Allocation for Bidding for Green Ammonia under SIGHT Programme enhanced

Capacity available for bidding under Mode 2A of SIGHT programme is increased from 5,50,000 MT per annum to **7,50,000 tonnes per annum.**

- Mode 2A of SIGHT programme (Incentive for Procurement of Green Ammonia Production) **provides selected bidder financial incentive for 3 years** for Green Ammonia produced and supplied.
  - Strategic Interventions for Green Hydrogen Transition (SIGHT) Programme is part of the National Green Hydrogen Mission.
- Allocation was enhanced in response to the **increase in demand of Green Ammonia** from the fertilizer sector.

About Green Ammonia

- **Production:** Green ammonia relies on **renewable energy,** and derives its **hydrogen from water** and its **nitrogen from air.**
  - Conventional ammonia is produced using **fossil fuels** (natural gas) for **hydrogen and energy,** hence it is termed **"brown ammonia".**
- **Significance:**
  - **Reducing GHG emissions:** Conventional ammonia production emits approximately **2 tonnes of CO2 per tonne of ammonia.**
  - **Sustainable fuel:** Green ammonia could be used for producing hydrogen (clean fuel). It also enables **efficient hydrogen transport and storage.**
  - **Energy Generation:** Can be used as a fuel in boilers, turbines, or engines for heat and electricity generation.
    - Compared with other forms of chemicals produced via renewable processes, **ammonia has a high energy density.**
- **Challenges:** Requires new infrastructure, innovation and investment (hence more expensive).

> **About Ammonia (NH$_3$)**
>
> - It is produced using the **Haber-Bosch process,** where hydrogen and nitrogen are combined.
> - Around **70% of ammonia is used for fertilizers;** the rest is used for industrial applications, including **plastics, explosives, and synthetic fibres.**
> - China is the largest producer of ammonia, accounting for 30% of production followed by US, the European Union, India, Russia and the Middle East.

International Seabed Authority (ISA) marks its 30th anniversary

International Seabed Authority (ISA) was established upon entry into force of **United Nations Convention on the Law of the Sea (UNCLOS) in 1994.**

- ISA is the **only example** of an **international organization** established to **manage a global commons** for benefit of humanity on the basis of equity in resource allocation.

About ISA

- It is an **autonomous international organization** mandated by UNCLOS to **manage mineral resources of the seabed beyond national jurisdiction** for shared benefit of humankind.
  - Area under its jurisdiction covers around **54% of total area of world's oceans.**
- **Mandate:**
  - Regulating **conduct of all exploration activities and exploitation** of deep-sea minerals.
  - **Protection of marine environment** from harmful effects of deep seabed related activities.
  - Encourage **marine scientific research.**
- **Headquarters:** Kingston, Jamaica.
- **Members:** 168 Member States **(including India)** and European Union.
  - All nations that **ratify UNCLOS** automatically become **members of ISA.**

Major Initiatives of ISA

- **Marine Scientific Research Action Plan** in support of UN Decade of Ocean Science for Sustainable Development.
- **Sustainable Seabed Knowledge Initiative:** Aiming to describe over 1,000 new deep-sea species.
- **Regional Environmental Management Plans (REMPs):** Following the success of **first REMP for Clarion-Clipperton Zone (CCZ),** ISA is developing additional REMPs for mid-Atlantic ridge, **Indian Ocean** and Northwest Pacific Ocean.

> **India and ISA**
>
> - India is among **38 countries that maintains permanent missions** to ISA.
> - Recently, India submitted **two applications** for seabed exploration in **two Indian Ocean regions:**
>   - **Polymetallic sulphides** in Carlsberg Ridge.
>   - **Cobalt-rich ferromanganese** crusts of Afanasy-Nikitin Seamount.
> - **Currently, India holds two contracts** for exploration in the Indian Ocean:
>   - **Polymetallic nodules exploration in Central Indian Ocean Basin.**
>   - **Polymetallic sulphides** exploration in Indian Ocean Ridge.

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US-India INDUS-X initiative marks one-year anniversary

India-US Defence Acceleration Ecosystem (INDUS-X) was launched in **June 2023** to build **defence innovation bridge** between two countries under **initiative on Critical and Emerging Technologies (iCET).**

- INDUS-X facilitates **partnerships among U.S. and Indian defense companies,** incubators and accelerators, investors, and universities.

Achievements of INDUS-X

- **Commercial collaborations** between defence companies of two countries in various defence domains such as **intelligence, surveillance, and reconnaissance (ISR)** and **semiconductors.**
- Exploration of modalities for **joint innovation funding** between two countries.
- **Indus-X Gurukul:** A hybrid information series for U.S. and Indian defense start-ups.
- **Industry-Academia linkage:** Exchange of best practices on technology transfer and licensing, advancing research in emerging defence technology domains etc.

India-US Defence Technology Cooperation

- **In 2016,** US designated India as a **"Major Defence Partner".**
- **Defence agreements include:**
  - Logistics Exchange Memorandum of Agreement (LEMOA) in 2016,
  - Communications Compatibility and Security Agreement (COMCASA) in 2018,
  - Industrial Security Agreement in 2019 and
  - Basic Exchange and Cooperation Agreement (BECA) in 2020.
- **iCET:** Overarching umbrella framework for technology cooperation, it covers commercial as well as defence technologies
- **US-India Roadmap for Defence Industrial Cooperation:** To fast track technology cooperation and coproduction in areas of mutual interest.

> **Significance of India-U.S. defence ties**
>
> - **Aligned with strategic objectives** of both countries for free, open and rules-based Indo-Pacific region.
> - **Defence Industrial development** along with development of **cutting-edge technologies and capabilities.**
> - **Addressing strategic challenges arising from emergence of China** for both the countries.
> - **Developing new defence domains** such as Space Force, AI use in defence, maritime domain awareness etc.

Kerala celebrates Kozhikode's recognition as India's first UNESCO 'City of Literature'

Kerala also announced that June 23 will be celebrated annually as **'City of Literature' Day in Kozhikode.**

- In October 2023, UNESCO announced **Kozhikode** as India's first UNESCO 'City of Literature' and placed it under the literary category of the **UNESCO Creative Cities Network (UCCN).**

About Kozhikode

- **Location:** Kozhikode or Calicut is located on the Malabar coast.
  - The term **"calico,"** a fine **hand-woven cotton cloth,** is believed to be derived from Calicut.
- **History:**
  - **Ruler:** In the medieval Age, it was ruled by the Samoothiris (Zamorins).
  - **City of Spices:** Traded in spices like **black pepper and cardamom with Jews, Arabs, Phoenicians, and Chinese for more than 500 years.**
  - **Foreign travellers:**
    - **Ibn Battuta** (author of Rihla) visited the city in the **14th Century.**
    - Portuguese explorer **Vasco da Gama** and Persian ambassador **Abdur Razzaq** visited the city in the **fifteenth century**.
- **Contemporary significance:**
  - It has a r**obust literary foundation** with over **500 libraries** and **more than 70 publishers.**
  - It also boasts a **high level of literary education.**
  - In 2012 it was given the tag of **"City of Sculptures"** (Shilpa Nagaram) because of the various architectural sculptures located in various parts of the city.

> **About UNESCO Creative Cities Network (UCCN).**
>
> - **Genesis:** Established in **2004** to promote **cooperation with and among cities** that have identified **creativity** as a strategic factor for **sustainable urban development.**
> - **Cities covered: 350 cities** around the world make up this network spanning
> - **Seven creative fields covered:** Crafts and Folk Art, Design, Film, Gastronomy, Literature, Media Arts, and Music.
> - **Significance:** The UCCN tag gives **global recognition and boosts tourism.**
> - **Other Indian cities on UCCN:**
>   - **Music:** Gwalior, Chennai, Varanasi
>   - **Film:** Mumbai
>   - **Gastronomy:** Hyderabad
>   - **Crafts and Folk Art:** Jaipur and Srinagar

State Visit of Prime Minister of Bangladesh to India

During the visit, both the countries signed MoU for cooperation in the areas of **Digital, Green, and Blue Economy, Small Satellite Project,** etc.

Importance of Bangladesh for India

» **Geographic proximity**
  ⊕ India shares its **longest land border** with Bangladesh, making it crucial for preventing **cross-border terrorism, human trafficking, and illicit trade.**
  ⊕ Bangladesh provides **India's Northeastern states with easier access to the rest of the country** and the Indian Ocean.
    ◆ For example, **Akhaura (Bangladesh)-Agartala (Tripura) cross-border rail link.**

» **Regional integration**
  ⊕ Bangladesh is crucial for **inter-regional connectivity between South Asia and South East Asia.** For example, initiatives like the **Trans-Asian Railway, BBIN** (Bangladesh, Bhutan, India and Nepal) Motor Vehicle Agreement.
  ⊕ It is also willing to join ongoing **India-Myanmar-Thailand trilateral project.**
    ◆ **Nepal exporting electricity to Bangladesh through India's grid** (first example of sub-regional cooperation energy sector).

» **India's vision for regional leadership**
  ⊕ Bangladesh is central to India's **'Neighbourhood First' Policy, Act East Policy, Vision SAGAR, and Indo-Pacific Vision.**
  ⊕ Strengthening ties with Bangladesh helps **India maintain its influence in the Bay of Bengal amid China's assertive presence.**

» **Economic**
  ⊕ **Bangladesh is India's biggest trade partner in South Asia** and India is the second biggest trade partner of Bangladesh in Asia.
    ◆ In FY 2022-23, the total bilateral trade was **US$ 15.9 billion.**
  ⊕ **India's largest development partner** (India extend Lines of Credit support).
  ⊕ **Trade in Indian Rupee** has started between the two countries.

Indian Space Research Organisation (ISRO) completes its Reusable Launch Vehicle (RLV) technology demonstrations

ISRO has achieved a **third consecutive success** in the final test of **RLV Landing EXperiment (LEX),** following the success of RLV LEX-01 and LEX-02 missions.

» **RLV LEX** is part of **RLV-Technology Demonstration Programme,** which aims to develop essential technologies for a **fully reusable launch** vehicle to enable **low cost access to space.**
  ⊕ Under it, a series of TD missions including **HEX-01 mission (2016), three LEX missions have been conducted and RLV Orbital Re-entry Experiment (ORE)** has been planned.

About RLV LEX-03

» This mission **simulated high-speed landing conditions for a vehicle returning from space.**
» Test was conducted with a **winged vehicle, named 'Pushpak'** which autonomously approached the runway and **performed a precise horizontal landing.**
  ⊕ **Unlike the SpaceX's Falcon 9** that lands back **vertically,** Pushpak has **wings** to help it **glide horizontally.**

ISRO's RLV-Technology Demonstrator (RLV-TD) Vehicle

» RLV-TD has been configured to act as a **flying test bed** to evaluate various technologies, namely, hypersonic flight, autonomous landing and powered cruise flight.
» It consists of a **fuselage (body), a nose cap, double delta wings** and **twin vertical tails** and looks similar to an **aircraft.**
» RLV-TD will be scaled up to become the **first stage of India's reusable two stage orbital launch vehicle.**

> **Previous experiments under RLV-TD Programme**
> » **RLV-TD HEX-01 (hypersonic experiment) mission, 2016:** It validated **autonomous navigation, guidance & control, reusable thermal protection system and re-entry mission** management.
> » **RLV LEX-01 (2023)** and **LEX-02 (March 2024) missions:** ISRO validated the indigenously developed technologies in the areas of **navigation, control systems, landing gear and deceleration systems** essential for performing a **high-speed autonomous landing of a space-returning vehicle.**

Also in News

🖼 Srikakulam

Several scholars have been working to restore **prominence of Srikakulam's forgotten heritage** (located in **Andhra Pradesh**).

About Srikakulam

» **History:**
  ⊕ Its former name was **Chicacole,** used by British colonial regime.
  ⊕ It was once part of **Kalinga Dynasty.**
    ◆ Later it came under **Gajapati Kingdom** during the medieval period, followed by **Eastern Chalukyas of Vengi.**
    ◆ It was also part of **Kakatiya** and **Vijayanagara Empires.**

» **Cultural sites:**
  ⊕ **Buddhist sites:** Salihundam (Buddhism spread to Sumatra and other eastern countries from here) and Danthapuri.
  ⊕ **Jainism sites:** Tangamayyakonda and Rottavalasa villages.
  ⊕ **Hindu temples:** Srimukhalingam, Srikurmam and Arasavilli.
  ⊕ **Neolithic era caves:** Nandi Hills.

🖼 Goods and Services Tax (GST) Council

Recently, the 53rd GST Council meeting was concluded.

About GST Council

» **Genesis:** Established as a Constitutional Body under **Article 279 (A) of the Constitution** through 101 Constitutional Amendment Act of 2016).
» **Constituted by: President**
» **Chairperson:** Union Finance Minister
» **Members:**
  ⊕ **Union Minister of State** (in-charge of Revenue of finance)
  ⊕ Minister in charge of finance or taxation or any other Minister **nominated by each State Government**
» **Mandate:** Make recommendations to the Union and the States on important issues related to GST.
» **Decision making:** By voting

'Twin Test' under PMLA

Enforcement Directorate contested a bail order, arguing that it didn't properly apply the **'twin test'** required under **Prevention of Money Laundering Act (PMLA) 2002.**

About Twin test

» **Section 45** of PMLA, which deals with bail, states that where the Public Prosecutor opposes the bail application, a **twin test must be applied** by the court.

» Conditions in twin tests:
  ⊖ There are **reasonable grounds** for believing that the accused is **not guilty of such offence.**
  ⊖ That the accused is **not likely to commit any offence** while on bail.

» It was upheld by Supreme Court in **Vijay Madanlal Choudhary case (2022).**

Reciprocal Exchange of Logistics Agreement (RELOS)

Russia approves the draft Reciprocal Exchange of Logistics Agreement (RELOS) with India.

About RELOS

» It would enable the militaries of both countries to **access logistics and support facilities at each other's bases and ports.**
  ⊖ It would facilitate the **replenishment of fuel, rations, spare parts and berthing for troops, warships and aircraft** while operating away from home ports and **bases during the war and peacetime missions.**

» Other countries with which India has similar agreements are the **US, Japan, Australia, France, Singapore and South Korea.**

Fast Track Immigration – Trusted Traveller Programme (FTI-TTP)

Ministry of Home Affairs inaugurated the FTI-TTP at Indira Gandhi International Airport, New Delhi.

» This facility will be launched **at 21 major airports in the country.**

» It will provide **faster, smoother and safer immigration clearance** for international travellers.

» The program will run on **e-gates or automated border gates** which will minimise human intervention in the immigration clearance process.

» In the **first phase, Indian citizens and OCI cardholders will be covered** and in the **second phase, foreign travellers will be covered.**

Kamakhya temple

Ambubachi Mela **at Kamakhya temple in Assam** has started.

» The festival **commemorates the yearly menstruation of Goddess Kamakhya.**

Kamakhya temple

» Located on the **Nilachal hills** (or Kamagiri).

» **Reconstructed in mid 16th century by the Koch dynasty** (original temple was destroyed by Kala Pahar).

» **It is one of the 52 Shakti shrines** (believed to be the place where the reproductive organ of Goddess Sati settled).
  ⊖ Also a centre of **Tantrik worship.**

» Here the **beliefs and practices of the Aryan and non-Aryan communities converge.**

Skin Bank

A **first-of-its-kind skin bank** has been opened by the Army Hospital in New Delhi.

» Skin bank has as its main functions the **harvesting, processing, preservation, and supply of fine human skin allografts** for burn treatment centers and polytrauma.

» This landmark initiative **aims** to revolutionise the treatment of **severe burn injuries** and other **skin-related conditions** among armed forces service members and their families.

» It will serve as a **centralised hub** for the **collection, processing, storage, and distribution of skin grafts.**

Cloudburst

Cloudburst triggers landslips and flood-like situation in **Itanagar, Arunachal Pradesh.**

About Cloudburst

» A cloudburst is an **intense, localized rainfall event.**

» According to India Meteorological Department, **rainfall over 100 mm per hour** occurring in a small geographical area is referred to as cloudburst.

» In India, cloudbursts occur during monsoon season **over orographically dominant regions** like Himalayan region, northeastern states and Western Ghats.

» **Mountainous regions are more prone** to cloud bursts due to orography; however, cloudbursts also occur on plains.

Personality in news — Sant Kabir Das (1398–1518)

Prime Minister paid tribute on the **birth anniversary of Sant Kabir Das**

Sant Kabir Das (1398–1518)

» **Early life**
  ⊖ It is believed he was **born a Hindu** but was **raised by a poor Muslim weaver family.**
  ⊖ He was **likely initiated into the Bhakti movement by a guru,** possibly Ramananda.
  ⊖ He advocated **Nirguna (God as formless) path.**

» **Literary work:** His verses are compiled in three traditions: **Bijak** (Kabirpanth), **Granthavali** (Dadupanth) and many other compositions are in the **Adi Granth Sahib**

» **Languages: Sant bhasha** (the language of Nirguna poets); **Ulatbansi** (upside-down sayings)

» **Values**
  ⊖ **Opposed idol worship**
  ⊖ **Preached** ideas of the **unity of God** and **equality of all human beings.**