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Current Affairs - 26 October 2025

RASHTRIYA VIGYAN PURASKAR (RVP)



- **Modelled on the Padma awards**, the Rashtriya Vigyan Puraskar is one of the highest recognitions in the field of science, technology, and innovation in India.
- **Objective:** To recognize the notable and inspiring contribution made by the scientists, technologists, and innovators individually or in teams in various fields of science, technology, and technology-led innovation.

Eligibility:

- **Scientists/technologists/innovators working in government or private sector organizations or any individual** working outside any organization, who have made **distinguished contributions** in terms of **path-breaking research or innovation or discovery** in any field of science, technology, or technology-led innovation shall be **eligible for the awards**.
- **People of Indian Origin staying abroad with exceptional contributions benefiting the Indian communities or society** shall **also be eligible** for the awards.
- The awards shall be given in the following **four categories**:
 - **Vigyan Ratna (VR)** award will recognize **lifetime achievements & contributions** made in any field of science and technology.
 - **Vigyan Shri (VS)** award will recognize **distinguished contributions in any field** of science and technology.
 - **Vigyan Yuva-Shanti Swarup Bhatnagar (VY-SSB)** award will recognize **& encourage young scientists up to the age of 45 years** who made an exceptional contribution in any field of science and technology.



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- **Vigyan Team (VT)** award to be given to a **team comprising three or more scientists/researchers/innovators** who have made an exceptional contribution working in a team in any field of science and technology.
- It shall be given in the **13 domains**, namely Physics, Chemistry, Biological Sciences, Mathematics & Computer Science, Earth Science, Medicine, Engineering Sciences, Agricultural Science, Environmental Science, Technology & Innovation, Atomic Energy, Space Science and Technology, and Others.
 - The **representation from each domain/field, including gender parity will be ensured.**

INDO-TIBETAN BORDER POLICE (ITBP)



- It is a **Central Armed Police Force** functioning under the **Ministry of Home Affairs**, Government of India.
- This force **guards the 3,488 km long India-China border** through 197 BOPs situated at altitudes ranging from 9,000 ft to 18,750 ft from **Karakoram Pass in Ladakh to Jachep La in Arunachal Pradesh.**

Background:

- It was **raised in 1962, in the wake of the Sino-Indian War of 1962**, for deployment along India's border with China's Tibet Autonomous Region.
- ITBP was initially raised under the CRPF Act. However, in **1992**, parliament enacted the **ITBPF Act**, and the rules thereunder were framed in 1994.
- **In 2004**, ITBP was declared as a **full-fledged central armed police force under the Ministry of Home Affairs.**

Motto: "Shaurya-Dridhata-Karma Nishtha" (Valour – Determination – Devotion to Duty).



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- Known as **one of the most specialized mountain forces in the world**, ITBP operates in some of the **harshest and most remote areas**, where temperatures can drop below -40°C.
- ITBP **trains its personnel in mountaineering, skiing**, and tactical combat, in addition to maintaining readiness for disaster response and relief operations in the Himalayan region.
- It is **headed by a Director General** under the Ministry of Home Affairs.
- **Headquarter: New Delhi.**

SWAMIH FUND



- The **Special Window for Affordable and Mid-Income Housing (SWAMIH) Investment Fund I** was **set up in 2019** to rescue stressed real estate projects by providing debt financing for stalled housing projects.
- The Fund is **sponsored by the Ministry of Finance**, Government of India.
- **Fund Managed by:** It is managed by SBICAP Ventures Ltd
- It is a **Category-II AIF** (Alternate Investment Fund) debt fund registered with the Securities and Exchange Board of India.
- The SWAMIH Fund is considered the **lender of last resort for distressed projects** for established developers with troubled projects.
- **Eligibility criteria for funding**
 - Real estate projects must be **registered under the Real Estate (Regulation and Development) Act (RERA) 2016**.
 - The project must be classified as a **non-performing asset (NPA)** or be under insolvency proceedings.
 - The project should have been declared as a **“stalled” or “delayed” project** by a competent authority.
 - The fund is available only for projects that fall under the affordable and mid-income housing categories.



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MAHA MEDTECH MISSION



MedTech mitra
Handholding MedTech innovators for clinical evaluation, regulatory facilitation and uptake of new products
A NITI Aayog-ICMR-CDSCO initiative

Handholding MedTech innovators for clinical evaluation, regulatory facilitation and uptake of new products



- It aims to **accelerate innovation in India's medical technology sector**, reduce reliance on high-cost imports, and

promote equitable access to affordable and high-quality medical technologies.

- The primary focus of the mission will be **supporting the development and commercialization** of high-quality, affordable, and **innovative medical technologies**.
- **Key objectives of MAHA MedTech Mission**
 - Drive public health impact by supporting technologies **that address priority disease areas** and expand access to safe, high-quality care;
 - **Ensure affordability and accessibility** by supporting solutions that reduce costs; and
 - **Enhance self-reliance and competitiveness** by catalyzing indigenous MedTech development, manufacturing, and industry–academia collaboration.
- **Features of MAHA MedTech Mission**
 - The Mission will provide **funding support to Academic and R&D institutions, Hospitals, Startups, MSMEs, MedTech industry** and collaborations between entities.
 - **Funding:** With milestone-linked funding of **₹5–25 crore per project** (and up to ₹50 crore in exceptional cases), the Mission will support projects that bring impactful MedTech solutions to market.
 - The Mission will also provide enabling support through national initiatives such as; **Patent Mitra** (IP protection and technology transfer), **MedTech Mitra** (regulatory guidance and clearances), a **Clinical Trial Network** (for clinical validation and evidence generation), as well as mentorship from industry experts.
 - **Total duration of the Mission: 5 Years**



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MAKHANANOMICS: INSIDE THE GOVERNMENT'S PUSH TO BOOST THE MAKHANA INDUSTRY

- Makhana, or foxnut, is the dried seed of the prickly water lily (*Euryale ferox*), a freshwater plant native to **South and East Asia**.
- Recognised for its violet-white flowers and large prickly leaves, the plant thrives in ponds and wetlands.

A Superfood on the Rise

- Once used mainly in ritual and festive settings, makhana has now emerged as a fitness and wellness food, thanks to its low-fat, high-nutrient profile.
- Nutritionists endorse it as a healthy snack, fuelling a surge in domestic and global demand.
- Globally, the **makhana market was valued at \$43.56 million in 2023** and is projected to reach \$100 million by 2033, according to Spherical Insights, underscoring its growing economic and export potential.

India's Makhana Industry: Bihar Leads in Production but Lags in Value

- Though Bihar produces nearly 90% of India's makhana, **the state remains a minor player in exports**.
- The largest exporters — Punjab and Assam — either process or repackage makhana sourced from Bihar, reaping the bulk of profits.
- **Lack of Processing and Export Infrastructure**
- **Fragmented Market and Low Farmer Returns**
- **Low Productivity and Manual Labour Challenges**
- **Slow Adoption of High-Yield Varieties (HYVs)**
- **Limited Mechanisation and Future Needs**



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Building a Makhana Ecosystem: Bihar's New Push for Industry Growth

- The newly established **National Makhana Board**, launched with an initial budget of ₹100 crore, aims to transform Bihar's makhana industry through improved production, processing, value addition, and marketing.
- Announced in the Union Budget 2024, the Board will train farmers, ensure they benefit from relevant schemes, and promote sustainable growth across the makhana value chain.
- **Mithila Makhana Gets GI Tag: Bihar Seeks MSP Support**
 - In 2022, 'Mithila Makhana' earned a Geographical Indication (GI) tag.
 - Following this recognition, the Bihar government urged the Centre to introduce a Minimum Support Price (MSP) for makhana to ensure fair prices for farmers and promote the crop as a profitable, identity-based agricultural product.
- **Infrastructure and Export Vision**
 - As per the officials, the Bihar government plans to create an integrated food processing ecosystem with new processing units, cold storage chains, and export facilities.
 - Upcoming cargo-enabled airports in Patna, Purnea, and Darbhanga are expected to play a key role in enabling direct makhana exports.
- **Need for Greater Investment and Accountability**
 - Experts cautioned that the success of the initiative will depend on adequate financial commitment and consistent policy attention from both the Centre and the state.
 - Past efforts—such as the National Research Centre for Makhana established in Darbhanga (2002)—failed due to neglect.
- **The Road Ahead**
 - For Bihar to truly harness its makhana potential, the government must bridge gaps in research, training, and infrastructure.
 - It should also focus on ensuring the new Makhana Board delivers real benefits to farmers and processors rather than becoming another underfunded bureaucracy.



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ELECTION COMMISSION ORDERS PARTIES TO LABEL AI-GENERATED CONTENT TO ENSURE FAIR PLAY

- The ECI has expanded its earlier directions on **AI-generated and deepfake content** to ensure greater transparency during election campaigns.
- Previously, the ECI had instructed parties to **remove deepfake posts within three hours** of detection and label altered media as “**AI-Generated,**” “**Digitally Enhanced,**” or “**Synthetic Content.**”
- Under the new advisory, the ECI now mandates that:
 - Labels or watermarks must cover **at least 10% of the screen area** for visuals or the **first 10% of duration** for audio clips.
 - The label in video content must appear **at the top of the screen.**
 - Each AI-generated item must **clearly name the creator or responsible entity** in its metadata or caption.
 - Parties must **maintain detailed internal records** of all AI-generated materials, including **creator identity and timestamps**, for verification when required by the ECI.
- These stricter norms mark a decisive step to curb **misleading synthetic media** and preserve **integrity in political communication.**

ECI's Deepfake Guidelines Mirror Draft IT Rules on AI Content Labelling

- ECI latest advisory on **AI content labelling** aligns closely with the draft amendments to the Information Technology (IT) Rules, 2021, proposed by the Ministry of Electronics and IT earlier this week.
- While the IT Rules are still in the **draft stage**, they outline similar obligations for social media platforms, including:
 - Requiring **users to declare** if uploaded content is **synthetically generated.**
 - Mandating platforms to use **automated tools or verification mechanisms** to confirm the accuracy of these declarations.



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- Ensuring **prominent AI labels or notices** on all verified synthetic or AI-generated content.
- Non-compliance could result in **loss of “safe harbour” protections**, meaning platforms could be held **legally liable** for hosting unlabelled or misleading AI-generated content.
- The draft rules also define **synthetically generated information** as content that is **artificially created, modified, or altered using computer resources** in a way that appears **authentic or real**.

AI and Threat to Democracy

- AI while transformative, poses serious risks to **democratic systems**, particularly through **deepfakes, misinformation, algorithmic bias, and voter manipulation**.
- These technologies can distort truth, erode public trust, and undermine free and fair elections.
- **Deepfakes and Political Disinformation**
 - AI-generated deepfakes can create highly realistic fake videos or audio, **spreading false narratives about political leaders**.
 - During the 2023 Slovakian elections, deepfake audio clips mimicking opposition leaders surfaced just days before voting, potentially swaying voter opinion.
- **Manipulation of Public Opinion through AI Algorithms**
 - **AI-driven recommendation systems** on platforms like Facebook, YouTube, and X can amplify polarising or false content, creating echo chambers that manipulate voter perception.
 - The Cambridge Analytica scandal showed **how algorithmic profiling and data analytics were used to micro-target voters** during the 2016 U.S. presidential election and Brexit referendum.
- **Loss of Authenticity in Political Discourse**
 - AI tools can automate fake news creation, clone voices, and generate speeches, making it harder for citizens to distinguish between real and synthetic communication. This dilutes informed public debate.



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PM-AYUSHMAN BHARAT HEALTH INFRASTRUCTURE MISSION (PM-ABHIM)



- **Launched in 2021**, PM-ABHIM is one of India's largest **pan-national programmes** aimed at **developing a resilient, accessible, and self-reliant public health system**.
 - It is a **Centrally Sponsored Scheme (CSS)** with some **Central Sector Components (CS)**, which has an outlay of **Rs. 64,180 crores** for the scheme period (**2021-22 to 2025-26**).
 - The Mission focuses on **strengthening health infrastructure from the grassroots to the district level** through the establishment and upgradation of **Ayushman Arogya Mandirs (AAMs)**, **Block Public Health Units**, **Integrated District Public Health Labs**, and **Critical Care Hospital Blocks** in every district.
 - These facilities aim to bridge service delivery gaps and ensure comprehensive primary, secondary, and critical care closer to communities.
 - PM-ABHIM also **prioritises pandemic and disaster preparedness** by expanding an **IT-enabled, real-time disease surveillance network** that **integrates laboratories** at block, district, regional, and national levels to detect, investigate, and prevent outbreaks effectively.
 - Additionally, it **promotes health research and innovation, particularly on COVID-19 and other infectious diseases**, by advancing the One Health approach, which recognises the interdependence of human, animal, and environmental health.
 - The Mission also aims to fill critical gaps in both urban and rural areas by creating **Urban Health and Wellness Centres (AAM)** in **slum areas** and **converting Sub-Centres into AAMs**.
 - Collectively, PM-ABHIM envisions a robust health ecosystem capable of withstanding future health emergencies while ensuring equitable and quality healthcare for all citizens.
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