

**Topic → QUAD at Sea Ship Observer Mission**

Participants: Coast Guards of the four QUAD nations — India, Japan, the United States, and Australia. Initiative Name: QUAD at Sea Ship Observer Mission. Objective: Deepen maritime cooperation among QUAD nations. Enhance joint maritime readiness. Significance: First-of-its-kind observer-at-sea engagement among the QUAD maritime agencies. Marks a practical step forward in QUAD security cooperation. Agencies Involved: Indian Coast Guard, Japan Coast Guard, United States Coast Guard, Australian Border Force. Strategic Context: Based on the Wilmington Declaration, adopted at the QUAD Leaders' Summit in September 2024. Reaffirms the QUAD's commitment to a free, inclusive, and rules-based Indo-Pacific. Focus Areas: Enhanced interoperability, Maritime domain awareness, Operational coordination

**Topic → WAVEX Start-up Challenge 2025**

Launched by: Union Ministry of Information and Broadcasting. Initiative Name: WAVEX Start-up Challenge 2025. Objective: To develop an AI-powered multilingual translation solution called 'BhashaSetu'. Promote innovation in real-time translation, transliteration, and voice localization. Target Languages: Solution must support at least 12 major Indian languages. Eligibility: No minimum eligibility criteria — open to start-ups at any stage of development. Format: Structured as a national hackathon.

**Topic → Faunal & Floral Discoveries (Animals)**

Faunal Total new additions: 683 459 new species 224 new records Top states for faunal discoveries: Kerala: 101 (80 new species + 21 new records) Karnataka: 82 (68 new species + 14

new records) Tamil Nadu: 63 (50 + 13) Arunachal Pradesh: 72 (42 + 30)

Significant faunal discoveries: 2 new genera, 37 species of reptiles, 5 new amphibians Notable species: *Dravidoseps gouensis* (new genus) *Anguiculus dicaprio* (named after Leonardo DiCaprio)

Floral Discoveries (Plants) Total taxa added: 433 410 species 23 infra-specific taxa Top states for plant discoveries: Kerala: 58 Maharashtra: 45 Uttarakhand: 40

Hotspot regions (Western Ghats & Northeast): Contributed 35% of total plant discoveries. Significant plant species: Orchids: *Bulbophyllum gopalianum*, *Coelogyne tripurensis*, *Gastrodia indica*, *Gastrodia sikkimensis*

**Topic → Kombucha**

Kombucha is a fermented, slightly effervescent, sweetened tea beverage that is gaining popularity for its potential health benefits

What Happens During Fermentation? Yeast in SCOBY converts sugars into alcohol. Bacteria convert alcohol into acetic acid, giving it a sour taste. Produces B vitamins, enzymes, and probiotics.

Origin: Ancient China (around 220 B.C.); later spread to Japan, Russia, and Europe. Main Ingredients: Black or green tea, Sugar, SCOBY (Symbiotic Culture of Bacteria and Yeast)



### Topic → Japan's Successful Launch of Climate Change Monitoring Satellite

**Date and Location:** On June 29, 2025, Japan launched a climate change monitoring satellite from the Tanegashima Space Centre. **Payload:** GOSAT-GW satellite (Global Observing Satellite for Greenhouse Gases and Water Cycle) **Significance:** This event marked a significant achievement in space exploration and climate change mitigation. **Outcome:** The satellite was successfully released into orbit 16 minutes after liftoff. **The H-2A Rocket: A Legacy of Success** **History:** The H-2A rocket has been operational since 2001 with a near-perfect success record. **Final Flight:** This launch marked its 50th and final flight

**About GOSAT-GW Satellite Mission objective:** Monitor greenhouse gases (e.g., carbon dioxide, methane) Track water cycle parameters like sea surface temperature and precipitation **Series:** Third in the GOSAT series **Data sharing:** High-resolution climate data to be shared globally, including with the U.S. NOAA **Operational timeline:** Expected to begin data distribution within one year

**Transition to New Rockets Successor: H3 Rocket** Larger payload capacity 50% lower cost than H-2A Developed with Mitsubishi Heavy Industries 4 consecutive successful launches after initial failure in 2023 **Epsilon Rocket:** Smaller-sized launcher. Developed with IHI Aerospace

### Topic → Cathodoluminescence

**Cathodoluminescence:** Inverse effect (X): Occurs when electrons (usually from an electron beam) strike a material, causing it to emit light (photons). **Input:** Electrons **Output:** Photons (light)

Inverse effect (X):

Occurs when photons (light) strike a material, causing it to emit electrons. This is the photoelectric effect.

### Topic → India's Foreign Policy at a Crossroads | भारत क वदश नीत एक सकट क मोड़ पर

India's foreign policy is under pressure due to growing global tensions and shifting alliances. भारत क वदश नीत दबाव म ह, वशषकर बदलत व क समीकरण और गठबधन क कारण।

Donald Trump's second term and claims of brokering India-Pakistan ceasefire have created diplomatic strain. डोनाल्ड प का दूसरा कायकाल और भारत-पाक सघषवराम म उनक भमका का दावा कटनीतक तनाव का कारण बना ह।

China-Pakistan military nexus is deepening, with shared weaponry and systems integration. चीन-पाकस्तान सन्य गठजोड़ और हथयार क साझादारी भारत क सरक्षा क लिए गभीर चनौती ह।

### West Asia & Global Shifts |

पमएशया और व क परवतन India's neutral stance in the Israel-Iran conflict is proving ineffective. इज़राइल-ईरान सघष म भारत क तटस्थ नीत अब प रभावी नह रही ह। Use of GBU-57 bunker buster bombs by the U.S. has intensified the conflict, raising the nuclear threat. GBU-57 बकर बस्टर बम का उपयोग परमाण खतर को बढ़ाता ह। India's tilt towards Israel and weak engagement with Iran are causing strategic imbalance. इज़राइल क ओर भारत का झकाव और ईरान क साथ सीमत सबध सामरक असतलन पदा कर रह ह।

**Required Strategic Shifts | आवश्यक रणनीतिक बदलाव** India needs to abandon strict neutrality and recalibrate its regional and global alignments. भारत को तटस्थता छोड़कर, अपनी क्षीय और व क नीतय म सधार करना होगा। Urgent need to assess China-Pakistan military ties,

especially joint systems like JF-17, J-10C fighters. चीन-पाक रक्षा सहयोग क गहराई को समझना आवश्यक है। Should conduct internal audit of war preparedness: ammunition, cyber capabilities, AI warfare. यद्ध तयारी क आंतरक समीक्षा जरूरी है – गोला बारूद, साइबर सुरक्षा, एआई क्षमताओं सहित।

China's Strategic Messaging | चीन क रणनीतिक सोच China's white paper on "National Security in the New Era" stresses technological and supply chain security. Warns that border tensions and regional instability are key threats to China's interests. इसम उल्लेख है कि सीमावर्त अस्थिरता चीन क लिए प्रमुख खतरा है।

Conclusion India faces nuclear-armed hostile neighbours with China and Pakistan acting in tandem.

भारत को परमाणु हथियार स लस दो शत्रु देश का सामना है – चीन और पाकिस्तान। Hard power is dominating global diplomacy, pushing India to rethink its foreign policy doctrines. 'हार्ड पावर' का बोलबाला व कटनीति में बढ़ रहा है, जिससे भारत को अपनी वदेश नीति पर पुनर्विचार करना आवश्यक है।

#### Topic → What WHO Is Doing to Ensure Drug Safety

1. Rapid Alert System | त्वरित चेतावनी प्रणाली WHO issues alerts to all member countries after detecting dangerous or harmful drugs. However, this is a reactive system — it activates after harm is done. डब्ल्यूएचओ खतरनाक दवाओं की जानकारी मिलने पर सभी सदस्य देश को चेतावनी भेजता है। यह प्रणाली घटनाओं के बाद सक्रिय होती है, न कि पहले।
2. Global Benchmarking Tool (GBT) | वैश्विक बचमाकग टूल Evaluates national drug regulatory systems from Level 1 (weakest) to Level 4 (most mature). As of 2023, 70% of member countries were at Level 1 or 2, showing limited capacity. यह टूल देश की औषध नगरानी क्षमता को स्तर 1 से 4 तक मापता है।

2023 में 70% देश स्तर 1 या 2 पर थे, जो कमजोर नगरानी को दर्शाता है।

3. Essential Medicines List | आवश्यक दवाओं की सूची A WHO-approved list of safe and essential medications for public health needs. Helps governments prioritise limited resources. हालांकि नकली या घटिया जनरिक दवाएं इसमें शामिल हो सकती हैं। यह सूची सार्वजनिक स्वास्थ्य के लिए आवश्यक सुरक्षित दवाओं की पहचान में मदद करती है।
4. Prequalification Program | पूर्व प्रमाणीकरण कार्यक्रम WHO inspects and approves specific drugs, ingredients, and labs. Helps countries safely procure pharmaceuticals. डब्ल्यूएचओ वशुष्ट दवाओं, सक्रिय घटक और प्रयोगशालाओं का निरीक्षण और मल्याकन करता है। यह सरकार को सुरक्षित दवाएं खरीदने में मदद करता है।
5. Good Manufacturing Practices (GMP) | अच्छे प्रक्रिया मानक Ensures consistent quality in drug production. Most countries allow imports only from GMP certified sources. यह प्रमाणित करता है कि दवाएं गुणवत्ता मानक के अनुसार नमूद हुई हैं। अधिकांश देश GMP प्रमाणित उत्पाद का ही आयात करते हैं।
6. WHO Certification Scheme (CoPP) | डब्ल्यूएचओ पूर्व प्रमाणन योजना (CoPP) Certificate issued by the exporting country proving the drug is approved and safe. Acts like a passport for medicines. दवाओं के लिए नयातक देश से प्रमाण पत्र प्राप्त होता है जो बताता है कि दवा सुरक्षित और अनुमोदित है। यह औषध का पासपोर्ट माना जाता है।
6. Topic → Geographical Indication & the Prada Controversy  
Recent Controversy On June 25, 2025, Italian luxury brand Prada unveiled footwear resembling Kolhapuri chappals during its menswear show in Milan. It triggered accusations of cultural misappropriation — using India's GI tagged heritage without acknowledgment. 25 जून 2025 को, इटालियन ब्रांड प्राडा ने मलान फैशन शो में कोल्हापुरी चप्पल से प्रेरित

जत प्रदशत कए। इस पर सस्कृतक शोषण (Cultural Misappropriation) क आरोप लग।

What is a Geographical Indication (GI)? | भौगोलिक सकतक क्या ह? A GI is a type of intellectual property that identifies goods as originating from a specific place and having unique qualities linked to that origin. GI एक बौद्धक सपदा अधिकार ह, जो कसी उत्पाद क वशष्ट भौगोलिक उत्पत्त और वशष्टता को दशाता ह। Examples from India include: Chanderi sarees (MP), Madhubani painting (Bihar), Pashmina (J&K), Darjeeling Tea (WB) उदाहरण: चदरी साड़ी, मधबनी पटग, पश्मीना, काचीपरम रशमी वस्त्र, दाजलग चाय

Importance of GIs | जीआई का महत्व Promotes rural development, exports, consumer trust, and cultural heritage Enhances livelihoods of local producers and artisans ामीण वकास, नयात, उपभो ा व ास और सास्कृतक वरासत को बढ़ावा दता ह स्थानीय उत्पादक और कारीगर क आय बढ़ान म मदद करता ह

What is a Geographical Indication (GI)? | भौगोलिक सकतक क्या ह? A GI is a type of intellectual property that identifies goods as originating from a specific place and having unique qualities linked to that origin. GI एक बौद्धक सपदा अधिकार ह, जो कसी उत्पाद क वशष्ट भौगोलिक उत्पत्त और वशष्टता को दशाता ह। Examples from India include: Chanderi sarees (MP), Madhubani painting (Bihar), Pashmina (J&K), Darjeeling Tea (WB) उदाहरण: चदरी साड़ी, मधबनी पटग, पश्मीना, काचीपरम रशमी वस्त्र, दाजलग चाय

5. Infringement & Limitations GI rights are territorial: protection applies only within the country of registration No automatic global protection exists GI अधिकार क्षत्रीय होत ह — य कवल पजीकत दश म मान्य होत ह व क स्तर पर स्वतः सरक्षा उपलब्ध नह ह 6. International Protection Secure protection first in country of origin, then apply in other jurisdictions Recognised through bilateral treaties, mutual recognition, or regional

systems पहल मल दश म पजीकरण करवाना अनवाय होता ह अन्य दश म प्रत्यक्ष सरक्षा हत आवदन करना पड़ता ह Past Examples of Misuse | पव क शोषण क उदाहरण Basmati Rice – Ricetec (USA) patent blocked Turmeric – University of Mississippi patent revoked Neem – EPO revoked patent granted to USDA & W.R. Grace बासमती, हल्द और नीम जस मामल म भारत को अतररा ीय स्तर पर काननी लड़ाई लड़नी पड़ी थी

What Can Be Done? Expand the Traditional Knowledge Digital Library (TKDL) Create a searchable GI database for brands to verify before using cultural designs Promote collaborative licensing with local producers परपरागतान डजटल लाइ री (TKDL) का वस्तार कर GI डटाबस बनाए ताक ाड जाच कर सक स थानीय उत्पादक क साथ साझदारी को बढ़ावा द

Facts → What is Asar Pandra? असार पद्रह क्या ह? Asar 15 (असार १५) refers to the 15th day of the Nepali month of Asar, which typically falls on June 29 or 30 in the Gregorian calendar. It marks the beginning of rice planting season in the monsoon and is celebrated as National Paddy Day (Dhan Diwas) in Nepal.