

# NEWS TODAY

## A DEPARTMENT-RELATED PARLIAMENTARY STANDING COMMITTEE TABLES REPORT ON “SPECIFIC ASPECTS OF ELECTION PROCESS AND THEIR REFORM”

Issues	Observation/Recommendations made
<b>Establishing parity between the minimum age of voting and contesting elections</b>	<ul style="list-style-type: none"> <li>● <b>Reducing age for contesting Lok Sabha and Assembly elections</b> from 25 years to <b>18 years</b>, which is minimum age of voting in India.                             <ul style="list-style-type: none"> <li>➢ Reasons suggested are <b>global practices, increasing political consciousness, advantages of youth representation</b> (wider range of viewpoints, help connect different generations etc).</li> </ul> </li> <li>● However, <b>Election Commission of India (ECI)</b> stated that it is <b>unrealistic to expect 18-year-olds</b> to possess <b>necessary experience and maturity</b> for these responsibilities.</li> </ul>
<b>Status of Common Electoral Roll for conducting elections</b>	<ul style="list-style-type: none"> <li>● <b>Implementing a common electoral roll</b>, as proposed by central government and ECI, is <b>presently outside scope of Article 325</b>.                             <ul style="list-style-type: none"> <li>➢ <b>ECI is responsible for electoral roll for Parliamentary and Assembly elections and state election commissions for local body polls.</b></li> </ul> </li> <li>● Expressed concern <b>about potential impact of a common roll on state powers</b> listed under Chapter IX and IX A of constitution.</li> </ul>
<b>False declarations during filing of nomination for elections</b>	<ul style="list-style-type: none"> <li>● Recommended <b>increasing punishment for a candidate filing a false affidavit from six months to up to two years</b> and a fine, depending on the severity of the offence.                             <ul style="list-style-type: none"> <li>➢ <b>Section 125A of the Representation of People Act of 1951</b>, deals with the <b>penalties for providing false information.</b></li> </ul> </li> </ul>

## MINISTRY OF SCIENCE & TECHNOLOGY INTRODUCES ANUSANDHAN NATIONAL RESEARCH FOUNDATION (NRF) BILL 2023 IN LOK SABHA

● Bill will establish Anusandhan NRF to **promote R&D and foster a culture of research and innovation** throughout India's universities, colleges, research institutions, and R&D laboratories.

### ● Key highlights

➢ **NRF, an apex body** to provide strategic direction to scientific research as per recommendations of National Education Policy (NEP), **will be set up at an estimated cost of Rs. 50,000 crore** during **five years (2023-28)**.

➢ **Department of Science and Technology (DST)** will be the **administrative department** of NRF.

➢ NRF will be governed by a **Governing Board** consisting of eminent researchers and professionals across disciplines.

▪ **PM will be ex-officio President of Board** and **Union Minister of Science & Technology & Union Minister of Education will be ex-officio Vice-Presidents.**

➢ **Bill will repeal Science and Engineering Research Board (SERB)** and subsume it into NRF.

➢ **NRF's functioning** will be governed by an **Executive Council chaired by Principal Scientific Adviser** to Government of India.

### ● Significance of Bill

➢ Encourage **spending by industry** on R&D.

➢ **Forge collaborations** among industry, academia, and government departments.

➢ **Promotes research in natural sciences, humanities, social sciences and art** for inculcating creativity.

### About SERB

● It is a **statutory body, under DST**, established through **SERB Act 2008**.

● It **promotes basic research in Science and Engineering** and provides financial assistance.

● A **regular faculty / researcher** in an academic / research institution can seek research support.

● Board gives **special attention to young scientists** below the age of 35 years (relaxable).

● Board **offers JC Bose National Fellowship and RAMANUJAN Fellowship.**

# COMMITTEE OF NATIONAL MISSION FOR CLEAN GANGA (NMCG) APPROVES PROJECT FOR PREPARATION OF URBAN RIVER MANAGEMENT PLANS (URMPs) FOR 60 CITIES

- Project is **part of River-Cities Alliance (RCA)** under **Namami Gange**.
  - RCA, started in 2021, is a **joint initiative of Ministry of Jal Shakti (MoJS) & Ministry of Housing and Urban Affairs (MoHUA)** with a vision to **connect river cities and focus on sustainable river centric development**.
  - Project will work in two phases. **First phase** would cover **25 cities from 5 main stem Ganga basin states** i.e., Uttarakhand, Uttar Pradesh, Bihar, Jharkhand and West Bengal.
  - It will be **World Bank funded**.
- **Need for Urban River Management**
  - **Ensure effective regulations of activities** in the floodplain.
  - **Water pollution** from sources like sewage draining and grey water, erosion due to deforestation etc.
  - **Lack of specific land-use category or legislation** defining 'River Regulation/Riparian Zone'.
  - **Religious practices** such as mass bathing, idol immersion, cremation etc.
- **Interventions by URMPs**
  - **Inculcating river-sensitive behaviour** among citizens.
  - **Develop eco-friendly riverfront** projects.
  - **Rejuvenate waterbodies** and wetlands in the city.
  - Ensure maximum good quality return flow from the city into the river.
  - Leverage on economic potential of the river.

## About NMCG

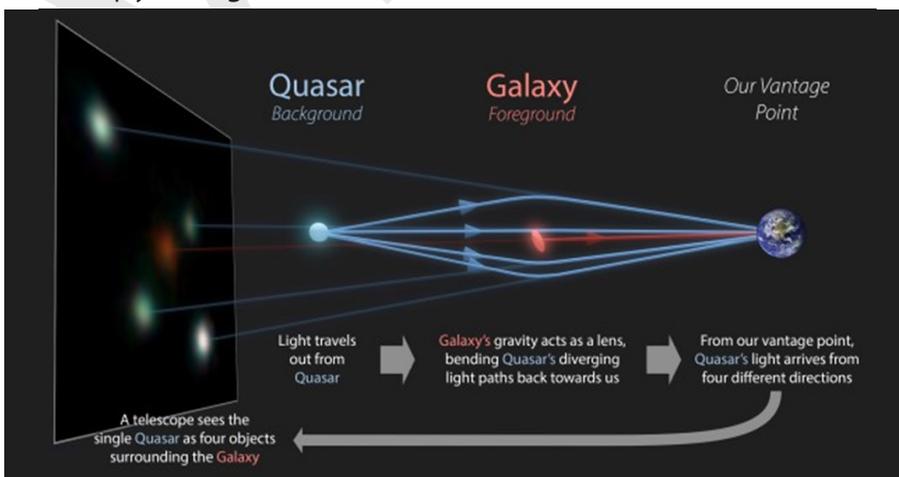
- It was **registered as a society in 2011 under Societies Registration Act 1860**.
- It acted as **implementation arm of National Ganga River Basin Authority (NGRBA)** which was constituted under Environment (Protection) Act (EPA) 1986.

## INDIA AND LATIN AMERICAN & CARIBBEAN (LAC) COUNTRIES SHOULD DOUBLE TRADE TO \$100 BN BY 2027: MINISTER OF EXTERNAL AFFAIRS

- Minister also suggested a **plan with four pillars for intensified trade and economic engagement**:
  - **Supply chain diversification**
  - **Resource partnerships** as LAC countries can help meet India's rising demand for oil, gas, strategic minerals and Indian products and services can also meet the needs of the middle class of LAC countries.
  - **Share developmental experiences**, including digital capabilities, health solutions and agricultural practices.
  - **Address global challenges** such as climate change, concerns of the Global South, and reforms of multilateral structures.
- LAC comprises **around 44 countries including Mexico** and covers **an extensive region**, extending from Bahamas and Mexico to Argentina and Chile.
- **Significance of India-LAC Relations**: High trade and investment potential, south-south cooperation, Strategic (copper, lithium supply from LAC region) etc.
- **Initiatives taken by India**
  - **Preferential trade agreements (PTAs)** with Southern Common Market (MERCOSUR) and Chile.
  - **Lines of credit extended to several LAC countries** under India's development partnership initiative.
  - **Focus Latin America & Caribbean (FOCUS LAC) program** started in 1997 and extended periodically.

## ASTRONOMERS DISCOVERED A RARE EXAMPLE OF AN EINSTEIN CROSS

- Einstein Cross is a **specific case of Gravitational Lensing (GL)**.
  - GL occurs when **massive objects distort and magnify light from objects behind them** (such as a galaxy or a quasar), acting as cosmic telescopes and **making distant galaxies appear brighter**.
- **In case of Einstein cross**, curvature of **space-time around a foreground object splits light behind it into four**, like the points of a cross.
  - Another case of gravitational lensing - **Einstein Rings** - are **produced when two galaxies are almost perfectly aligned**, one behind the other.
- **Einstein's theory of general relativity** describes how **massive objects warp the fabric of universe, called space-time**.
  - **Greater the mass** of an object the **more extreme the warping of space** it causes, so a star warps space-time more than a planet, and a black hole warps it more than a star.
  - **Sun, Earth and all other bodies** formed **similar curvatures around them**, which was why smaller objects got **pulled towards them**.
- Extremely massive celestial bodies **also curve the path of light passing through it** and simply **act as gravitational lenses**.



# PARLIAMENTARY STANDING COMMITTEE ON HEALTH AND FAMILY WELFARE TABLED “MENTAL HEALTHCARE AND ITS MANAGEMENT” REPORT

- WHO defines mental health as “a **state of mental well-being** that enables people to cope with the stresses of life, realise their abilities, learn well and work well, and contribute to their community.”
- **Key observations**
  - India has **only 0.75 psychiatrists per 1 lakh population**, while WHO recommends **above three psychiatrists per 1 lakh people**.
  - **Treatment gap for mental disorders is 70 to 92 per cent** for different disorders.
  - According to **National Mental Health Survey (NMHS) 2015- 2016**,
    - **150 million Indians are affected** by some type of mental illness.
    - **Mental morbidity** of individuals above age of 18 years was 10.6 per cent.
      - **Mental morbidity** refers to **incidence of both physical and psychological deterioration** as a result of a mental or psychological condition.
  - Students and unemployed youth accounted for highest number of suicides in India.
- **Recommendations**
  - **Conduct 2nd NMHS** to assess COVID-19 impact on mental health.
  - **Formulate short-term training courses** to strengthen capacity of existing mental health service providers.
  - Dedicated cadre of school counsellors in all schools under “**Manodarpan**” (initiative of Ministry of Education for students’ Mental Health and Well-being).

## ALSO IN NEWS



### Committee of Parliament on Official Language

- It **came into existence in 1976** as a result of arrangements made in the **Official Language Act, 1963**.
  - **Article 344 (4)** provides for formation of such committee.
- **Mandate:** To review progress made in use of Hindi for official purposes of Union and to submit report to the President while making recommendations on it.
- **Composition:** 30 members (20 from Lok Sabha and 10 from Rajya Sabha).
- **Chairman:** Union Home Minister.



### Virtual Courts

- It has been introduced **under the eCourts project to deal with petty traffic offence cases and offences where summons can be issued under Section 206 of CrPC 1973**.
  - Establishment of Virtual Courts **falls within domain of judiciary and respective State Governments**.
- It is aimed at **eliminating presence of litigant or lawyer in the court and for adjudication of cases on a virtual platform**.
  - **Administered by a Judge** whose **jurisdiction may extend to the entire State and function 24X7**.



### Bhu-Vision (Krishi-RASTAA) platform

- It is an **Internet of Things (IoT) based automated soil testing and agronomy advisory platform**, which can **conduct 12 key soil parameter tests** (like pH value, electrical conductivity etc).
- It can **immediately send the summary of results in a soil health card** to mobile devices and **will help to quickly identify the deficiencies**.
- **Developed by:** ICAR-IIRR (Indian Council of Agricultural Research - Indian Institute of Rice Research), Hyderabad and KrishiTantra (an Agri-tech start-up).



### Digital Health Incentives Scheme (DHIS)

- National Health Authority (NHA) **announced extension of its DHIS under the Ayushman Bharat Digital Mission (ABDM) till 31st December 2023**.
  - NHA is an **attached office of Ministry of Health & Family Welfare**.
- Under DHIS, **incentives are provided to hospitals and diagnostic labs** and to providers of digital health solutions for **adopting and enabling transformative digitization under ABDM**.
  - They can **earn financial incentives of up to Rs. 4 crores** based on **number of digital health records created and linked to ABHA** (Ayushman Bharat Health Account) numbers of patients.

 <p><b>Spike Non Line of Sight (NLOS) Anti-tank Guided Missile</b></p>	<ul style="list-style-type: none"><li>● <b>Indian Air Force has received</b> the Israeli Spike NLOS Anti-Tank Guided Missiles.</li><li>● Spike NLOS will be <b>integrated with Russian-origin fleet of Mi-17V5 helicopters</b>.<ul style="list-style-type: none"><li>➤ It is developed and designed by Israeli company Rafael Advanced Defense Systems. It belongs to <b>6th Generation of Spike missiles</b>.</li></ul></li><li>● <b>Features</b><ul style="list-style-type: none"><li>➤ <b>Capable of destroying enemy targets hidden</b> behind mountains from long ranges.</li><li>➤ <b>Effective range is 25km</b>.</li><li>➤ <b>Lightweight, fire-and-forget tactical precision-guided missiles</b> using electro-optical and fibre-optic technologies.</li></ul></li></ul>
 <p><b>Demonstration Rocket for Agile Cislunar Operations (DRACO) Program</b></p>	<ul style="list-style-type: none"><li>● <b>NASA</b> and Defense Advanced Research Projects Agency (DARPA) are <b>working on DRACO program</b>.</li><li>● DRACO program aims <b>to create a Nuclear Powered Space propulsion system</b> that could <b>cut down the travel time to Mars by half</b>.<ul style="list-style-type: none"><li>➤ DRACO will <b>use a less-enriched form of uranium</b> for its propulsion systems.</li><li>➤ The launch of the test flight is currently scheduled for 2027.</li></ul></li></ul>
 <p><b>Trachoma</b></p>	<ul style="list-style-type: none"><li>● <b>Iraq has successfully eliminated Trachoma</b>, as a public health problem.</li><li>● <b>Trachoma is a neglected tropical disease</b> and a <b>leading infectious cause of blindness worldwide</b>.<ul style="list-style-type: none"><li>➤ It is caused by <b>repeated infection of the eye</b> with bacterium <b>Chlamydia trachomatis</b>.</li><li>➤ It is <b>contagious</b>, spreading through contact with eyes, eyelids, and nose or throat secretions of infected people.</li><li>➤ <b>India eliminated trachoma</b> in 2017. WHO has set a target for <b>global elimination of trachoma by 2030</b>.</li></ul></li></ul>
 <p><b>Chromodomain Helicase DNA Binding Protein 1 Like (CHD1L)</b></p>	<ul style="list-style-type: none"><li>● A study has revealed that <b>CHD1L gene variant is likely to control Human Immunodeficiency Virus (HIV)</b>.</li><li>● A <b>variant of CHD1L gene</b> is specifically present in <b>African population</b>.<ul style="list-style-type: none"><li>➤ <b>CHD1L gene variant</b> has been linked to <b>reduced viral load (amount of HIV in blood)</b> of HIV-1 (most common).</li><li>➤ The gene variant <b>CHD1L is found on chromosome 1</b>.</li><li>➤ People carrying this variant in their body <b>had lower risk of spreading the virus and also had slowed progress of their own illness</b>.</li></ul></li></ul>
 <p><b>Water Neutrality</b></p>	<ul style="list-style-type: none"><li>● NITI Aayog released a <b>Report on Water Neutrality for Indian Industry</b>.</li><li>● Water neutrality is defined as <b>reducing an activity's water footprint as much as reasonably possible while offsetting negative externalities</b> of remaining water footprint.</li><li>● <b>Three steps</b> to achieve water neutrality:<ul style="list-style-type: none"><li>➤ <b>Reduce water use</b> by increasing water efficiency.</li><li>➤ Install <b>water reuse</b> systems such as rainwater harvesting or grey water recycling.</li><li>➤ <b>Offset remaining water demand</b> in local region.</li></ul></li><li>● <b>National Water Mission's Goal 4</b> (Increasing water use efficiency by 20%) includes <b>promotion of water neutral and water positive technologies</b>.</li></ul>
 <p><b>Places in News</b></p>	<p><b>Ethiopia (Capital: Addis Ababa)</b></p> <ul style="list-style-type: none"><li>● Ethiopia's government has declared a state of emergency in its second-largest region, Amhara.</li><li>● <b>Political Boundaries</b><ul style="list-style-type: none"><li>➤ <b>Landlocked country</b> on the Horn of Africa.</li><li>➤ Bounded by <b>Eritrea</b> (north), <b>Djibouti</b> (northeast), <b>Somalia</b> (east), <b>Kenya</b> (south), and <b>South Sudan and Sudan</b> (west).</li></ul></li><li>● <b>Geographical features</b><ul style="list-style-type: none"><li>➤ <b>Highest point:</b> Mount Ras Dejen.</li><li>➤ <b>Major rivers:</b> Blue Nile, Omo, Awash, etc.</li><li>➤ <b>Major Lakes:</b> Lake Tana (Source of Blue Nile), Lake Ziway etc.</li></ul></li></ul> 