

DAILY CURRENT AFFAIRS 21-05-2025

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International Booker Prize

Syllabus: GS-1: Culture and Art – Literature.

Context:

Writer and activist Banu Mushtaq's short story collection 'Heart Lamp', translated by Deepa Bhasti, became the first Kannada title to win the coveted GBP 50,000 International Booker Prize in London on May 20, 2025.

Banu Mushtaq & 'Heart Lamp' - Key Highlights

1. International Booker Prize 2025

- First Kannada title to win the £50,000 International Booker Prize (May 20, 2025).
- Translated by: Deepa Bhasthi (also won English PEN Translation Award 2024 for Haseena and Other Stories).
- Book: *Heart Lamp* a collection of **12 short stories** (originally written in Kannada between **1990-2023**).
- > **Themes**: Women's rights, resistance against caste/religious injustice.

2. About Banu Mushtaq

- **Born**: April 3, 1948, in **Hassan, Karnataka**.
- > **Professions**: Writer, activist, journalist, lawyer, and politician.
- **Education**: B.Sc, LLB.
- > Married to: Mohiyuddin Mushtaq (businessman).

3. Literary & Activism Career

- > **Debut**: First story published in *Prajamatha* (1974).
- Journalism: Worked at Lankesh Patrike (1981–90), edited by P. Lankesh (father of Gauri Lankesh).
- Bandaya Movement: Part of Kannada protest literature (1980s), advocating for Dalits, Muslims, and marginalized voices.
- Political Role: Elected to Hassan City Municipal Council (1983, served two terms).
- > **Legal Career**: Practiced law post-1990 to support family.

4. Major Literary Works

> Notable Collections:

- Hejje Moodida Haadi (1990)
- Benki Male (1999) won Karnataka Sahitya Academy Award.
- Haseena Mattu Itara Kathegalu (2015) English translation won PEN Award.
- Hennu Haddina Swayamvara (2022).
- > Adaptation: Story *Black Cobra* adapted into film *Hasina* by Girish Kasaravalli.
- Translations: Works translated into Malayalam, Tamil, Punjabi, Urdu, and English.

5. Challenges & Legacy

- Faced backlash from orthodox groups (including a knife attack) for writing on Muslim women's empowerment.
- > **Pioneer** in portraying **strong female protagonists** resisting societal norms.
- Global Recognition: Elevates Indian regional literature (Kannada) on the world stage.

Indus And Sutlej Rivers

Syllabus: GS-1: Geography – rivers.

Context:

The geopolitical dynamics surrounding the **Indus and Sutlej rivers** underscore the fragility of water security in South Asia, particularly given China's upstream control over their sources in Tibet.

Background:

The **Indus Waters Treaty (IWT, 1960)** between India and Pakistan has historically managed water-sharing, but rising tensions—such as after the **Pahalgam terror attack**— have strained its implementation.

Meanwhile, **China's hydroelectric projects** and potential to manipulate water flows introduce a new strategic variable that could destabilize the region.

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Key Issues at Play

1. China's Upstream Advantage

- Both the **Indus (Seng Khabab glacier)** and **Sutlej (Longchen Khabab glacier)** originate in Tibet, giving China control over their headwaters.
- China has built **dams and barrages (e.g., Senge Tsangpo, Zada Gorge)** that could regulate or divert water, impacting downstream flows.
- Past actions (like **restricting Brahmaputra data-sharing** during India-China tensions) suggest China could weaponize water.



- 2. Threat to the Indus Waters Treaty
 - The **IWT** allocates the western rivers (Indus, Jhelum, Chenab) to **Pakistan** and the eastern rivers (Sutlej, Beas, Ravi) to India.
 - If India reduces Pakistan's water share (as threatened post-Pahalgam), China could retaliate by restricting Indus/Sutlej flows, worsening shortages.
 - The treaty **does not account for China's role**, making it vulnerable to external manipulation.
- 3. Environmental & Security Risks

- Earthquake-prone Himalayas: Large dams risk catastrophic failures.
- **Ecological damage**: Reduced flows could devastate agriculture in **Ladakh**, **Punjab**, and **Pakistan's breadbasket**.
- **Military implications**: Water scarcity could impact **Siachen Glacier logistics** and border security.

4. Legal & Diplomatic Gaps

- No water-sharing treaty exists between India and China, only datasharing pacts (for Sutlej & Brahmaputra).
- China is **not bound by IWT** and could exploit its position in a conflict.
- International law (e.g., **UN Watercourses Convention**) is weak in enforcing equitable water use.

Possible Scenarios

- ➤ China restricts flows → Pakistan blames India → Escalates India-Pakistan tensions.
- > India builds more dams \rightarrow Pakistan protests \rightarrow China intervenes politically.
- ➤ Climate change reduces glacial water → All three nations face shortages, increasing competition.

Conclusion

The **Indus-Sutlej water system is a tinderbox** where **hydropolitics, terrorism, and climate change** intersect. Without **a trilateral agreement involving China**, the region remains vulnerable to water coercion. India and Pakistan must **modernize the IWT**, while engaging China to prevent future water wars.

<u>Supreme Court Mandates Three Years of Legal Practice</u> <u>for Judicial Service Aspirants</u>

Syllabus: GS-2: Working of Judiciary in India.

Context:

The Supreme Court has reinstated the requirement of a minimum of 3 years of legal practice for aspirants to entry-level judicial posts, such as Civil Judge (Junior Division).

Background

- > 2002 ruling allowed fresh law graduates to enter judiciary without courtroom experience.
- > The Court found this resulted in a **lack of practical skills** among judges, affecting judicial efficiency.

New Eligibility Criteria

- > Minimum 3 years of legal practice required from date of provisional enrollment as advocate.
- > Not from the date of passing the All India Bar Examination (AIBE).
- > Experience must be certified by:
 - An advocate with **minimum 10 years at the Bar**.
 - Endorsed by a **judicial officer** of the respective court.
- > Experience as a **law clerk** to a judge is also **recognized as valid practice**.

Scope & Applicability

- > **Prospective in nature** will **not affect ongoing recruitments**.
- > High Courts and State Governments must amend service rules accordingly.

Implications for Aspirants

- Law graduates must now engage in active legal practice or clerkships before applying for judicial services.
- > While it **extends the timeline**, it aims to ensure **better-prepared and effective judiciary**.

Dr M. R. Srinivasan, Pioneering Nuclear Scientist

Syllabus: GS-3: Science and Technology – Scientists.

Context:

Dr M. R. Srinivasan, a pioneering Indian nuclear scientist and mechanical engineer, passed away on 20 May 2025 in Udhagamandalam, Tamil Nadu, at the age of 95.

Dr. M. R. Srinivasan - A Pioneering Indian Nuclear Scientist

Personal Profile

- **Full Name:** Dr. Mambillikalathil Raghavan Srinivasan
- > **Birth:** 5 January 1930, Bangalore (Mysore State)
- > Death: 20 May 2025, Udhagamandalam (Tamil Nadu), aged 95

Education

- > **Bachelor's Degree:** Mechanical Engineering, UVCE, Bangalore (1950)
- > Postgraduate: Master's (1952) and PhD (1954), McGill University, Canada
- > Specialisation: Gas Turbine Technology

Career in Atomic Energy

- > Joined Department of Atomic Energy (DAE): September 1955
- > Worked with: Dr. Homi Bhabha
- > Project Involvement:
 - Apsara India's first nuclear reactor (achieved criticality in 1956)
 - Chief Project Engineer Madras Atomic Power Station
 - Director Power Projects Engineering Division, DAE (1974)
 - Chairman Nuclear Power Board (1984)
 - Chairman Atomic Energy Commission (1987)
 - Founding Chairman Nuclear Power Corporation of India Limited (NPCIL)

Major Contributions

- > Instrumental in India's transition to self-reliance in nuclear power technology
- > Oversaw:
 - 7 reactors operational
 - 7 reactors under construction
 - 4 reactors in planning
- > Expanded indigenous capabilities in nuclear reactor design and construction

International and National Roles

- > IAEA Advisor (Vienna): 1990–1992
- Member, Planning Commission: 1996–1998 (Energy & S&T portfolios)
- Member, National Security Advisory Board: 2002–2004, 2006–2008
- > Chairman, Karnataka Task Force on Higher Education: 2002–2004

Honours and Awards

- Padma Shri (1984)
- Padma Bhushan (1990)
- Padma Vibhushan (2015)
- ➤ Fellowships:
 - o Indian National Academy of Engineering
 - Indian Nuclear Society
- **Founder-member:** World Association of Nuclear Operators (WANO)

Legacy

- > Architect of India's modern nuclear energy framework
- > Championed indigenous technological development
- > Advocated for energy security and sustainable science policy
- > A role model for **public service through science and technology**

A-to-I mRNA Editing

Syllabus: GS-3: Science and Technology - Genetic Engineering.

Context:

Chinese researchers studied **A-to-I mRNA editing** in *Fusarium graminearum* (a wheat pathogen), uncovering its complex biological role in fungal development and infection mechanisms.

What is A-to-I mRNA Editing?

DNA & mRNA Basics:

- **DNA** encodes genetic instructions using nucleotides (A, T, C, G).
- **mRNA** transcribes DNA and carries instructions to ribosomes for protein synthesis.

Editing Mechanism:

- Enzymes called **ADARs (Adenosine Deaminases Acting on RNA)** convert **adenosine (A)** to **inosine (I)** in mRNA.
- **Inosine (I)** is read as **guanine (G)** during translation, potentially altering the protein's amino acid sequence.

> Impact:

- Can modify protein function without changing the original DNA.
- Regulates gene expression and may help pathogens adapt to host defenses.

RNA Editing vs. DNA Editing

Feature	RNA Editing	DNA Editing (e.g., CRISPR)
Permanence	Temporary (affects only mRNA)	Permanent (alters genome)
Safety	Lower risk (uses natural ADAR enzymes)	Higher risk (foreign proteins may trigger immunity)
Reversibility	Therapy can be stopped if side effects occur	Irreversible changes
Applications	Short-term treatments, immune- sensitive patients	Long-term genetic fixes

Key Advantage of RNA Editing:

> Avoids ethical/technical challenges of DNA editing while enabling precise, reversible protein modulation.