data is transmitted in classical binary bits (0s and 1s), making it vulnerable to hackers who can read and copy it without a trace.

However, in a quantum communication network, data is transmitted via qubits. Qubits are particles — usually photons of light — in a superposition state, meaning they can be in multiple states and represent numerous combinations of 0 and 1. If a hacker tries to read this data, the qubits would "collapse" from their fragile quantum state to either a 0 or 1, thereby leaving a clear trace of external activity. Theoretically, this makes these networks ultra-secure.

How data encryption works in a quantum communication network?
Companies have recognised the additional security offered by quantum communication networks and have taken to transmitting sensitive data through a process called quantum key distribution (QKD).

This process involves the transmission of encrypted data as classical bits over networks while the decryption key is encoded and transmitted in a quantum state using qubits.

The most widely used scheme for this is the BB84, the world's first quantum cryptography protocol. While there are several operational QKD networks in the world, China boasts the world's longest one. Running a ground link of over 2,000 km between Beijing and Shanghai, banks and other financial institutions in China are already using this network to transmit data in an incredibly secure manner.

Are quantum communication networks really secure?
Theoretically, Quantum Communication networks are highly secure, with the built-in security of qubits and the simplified traceability of external interference in the signal. However, these are predicated on the assumption that the machines used in the data encryption and transmission are secure and perfect, which may not be the case. The decay of the signal due to decoherence and the need for quantum repeaters for long-distance transmission is a systemic vulnerability that needs to be addressed. Quantum repeaters are nodes where the quantum keys are decrypted into bits and re-encrypted in a fresh quantum state to avoid signal loss.

Classical computing	Quantum computing
Used by large-scale, multipurpose computers and devices.	Used by high-speed, quantum mechanics-based computers.
Information is stored in bits.	Information is stored in quantum bits.
There is a discrete number of possible states: 0 or 1.	There is an infinite, continuous number of possible states.
Calculations are deterministic, meaning repeating the same input results in the same output.	Calculations are probabilistic, meaning there are multiple possible outputs to the same input.
Data processing is carried out by logic and in sequential order.	Data processing is carried out by quantum logic at parallel instances.
Operations are defined by Boolean algebra.	Operations are defined by linear algebra over Hilbert space.
Circuit behavior is defined by classical physics.	Circuit behavior is defined by quantum mechanics.

Context: While speaking at the first International **Quantum Communications** Conclave in New Delhi, Union Minister for Communications, Electronics, and Information Technology announced that India's first quantum computing-based telecom network link now is operational.

Quantum communication

- **About**: Quantum Communication is one of the safest ways to connect two places with **high levels of quantum and code cryptography**, which cannot be decrypted or broken by an external entity.
  - If any hacker tries to crack message in quantum communication, it changes its form in a way that would alert the sender.
  - It would also cause the message to be altered or deleted.
- **Quantum Physics:** Quantum communication is a field of **applied quantum physics**.
  - It is closely related to **quantum teleportation and information processing.**
- **Application**: The most developed and well-known application of quantum cryptography is **quantum key distribution (QKD),** which describes the use of quantum mechanical effects for performing cryptographic tasks or for breaking cryptographic systems.

DTE MARCH 29

RENAL FAILURE

(Syllabus: GS Paper 3 - Sci & Tech)



Context: Sasha **(a female cheetah)**, one of the eight cheetahs brought to **Kuno National Park (KNP)** of Sheopur district in Madhya Pradesh on September 17, 2022 from Namibia, died on March 27, 2023.

- Sasha was undergoing treatment for **renal failure.** A blood sample taken from Sasha revealed that there was **infection in her kidneys.**

Renal Failure

- **About**: The kidneys **filter the blood and remove toxins** from it. These toxins are passed to the bladder where they are removed during micturition.
  - When the **kidneys fail to remove toxic substances** from the body, this is known as renal failure.
- **Causes:**
  - Certain acute and chronic diseases
  - Excessive dehydration
  - Kidney trauma
  - Exposure to pollutants or excessive medicines
- **Types**: Renal failure is of **two types:**
  - **Acute Renal Failure or ARF**: It occurs when the kidney suddenly **stops filtering blood.**
  - **Chronic Renal Failure or CRF**: The patient with chronic renal failure **does not show any symptoms** until the kidney function declines to 20%.
- **Prevention and Treatment:** The risk of developing renal failure **could be predicted** such as decreased perfusion secondary to abdominal surgery, coronary bypass surgery, acute blood loss in trauma, and uric acid nephropathy, where preventative strategies could prove effective.

- **Preventive Dialysis**: A novel approach to reduce the incidence of **nephrotoxicity** is associated with radiocontrast dye administration.
  - It is provided **prophylactically** to patients who are at high risk of acute renal failure.
  - **Hemofiltration** initiated prior to and continued for 24 hours after dye administration has resulted in a significant reduction in mortality and a reduced need for dialysis.
- **Dopamine and Diuretics**: Low doses of **dopamine** (≤ 2 mcg/kg/min) increases renal blood flow and might be expected to increase GFR (glomerular filtration rate).
  - Theoretically, this could be considered beneficial, as an enhanced **GFR (glomerular filtration rate)** might flush nephrotoxins from the tubules, minimizing their toxicity.

THE HINDU Page 12

I4C
(Syllabus: GS Paper 3 - Cyber Security)

More than 500 apps blocked on the advice of cyber-crime centre, says Home Minister

Vijaita Singh
NEW DELHI

Union Home Minister Amit Shah said on Tuesday that more than 500 Internet-based applications have been blocked on the recommendation of the Indian Cyber Crime Coordination Centre (I4C).

Reviewing the functioning of the I4C, along with Union Home Secretary Ajay Kumar Bhalla, Mr. Shah said the Centre has prepared an analytical report of the *modus operandi* of the top 50 cyber-attacks in the country.

The government has taken several initiatives for cyber security and in the coming days, nearly 70% of the criminal justice system that includes prisons and courts, will be online, he added.

More than 20 lakh cyber-crime complaints have been registered on the portal *cybercrime.gov.in*, on the basis of which more than 40,000 FIRs have been registered, he said, adding that 13 crore hits were registered on this portal since its launch in January 2020.


Amit Shah

He said 99.9% of police stations (16,597) are registering 100% FIRs directly on the Crime and Criminal Tracking Network and Systems (CCTNS). The CCTNS National Database so far contains 28.98 crore police records.

"If a victim of financial fraud complains immediately calls on the toll-free number 1930, agencies can freeze the SIM card and the bank account involved in the crime. The chance of recovering the money is higher if complained immediately," Mr. Shah said.

The Minister said that the National Database of Sexual Offenders (NDSO), a searchable registry of convicts involved in sexual offences such as rape, molestation, stalking and child abuse, has a record of 13 lakh offenders so far.

Mr. Shah said the NDOFO (National Database of Offends of Foreign Origin), launched on January 20, is a registry of foreigners involved in crime in India and has details of convicted and accused foreign offenders.

Context: The Union Home Ministry has identified over 500 apps which were being used for spoofing and committing frauds in India.

- The apps have been blocked on **Indian Cyber Crime Coordination Centre (I4C)** recommendations due to security reasons and action has been taken as per law.

Indian Cyber Crime Coordination Centre (I4C)

- **About**: It is a government initiative to **deal with cybercrime** in India, in a coordinated and effective manner. It is affiliated to the **Ministry of Home Affairs**, Government of India.
  - The scheme to set up the Indian Cyber Crime Coordination Centre was **approved in October 2018** by the Ministry of Home Affairs (India).
  - It is set up under the newly created **Cyber and Information Security (CIS)** division of the MHA.
- **7 components:**
  - National Cyber Crime Threat Analytics Unit (TAU)
  - National Cyber Crime Reporting Portal
  - National Cyber Crime Training Centre
  - Cyber Crime Ecosystem Management Unit
  - National Cyber Crime Research and Innovation Centre
  - National Cyber Crime Forensic Laboratory (NCFL) Ecosystem
  - Platform for Joint Cyber Crime Investigation Team
- **Functions**: The I4C **assist in centralising cyber security investigations,** prioritise the development of response tools and bring together private companies to contain the menace.

ECONOMIC TIMES

Page 2

As Surveys Begin in Lithium-Rich Reasi, Locals Fear Relocation



HAKEEM IRFAN

Discovery of lithium is good news for the whole country. It will bring economic prosperity, but the government should consult and take care of the primary stakeholders who are living here

RAJINDER SINGH, *deputy sarpanch of Salal panchayat*

HakeemIrfan.Rashid@timesgroup.com

Salal, Reasi: The Jammu and Kashmir administration has started demarcation of the infrastructure and habitation in Salal-Haimana areas of Reasi in Jammu, where 5.9 million tonnes of lithium reserves have been discovered recently.

A team of Geological Survey of India (GSI) along with the experts from geology and mining department of J&K is set to visit the village this week to start a microscopic survey in the region, mapping the coordinates of every household, government building and other infrastructure falling in the area where the mineral reserves are located.

In February, the GSI said in a report that lithium inferred resources (G3) of 5.9 million tonnes were present in Salal-Haimana area of Reasi. The government has decided to auction the mineral block as well.



In Feb, GSI said in a report that lithium inferred resources (G3) of 5.9 MT were present in Salal-Haimana area of Reasi

"We have started collecting the data from the area on broader parameters to map the infrastructure and habitation in the area. For microscopic demarcation, we need to geo-map the coordinates of each and every household and other infrastructure, for which a team of GSI along with the Geological and Mining department is arriving within a day or two to start the process," said Babila Rakwal, deputy commissioner of Reasi.

The discovery of this major mineral has triggered unease and uncertainty among the residents of Salal-Haimana, located in the mountains on the banks of Chenab river, around 90 km from the winter capital of Jammu. Locals fear forced relocation, loss of agricultural livelihood and annihilation of their social and cultural relations.

LITHIUM RESERVE

(Syllabus: GS Paper 1 - Geography)

Context: The Jammu and Kashmir administration has started demarcation of the infrastructure and habitation in **Salal-Haimana areas** of Reasi in Jammu, where 5. 9 million tonnes of **lithium reserves** have been discovered recently.

- 5.9 million tonnes inferred resources of lithium were discovered in the Salal-Haimana area of Reasi district, Jammu & Kashmir, by the **Geological Survey of India.**
- **Mineral Resources** are subdivided into inferred, indicated and measured categories, based on the order of increasing geological confidence.
- The term 'inferred' refers to the 'preliminary exploration stage', the second of a four-step process, according to the **Mines and Minerals (Development and Exploration) Act 1957.**

Lithium

- **About**: Lithium is a **chemical element** with the symbol Li and atomic number 3.
  - It is a **soft, silvery-white alkali metal.**
  - Under standard conditions, it is the **least dense metal** and the **least dense solid element.**
  - Like all alkali metals, lithium is **highly reactive and flammable**, and must be stored in vacuum, inert atmosphere, or inert liquid such as purified kerosene or mineral oil.
- **Global reserves: Chile, Australia, Argentina, Bolivia and China** contain most of the reserves discovered so far globally.
  - In South America, 54% of the world's Lithium reserves are found in **Argentina, Bolivia and Chile.**
  - The area is referred to as the **'Lithium Triangle'** and is concentrated in various salt pans present in the Atacama Desert and neighbouring arid regions.
- **Potential reserves in India:** In India, there is some potential to recover lithium from brines of Sambhar and Pachpadra areas in Rajasthan, and Rann of Kutch, Gujarat.
  - The major mica belts located in Rajasthan, Bihar and Andhra Pradesh and the pegmatite belts in Odisha, Chhattisgarh, alongside rock mining being undertaken at Mandya, Karnataka, are other potential geological domains of the country.

Secure Top Rank with theIAShub Courses

Prelims 2023 Courses

01 Prelims Crash Course Score Enhancement Program (SEP)

02 INA Current Affairs (Prelims)

03 TACKLE - Prelims Test Series

04 Geography - Prelims Crash Course

Quality Enrichment Courses (Mains 2023)

01 Quality Enrichment Program (QEP)

02 Science of Answer Writing (SAW)

Prelim Cum Mains 2024 Courses

01 NEEV GS Foundation 2024/25

02 INA Current Affairs Pre Cum Mains - 2024

FREE Download PDF

Login to theiashub.com

- Aaj Ka Quality Enrichment (Toppers' Favourite PDF)
- News-CRUX-10 (10 News. 10 Sources. One Place)
- Monthly Editorials (The Hindu & Indian Express)
- Daily Quiz (Prelims)
- Government Schemes & Ministry Wise Year End Review
- Free Enrichment PDFs (Tailor Made Crisp Study Material)



Log On To Our Unique
Free Answer Writing Sessions with Toppers (FAST) Portal
& Start Practicing!

SCAN HERE

9560082909

t.me/theiashub

/mkyadav

www.theiashub.com

www.theiashub.com