

# DAILY CURRENT AFFAIRS

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### Glacial Lake Outburst Flood (GLOF)

#### Syllabus: GS1/Geography/GS3/Disaster Management In News

• Flash floods occurred in **north Sikkim** after the **South Lhonak Lake** which is a glacial lake burst due to incessant rains.

#### <u>About</u>

- The South Lhonak Lake is situated in the state's northwest at 17,000 ft. It formed due to the melting of the Lhonak glacier.
- The outburst of the lake has caused the **rise of water levels in Teesta river** that flooded **at least four districts**, including **Mangan**, **Gangtok**, **Pakyong and Namchi**.
- Lhonak lake is **one of the largest and fastest growing proglacial lakes in Sikkim** and is among the 11 large glacial lakes monitored by the Central Water Commission.

- During the past 29 years, the glacier's length has reduced from 6.4 km to 5.1 km.
- The Lhonak lake, which measured just 0.17 square kilometres in 1977, grew to 0.78 square kilometres in 2002 and 1.35 square kilometres in 2019.

Sentinel-1A, 28 Sep 2023

RISAT-1A, 04 Oct 2023 (0600 Hrs)

Between September 17 and September 28, its size shot up by around 5 hectares, which is around three percent of its size.



What is GLOF?

- Glacial Lakes are large bodies of water that sit in **front of**, on top of, or beneath a melting glacier.
- As they grow larger, they become more dangerous because glacial lakes are mostly dammed by unstable ice or sediment composed of loose rock and debris.
- In case the boundary around them breaks, **huge amounts of water rush** down the side of the mountains, which could cause flooding in the downstream areas. This is called glacial lake outburst floods or GLOF.
- GLOF can be triggered by several reasons, including **earthquakes**, **extremely** heavy rains and ice avalanches.
- These lakes are often found in **steep**, **mountainous regions**, which means landslides or ice avalanches can sometimes fall directly into the lakes and displace the water, causing it to over-top the natural dam and flood downstream.

#### About Sikkim geology and geomorphology

- East district is a part of the Eastern Himalayas Five geological units • encountered in the district are Kanchenjunga gneiss, Darjeeling gneiss, Chungthang schists and gneiss, lingtse granite gneiss and the daling group of rocks.
- In the East District out of the total geographic area (964 sq km), 679 sq km of area is covered by forest which is 71.17% of the total geographic area.
- The major drainage systems in the East district are **Teesta**, **Rangpo Chhu**, and Dik Chhu.

#### South Lhonak Lake Outburst - Pre and Post Scenario

RISAT-1A, 17 Sep 2023

- The Teesta basin in Sikkim Himalaya hosts numerous glacial lakes in the high-altitude glacierised region, including one of the largest and fastest-growing South Lhonak Lake.
- Sikkim has **733 glacial lakes, with 288 located above an altitude of 5,000 m**, according to the National Remote Sensing Centre (NRSC).

#### Old study warned about threat of lake bursting in Sikkim

- A study by an international team of researchers had warned two year ago that the **South Lhonak lake in Sikkim may burst in the future** and significantly impact the downstream region.
- The 2021 study, published in the journal Geomorphology, highlighted that South Lhonak Lake had **witnessed a significant growth in the past decades** due to glacial retreat, thereby increasing its chances of glacial lake outburst floods (GLOF).

### IGNORED RED FLAGS TRIGGERED FLASH FLOODS IN SIKKIM

A look at what we know about Wednesday's tragedy.

South

Overflow of water

Moraine

#### WHAT IS A GLOF?

A glacial lake outburst flood, or GLOF, is when there's a sudden flow of water from a glacier-dammed lake (a lake created after a glacier retreats). The outer edges of the dam are formed by what is known as a moraine – the material/rocks left behind by the retreating glacier. During a GLOF, water either breaches the moraine by overflowing, or a part of it collapses.

LAKE

This sudden burst of water

results in flash flooding in

Heavy rainfall in the lakebed

the river. These can be

triggered by:

#### WHAT HAPPENED?

At around 1am on Wednesday, a GLOF was reported in South Lhonak Lake, which led to a hydel project dam getting washed away, triggering flash flood down the stream in the Teesta River basin. A barrage of boulders, debris and water flowing down meant a sudden increase in water level which tore through at least one critical dam, and destroying homes, public infra, etc.

LHONA

SO, WHAT

So far, it's not

CAUSED IT?

entirely clear yet

triggered the GLOF because the

remote. Experts,

however, have

some theories:

what may have

region is too

5.245m

Altitude



Chungthang

North Western part of Sikkim

Mangan

(Dzongu)

Dik-Chu

SIKKIM

#### THEORY #1: CAUSED BY RAIN

Ha

Primarily, experts suspect vigorous monsoon rainfall may have been the trigger. There is no rainfall data from IMD for this remote region as IMD does not have automatic weather stations there. Experts say it appears that heavy rainfall caused water to rise above the moraine, or led to a partial collapse of the moraine, which triggered the flashflood.

### THE DESTRUCTION

#### MANGAN (NORTH SIKKIM)

- Chungthang, NHPC dam and bridge washed away
- Bridges washed away at Minshithang and Zema among other places
- Drinking water supply lines totally damaged

#### GANGTOK DISTRICT

- 3 bodies recovered at Golitar
- 4 relief camps set up
- 25 people rescued by SDRF
- NHPC dam control room damaged
- Drinking water lines and sewage plant at Singtam damaged

#### **PAKYONG DISTRICT**

- 4 deaths reported
- 7 reported missing at Baghey Khola, 3 at Majitar
- 17 have been wounded
- Drinking water supply lines and sewage plant at Rangpo damaged

#### NAMCHI DISTRICT

- 2 labourers swept in Mamring
- Sewage plant at Melli damaged

#### THEORY #2: LANDSLIDE/AVALANCHE

Another theory is that a portion of the glacier collapsed into the lake or a landslide brought soll into the lake, which led to the water level suddenly rising above the moraine. This, then, caused the sudden flooding downstream.

#### THEORY #3: ROLE OF EARTHQUAKE

Some scientists have also suggested that the earthquake that hit Nepal and northern India on Tuesday may have triggered the GLOF.

Rapid glacier melting
Snow and ice avalanches

Landslides into the lake

Glacier

#### Source: IE

### **Dynamic Injunction**

Syllabus: GS2/Polity and Governance

#### <u>In News</u>

• The **Delhi High Court** has **passed a "dynamic injunction**" in favour of the **ICC Men's Cricket World Cup 2023** broadcaster, **Star India Private Limited**, before the Cup's commencement.

#### What is a Dynamic Injunction?

- An injunction is an official order given by a law court, usually to stop someone from doing something.
- A **dynamic injunction** is passed to protect copyrighted works **even before they are publicly released**, **distributed**, **or created**.
- It ensures that **no irreparable loss is caused to its authors and owner**, owing to the imminent possibility of such works being uploaded on rogue websites or their newer versions immediately after their creation or release, given the challenges posed by **online piracy**.
- Star India filed the pleas on the basis of **exclusive rights** they had acquired from ICC, they enjoyed broadcast reproduction rights which are contemplated under **Section 37 of the 1957 Copyright Act.**

#### What is Section 37 of the Copyright Act?

- Section 37 deals with a "**special right**" extended to every broadcasting organisation.
- Section 37 (2) proceeds to enlist **what constitutes an infringement** of this right.
- It states that "during the continuance of a broadcast reproduction right" any person who, **without the licence of the right's owner** engages in re-broadcasting the broadcast;
  - or causes the broadcast to be heard or seen by the public on payment of charges;
  - or makes **any sound or visual recording** of the broadcast;
  - or makes any reproduction of such sound or visual recording where the initial recording was done without licence or was licensed, for any purpose not envisaged by the licence;
  - **or sells or hires to the public, or offers for such sale or hire**, any such sound recording or visual recording, will be deemed to have infringed this right, subject to the provisions of Section 39.
- Section 39: Acts not infringing broadcast reproduction right or performer's right.
  - the making of any sound recording or visual recording for the **private use** of the person making such recording, or **solely for purposes of bona fide teaching or research; or**
  - the use, consistent with fair dealing, of excerpts of a performance or of a broadcast in the reporting of current events or for **bona fide review**, **teaching or research; or**
  - such other acts, with any necessary adaptations and modifications, which **do not constitute infringement of copyright under section 52.**

#### Source: IE

### Nobel Prize in Chemistry 2023

#### Syllabus: GS3/Science & Technology In News

• The 2023 Nobel Prize in Chemistry has been awarded to Moungi G. Bawendi, Louis E. Brus and Alexei I. Ekimov for the discovery and synthesis of quantum dots.

#### The Discovery

- Every piece of a **pure element** exhibits **exactly the same properties**, regardless of its size.
- But about **forty years ago**, scientists started discovering something very remarkable. **Very small particles**, in the **nanoscale range**, were found to behave **slightly differently from larger particles of the same element**.
- Alexei Ekimov was the first to notice this deviant behaviour in Copper Chloride nanoparticles around 1980.
- A few years later, Louis Brus, discovered similar behaviour in Cadmium Sulphide nanoparticles.
- Moungi Bawendi, later developed easier methods to efficiently produce nanoparticles that showed some desired deviant behaviour.
- For their path-breaking research, done three to four decades ago, they were awarded the 2023 Nobel Prize in Chemistry.

#### What are Quantum Dots?

- Quantum dots, often referred to as "artificial atoms," are semiconductor nanocrystals that exhibit remarkable quantum mechanical properties.
- Unlike traditional materials, the **size of quantum dots** plays a pivotal role in determining their electronic and optical characteristics.
  - This size-dependent behaviour is a **direct result of quantum confinement**, a phenomenon that occurs at the nanoscale.
- Quantum dots are typically composed of elements from the periodic table's groups II-VI or III-V, such as **cadmium selenide (CdSe) or indium arsenide (InAs).**
- Their size can be precisely controlled during synthesis, allowing scientists to **tailor their properties for various applications.**



#### **Significance**

- Their unique optical properties, including **tunable fluorescence**, make them invaluable tools for **labeling and tracking molecules** within biological systems.
  - Researchers use quantum dots as **fluorescent probes** to visualize cellular processes at an unprecedented level of detail.
- Quantum dots have revolutionised the world of **sensors and detection**.
  - Their sensitivity to changes in the surrounding environment, such as temperature or pH, has led to the development of **highly accurate and responsive sensors.**
  - These sensors find applications in environmental monitoring, medical diagnostics, and industrial quality control, among others.
- However, quantum dots are not merely limited to chemistry; they have profound implications in the realm of **quantum physics.** 
  - Due to their confined size, electrons within quantum dots are restricted to discrete energy levels, resembling the behavior of electrons in atoms.
  - This resemblance has sparked interest in using quantum dots to construct **quantum bits or qubits**, the building blocks of quantum computers.
- Their use is also being explored in **high-efficiency solar cells**, enhancing the brightness and colour accuracy of displays, and even in the development of **quantum dot-based LEDs** for next-generation lighting solutions.

Source: IE

### <u>Changes related to Insolvency and Bankruptcy</u> <u>Code, 2016</u>

Syllabus: GS 3/Economy

#### In News

• Recently, the Ministry of Corporate Affairs issued a notification stating that certain provisions of the **Insolvency and Bankruptcy Code (IBC)** will no longer apply to **aircraft**, **their engines**, **airframes**, **and helicopters**.

#### <u>About</u>

- The provisions of sub-section (1) of section 14 of the Insolvency and Bankruptcy Code, 2016, which imposes a moratorium on assets of a company undergoing insolvency ,shall not apply to transactions, arrangements or agreements, under the Cape Town Convention and the protocol, relating to aircraft, aircraft engines, airframes and helicopters.
- **Implications :** It is expected to have a significant impact on the aviation industry in India, making it easier to recover assets especially aircraft and engines even when an airline goes through insolvency.
  - It could resolve discrepancies between global leasing rules and its bankruptcy laws.
- <u>The Cape Town Convention (CTC)</u>
  - It is a global treaty that guarantees the **rights of lessors to repossess leased high-value equipment** such as aircraft, engines, and helicopters in case of payment defaults.
  - It was adopted at a conference in Cape Town in November 2001 under the International Civil Aviation Organisation (ICAO) and the International Institute for the Unification of Private Law (UNIDROIT).
  - It aims to solve problems of obtaining certain rights to aviation assets such as aircraft engines, helicopters and airframes, which, by their nature, have no fixed location.
  - **India is now a signatory to the convention**, but the Indian Parliament has not ratified the same.

#### Insolvency and Bankruptcy Code, 2016 (IBC)

- It was enacted in 2016, against the backdrop of mounting non-performing loans, with a view to establishing a **consolidated framework for insolvency resolution** of **corporations**, **partnership firms** and **individuals** in a time-bound manner, and seeks to tackle the **non-performing asset (NPA)** problem in two ways.
  - Firstly, behavioural change on part of the debtors to ensure sound business decision-making and prevent business failures is encouraged.
  - Secondly, it envisages a process through which financially ailing corporate entities are put through a rehabilitation process and brought back up on their feet.
- The IBC sets out three classes of persons who can trigger the corporate insolvency resolution process (CIRP) financial creditors, operational creditors and corporate debtors.

#### **Progress**

• The IBC has undoubtedly revived India's insolvency regime. Not only has it been successful in combating the growing threat of NPAs, but it has also benefited the economy in a variety of nuanced ways, including improving credit discipline.

- The IBC has reformed the Indian insolvency law landscape to a great extent. It has contributed to the development of disciplined borrowing amongst companies.
  - Promoters are fearful of losing control of their enterprises in the event of a default.
- Post the implementation of IBC, as per the World Bank's report, India's rank in resolving insolvency went from 136 in 2017 to 52 in 2020.

#### <u>Issues</u>

- The recovery rates under the IBC are low. There are matters where haircuts of as much as 95 per cent are being granted during the insolvency resolution.
- Adding to the problem is the **pendency of insolvency matters**.
  - Around 71 per cent of the cases are pending for more than 180 days which is a marked deviation from the intent of swiftly resolving insolvency.
- As far as staffing is concerned, in September 2021, the NCLTs were functioning without a President and were short of 34 members out of a total sanctioned strength of 62 members.
- Another important challenge is the **digitisation of the IBC ecosystem**.
  - The lack of digitisation has led to the insolvency process being stymied with long delays much beyond the statutory limits.

#### The way forward

- It is important for the key stakeholders to make their best endeavours to ensure that the power of the IBC does not diminish.
- The goal must be to fill the voids that are discovered and move towards a more complex legal system over time.
- The government needs to cater appropriate budgetary allocations to upskilling insolvency professionals, improvement of tribunal infrastructure and digitisation of the insolvency resolution process.
- India is working to resolve discrepancies between global aircraft leasing rules and its national bankruptcy laws.

Source:<u>LM</u>

### <u>Uterus Transplant</u>

#### Syllabus: GS2/ Government Policies & Interventions, Health In News

• Recently in the U.K., conducted the country's **first uterus transplant.** 

#### About the Uterus Transplant

- Unlike heart or liver transplants, uterus transplants aren't life-saving transplants.
  - Instead, they are more like limb or skin transplants which improve the quality of individuals' lives.
- Uterus transplants can help women who lack a uterus fulfil their reproductive needs.

#### **Procedure of Uterus Transplant**

- **Primary Evaluation:** Before transplantation, the recipient is evaluated for good physical and mental health.
- **Cryopreservation:** The procedure doesn't connect the uterus to the **fallopian tubes** (which ensure the ovum from the ovaries moves to the uterus).
  - So the individual can't become pregnant through natural means.
  - Instead, doctors remove the recipient's ova, create embryos using in vitro fertilisation (IVF), and freeze them embryos (a.k.a. cryopreservation).
  - Once the newly transplanted uterus is 'ready', the doctors implant the embryos in the uterus.
- **Implantation:** Once the transplant has been cleared, the uterus is carefully removed from the donor.
  - The uterus is harvested together with its blood vessels.
  - Surgeons **also remove the fallopian tubes** (and don't use them in the graft for the donor to prevent pregnancies outside the uterus).
  - With the recipient, the surgeons link up the muscles, cartilage, tendons, and arteries, veins, and other blood vessels so that the uterus functions normally.
- After-care: To prevent the recipient's body from rejecting the transplanted uterus, the recipient needs to take drugs that suppress the immune system.

#### **Global position on Uterus transplant**

- India is one of a few countries to have had a successful uterine transplant; others include Turkey, Sweden, and the U.S.
- India's first uterine transplant baby was born on October 18, 2018 17 months after the recipient had undergone the procedure.
- The doctors now aim to make the procedure more affordable.

#### Artificial Uterus

- About: Scientists are now working on creating a bioengineered artificial uterus.
  - These experiments are still in their early stages; preliminary results with rats have shown some promise.
- **Significance:** Such an entity could simplify the transplantation process by eliminating the need for live donors as well as sidestep debates about the ethics of using such organs.
  - When it does, the advantages could extend to women as well as members of the LGBTQ+ community.

Source: TH

## BlueWalker 3 Satellite

#### Syllabus: GS3/Space

#### In News

• Recently, scientists have published a paper in Nature journal, detailing the **impact of the prototype BlueWalker 3 satellite** on astronomy.

#### About the BlueWalker 3 (BW3) satellite

- The BlueWalker 3 is a **prototype satellite**, part of a **satellite constellation** planned by its owner **AST SpaceMobile**.
  - It was launched to orbit on September 10, 2022.
  - It is the largest-ever commercial communications array deployed in low-Earth orbit and is designed to communicate directly with cellular devices via 3GPP standard frequencies at 5G speeds.
- **BW3: the brightest object:** Observations of the BlueWalker 3 showed it was one of the brightest objects in the night sky, outshining all but the brightest stars, the researchers said.

#### About satellite constellation

- A satellite constellation is a group of artificial satellites working together as a system.
  - Several companies around the world have envisaged such satellite constellations.
- **Significance:** Unlike a single satellite, a constellation can provide permanent global or near-global coverage, such that at any time everywhere on Earth at least one satellite is visible.
  - Typically revolving on the low Earth orbit, satellite constellations provide the required data with quick signal transmitting time
  - Compared to single large satellites, swarms of small units (up to 500 kg) are cheaper and faster to deploy.

#### Concerns & challenges

- Disruption of night sky observations:
  - The night sky is a unique laboratory that allows scientists to conduct experiments that cannot be done in terrestrial laboratories.
  - However, owing to the location of satellite constellations, which is closer to the earth location and relatively large size, their potential to disrupt night sky observations is high.

- Interference of the satellite constellation with astronomical observations could severely hamper the progress in understanding of the cosmos.
- Hampering radio astronomy:
  - As the BlueWalker 3 uses wavelengths close to those that radio telescopes observe in, the satellite could also hamper radio astronomy.
  - BlueWalker 3 actively transmits at radio frequencies that are close to bands reserved for radio astronomy, and existing observatory protection from radio interference may not be sufficient.
  - This is why astronomers are raising concerns around these constellations, or groups of satellites.

#### Suggestions

- The pristine night sky is also an important part of humanity's shared cultural heritage and should be protected for society at large and for future generations
- Further **research is required** to develop strategies for **protecting existing and upcoming telescopes** from the numerous satellites planned for launch over the next decade.
- The deployment of such satellite constellations should therefore be conducted with due **consideration of their side effects** and with efforts made to minimise their impact on astronomy.

Source: TH

### <u>Facts In News</u> Ichamati River

### Syllabus: GS-1/Geography

#### <u>Context</u>

- The Ministry of Ports, Shipping and Waterways has started work to revive the **Ichamati River.** 
  - The government has declared a part of 63 km of the **Ichhamati River** as a **National Waterway** and marked it as **Waterway number 44**.

#### About Ichamati River:

- Other name: Also known as Ichamathi River.
- Ichhamati River is a transboundary river that flows through West Bengal, India, and Bangladesh.
- **Origin:** It is one of the bifurcations of river Mathabhanga and originates at Mahjdia village in the Nadia district of West Bengal.
- Ichamati River is now in **three parts**:
  - The longer part flows from the **Mathabhanga River**, then it joins the **Kalindi River** and then **in North-24 Parganas and Debhata in Satkhira District.**
- **Tributaries:** Ichhamati River and its tributaries form a large oxbow lake complex in North 24-Paraganas district near Bangaon.
- Significance:
  - This river is the inspiration for many poems and songs.
  - It also serves as a source of irrigation for the farmers living along its banks.

#### <u>About Inland Waterway Transport (IWT)</u>

- India has an extensive network of inland waterways in the form of rivers, canals, backwaters and creeks.
- It has about 14,500 km of navigable waterways which comprise rivers, canals, backwaters, creeks, etc.

#### Inland Waterways Authority of India (IWAI)

- It is an autonomous organisation constituted on 27th October 1986 under the Inland Waterways Authority of India Act, 1985.
- IWAI is primarily responsible for the development, maintenance and regulation of those waterways which have been declared as NWs under the National Waterways Act, 2016.
- The head office of IWAI is at Noida, UP.
- The policy guidelines and directions issued by IWT Wing are implemented by IWAI.

#### Source: <u>PIB</u>

### National Turmeric Board (NTB)

### Syllabus: GS2/Government Policies and Interventions

#### News:

• The Centre recently notified the constitution of the **National Turmeric Board**, a long-standing demand of turmeric farmers across the country.

#### About the NTB

- Mandate: The Board will focus on the development and growth of turmeric and turmeric products in the country.
- Composition:
  - The Board will have a **Chairperson**, who will be **appointed by the Centre**.
  - It will have members from the Ministry of AYUSH, Department of Pharmaceuticals, Ministry of Agriculture and Farmers Welfare, Ministry of Commerce & Industry and senior State Government representatives from three states on a rotational basis.
  - Select national/State institutions involved in research, representatives of turmeric farmers and exporters will also be members in the board.
  - A **secretary** will be appointed to the Board by the **Commerce Ministry.**
- The Ministry of Commerce will be the nodal department providing funds and infrastructure for the NTB, which will look into increased demand, usage, production, research, market linkage, exports and so on.

#### <u>Turmeric crop (Curcuma longa):</u>

- Turmeric is a **perennial flowering plant** in the **ginger family Zingiberaceae**.
- Native: Indian subcontinent and Southeast Asia.
- Soil and climate: A friable well drained red loamy soil in wet or garden lands under tropical conditions is ideal.

- **Annual rainfall:** It can be grown in regions receiving an annual rainfall of 1500 mm or more.
- **Temperatures**: between 20 and 30 °C.
- **Varieties**: Co 1, BSR 1, Roma, Swarna, Sudarshana, Suguna, Sugandham, BSR 2, Ranga, Rashmi, Rajendra Sonia, Krishna, Suroma, Alleppey finger turmeric (AFT), IISR Prabha, IISR Prathiba, IISR Alleppey Supreme and IISR Kedaram.
- Production:
  - India is the **largest producer**, **consumer and exporter of turmeric** in the world.
  - In the year 2022-23, an **area of 3.24 lakh hectares** was under turmeric cultivation in India with a production of **11.61 lakh tonnes [over 75% of global turmeric production]**.
  - India has 62% share of world trade in turmeric.
  - The largest producing states of Turmeric are **Maharashtra**, **Telangana**, **Karnataka and Tamil Nadu**.

Source: TH

### India-Japan Fund

Syllabus: GS-2/International Relations <u>Context:</u>

- The National Investment and Infrastructure Fund has entered into a collaboration with Japan Bank for International Cooperation (JBIC) to unveil India-Japan Fund.
  - The fund will have JBIC and Government of India as anchor investors.

About the Fund:

- The India-Japan Fund will prioritize investments in initiatives related to **environmental sustainability** and strategies aimed at **reducing carbon emissions**, while also working to boost **Japanese investments in India**.
- This joint venture highlights a significant aspect of cooperation between the two nations in an area of mutual importance, namely, climate and the environment.
- This is NIIF's bilateral fund , with the **Indian Government contributing 49%** of the target corpus and **JBIC 51%**.
- The fund will be managed by **NIIF Limited (NIIFL)**, and **JBIC IG (a subsidiary of JBIC)** will support NIIFL in promoting Japanese investments in India.

Source: <u>PIB</u>

### North Koel Reservoir Project

#### Syllabus: GS2/Government Policies and Interventions News:

• The Cabinet Committee on Economic Affairs has recently given its approval to complete the balance works of **North Koel Reservoir Project.** 

#### About:

- North Koel Reservoir Project is an inter-State major irrigation project with command area lying in the two States of **Bihar and Jharkhand**.
- The project comprises a **dam on North Koel river near Kutku village** (Latehar, Jharkhand), a barrage 96 km downstream of the **dam at**

**Mohammadganj** ( Palamu, Jharkhand), Right Main Canal (RMC) and Left Main Canal (LMC) taking off from the barrage.

- On completion of the balance works, the **project would provide additional annual irrigation to 42,301 ha in the four drought prone districts of Jharkhand and Bihar.**
- Issue with the project: There is an apprehension that water accumulated in the dam would threaten the Betla National Park and Palamu Tiger Reserve.

#### The North Koel River

- The North Koel river is a **tributary of Son**, which, in turn, is a **tributary of the Ganga**.
- Origin: Chulha Pani, Chhota Nagpur plateau, Jharkhand
- **Mouth**: It meets Son in Haidernagar block of Palamu, travelling a distance of 260 km.
- Tributaries: Auranga, Amanat and Burha River.

#### Source: PIB

#### Sammakka Sarakka Central Tribal University

<u>Syllabus:</u> Prelims/Current Events of national importance <u>News:</u>

• The Union Cabinet recently gave its approval for introduction of **the Central Universities (Amendment), Bill, 2023** in the Parliament.

#### About:

- It is to **amend the Central Universities Act, 2009** for setting up of **Sammakka Sarakka Central Tribal University**.
- The university is to be set up at **Mulugu District in the State of Telangana** as provided in the Thirteenth Schedule to the Andhra Pradesh Reorganisation Act, 2014.

#### Central University Act, 2009:

- It was passed by the Parliament in 2009, which **aims to establish and incorporate universities directly governed by the federal government** for teaching and research purposes, across all the States in India.
- Visitor: The President of India shall be the Visitor of the University.
- The following shall be the **officers of the University**, namely:-- The Chancellor; The Vice-Chancellor; The Pro-Vice-Chancellor; The Deans of Schools; The Registrar; The Finance Officer; The Controller of Examination; The Librarian; and Such other officers as may be declared by the Statutes to be the officers of the University
- **Chancellor and Vice-Chancellor**: The Chancellor and Vice-Chancellor shall be **appointed by the Visitor** in such manner as may be prescribed by the Statutes.
  - The Chancellor shall be the **head of the University** and preside at the Convocations of the University held for conferring degrees and meetings of the Court.
- **Central Universities (Amendment) Act, 2014** changed the name of the Central University of Bihar (CUB) to **Central University of South Bihar**

(CUSB) and the new central university was proposed to be called **Mahatma** Gandhi Central University.

#### Significance:

- The new university will **increase access and improve the quality of higher education** in the State.
- It also **promotes avenues of higher education and advanced knowledge** by providing instructional and research facilities in tribal art, culture and traditional knowledge systems for the **benefit of the tribal population in the State.**
- This new university will also **create additional capacity and will strive to remove regional imbalances.**

Source: <u>PIB</u>

### Linguistic Inclusion in Financial Services

#### Syllabus: GS-3/Economy

#### <u>Context</u>

• The **Reserve Bank Innovation Hub (RBIH)** and **Digital India Bhashini Division (DIBD)** have collaborated to launch a **Public Tech Platform** for frictionless credit in multiple languages.

#### More in News

• Both DIBD and RBIH have signed a Memorandum of Understanding (MoU) in recognition of the **'Pressing need for linguistic inclusivity within the financial services sector'.** 

#### About:

- It aims to revolutionize financial services by enabling communication in local languages.
- It will extend the reach of digital financial services to users in their native language, thereby making banking experience more accessible and user friendly.
- Significance:
  - By utilizing voice as a medium, **BHASHINI** with its capability in language translation and voice processing, it can promote financial inclusivity, economic empowerment and enhance financial literacy.
  - This platform aims to streamline and enhance credit delivery by financial institutions, contributing significantly to greater financial inclusion.

#### <u>About Digital India Bhashini Division (DBID)</u>

- It is a Division under Digital India Corporation, section 8 Company under Ministry of Electronics and Information Technology, Govt of India.
- The vision of Bhashini is to "harness natural language technologies to enable a diverse ecosystem of contributors, partnering entities and citizens for the purpose of transcending language barriers, thereby ensuring digital inclusion and digital empowerment in an Aatma Nirbhar Bharat.

#### About Reserve Bank Innovation Hub (RBIH)

- It is a wholly-owned subsidiary of the Reserve Bank of India (RBI).
- It is an organisation that works to enable frictionless finance for a billion Indians.
- The hub will collaborate with financial sector institutions, policy bodies, the technology industry, and academic institutions and coordinate efforts for exchange of ideas and development of prototypes related to financial innovations.
- It aims to strengthen the Indian financial system and position of India at the forefront of global financial innovation.

Source: **PIB** 

### Fifth Positive Indigenisation List (PIL)

### Syllabus :GS 3/Defence

#### <u>In News</u>

Defence Minister Rajnath Singh released the fifth Positive Indigenisation List (PIL) of 98 items which will be procured by the three armed services from indigenous suppliers in a staggered manner as per specified timelines.

#### More in news

- The Indian Navy's updated indigenisation roadmap, named <u>Swavlamban 2.0.</u> was also released
- 76 challenges under DISC 10 & DISC 10 PRIME and two under INDUS X also launched

#### About Fifth Positive Indigenisation List (PIL)

- It has been prepared by the **Department of Military Affairs** after several rounds of consultations with all stakeholders
- It lays **special focus on import substitution** of components of major systems besides important platforms, weapon systems, sensors and munitions which are being developed and likely to translate into firm orders in the next five to ten years.
- **Some items** on the list include a futuristic infantry combat vehicle, articulated all-terrain vehicles, several types of unmanned aerial vehicles, a medium range precision kill system for artillery, test equipment for a guided weapon system for

T-90 S/SK tanks, radars, armour plates for the cabin nose section of the Mi-17 helicopter, an automated mobile test system for the OSA-AK-M air defence system, gravity rollers for the Mi-17V5 helicopter, and flares of P-8I and MiG 29-K aircraft.

#### **Significance**

- The MoD has taken numerous steps for self-reliance in the defence sector and Positive Indigenisation Lists is one of the most important transformative reforms in pursuit of indigenisation.
  - The Department has promulgated four previous PILs, comprising 411 military items. This is in addition to the four PILs for defence public sector undertakings.
- It is one of the key constituents of the Government's 'Aatmanirbhar Bharat Abhiyan' to transform the defence sector to achieve self-reliance and boost exports with the active participation of the public and private sector.

#### **iDEX DISC 10 & DISC 10 PRIME Challenges**

- **76 challenges** were launched for the industry under DISC 10 & DISC 10 PRIME to celebrate the 76th year of India's independence.
  - These challenges include problem statements from the three Services, Indian Coast Guard, DPSUs, Border Roads Organisation and Mission DefSpace. In addition, five problems under the iDEX for Fauji (i4F) scheme were also launched.
- **INDUS X Challenges:** iDEX in partnership with the US DoD had recently conducted the India-US Defence Acceleration Ecosystem **(INDUS X)** event in Washington DC to expand the strategic technology partnership and defence industrial cooperation between the start-up ecosystems, businesses and academic institutes of India and US.
- **INVenT:** The NIIO and the Defence Innovation Organisation (DIO) entered into an agreement for jointly working on facilitating the infusion of Venture Capital into the defence ecosystem through the iDEX Innovators Hub (iIH).
- SBI NAVeCash Card : It is a one-of-its-kind dual-chip debit card developed by the State Bank of India (SBI) and the Indian Navy.
  - The card can be used in online mode (as a regular debit card) as well as in offline mode while at sea with no direct connectivity with the bank.
  - The card has been developed and tested onboard various Indian Naval ships and is now ready for launch pan-Navy.
- **Exhibition:** Products developed under the SPRINT (Supporting Pole-vaulting in R&D through iDEX, NIIO and TDAC) initiative were showcased in an exhibition during the seminar.

Source:<u>TH</u>